Planning Statement

Ørsted

Owenreagh- Craignagapple Windfarm

August 2023

JUNO | PLANNING & ENVIRONMENTAL LIMITED

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Executive Summary

In accordance with the Section 45 of the Planning Act (Northern Ireland) 2011, this Planning Statement has assessed the Application against the provisions of the Local Development Plan (Northern Area Plan 2016) and relevant material considerations.

Significant material planning support can be drawn from regional and national energy policy, and the recent Climate Change Act (NI) 2022 which promotes and supports renewable energy development, recognising its contribution towards sustainable development and tackling climate change, to safeguarding the UK and Northern Ireland's energy supply. The Development will sustain and build upon a contribution (up to a capacity output of 67.2 MW) towards NI's and the UK's legally binding targets for reductions in carbon emissions and energy from renewable resources. Importantly the Development will be one of the leading planning applications made to repower an existing operational windfarm in Northern Ireland and will maintain and increase the renewable energy output at an already established renewable energy asset.

Based on the findings of the accompanying ES and the assessment of the Development's compliance with the relevant policies of the extant Local Development Plan, the Development's compliance with the relevant regional planning policies and associated Supplementary Guidance, it is concluded that the Development fully accords with the Development Plan and regional planning policy guidance (which is an important material consideration where the Local Development Plan is silent on policy issues) when read as a whole. As per the ES submitted as part of the planning application, the Development will not give rise to any unacceptable adverse impacts.

The layout of the Development presented in the Planning Figures and ES represents the optimum fit with the technical and environmental parameters of this project having specific regard to the existing infrastructure of the Operational Owenreagh I & II Windfarms. The primary aim of the Development is to generate energy from a renewable resource. With this there are tangible environmental, economic and social benefits (identified in **Chapter 1** and **Chapter 14** of the ES) which include:

- Up to a capacity output of to 67.2MW of installed renewable energy electricity generating capacity that will contribute to regional and national renewable energy targets;
- The Development will increase the renewable energy output from the existing Operational Owenreagh I & II Windfarms c. six-fold increasing the efficiency of an established renewable energy asset;
- The electricity generated from the Development will contribute towards increased site electricity generation, reduce dependency on fossil fuels lowering carbon dioxide emissions and output, sustain existing development and construction jobs and create opportunities for new supply chain jobs.
- The Development will (development/decommissioning/construction phases) support 90 job years in the DC&SDC area and 260 job years for Northern Ireland. The employment effects during the development/decommissioning/construction phases are reported in job years rather than Full-time equivalents (FTE's) because the contracts would be short term.
- In addition to land-owner rents, the Development would be liable for non-domestic rates, the payment of which would contribute to public sector finances. It is estimated that the Development could contribute £0.47 million annually to public finances. Over a 40-year period this would be expected to contribute £18.8 million, although the actual contribution would depend on variables such as the actual load factor of the Development.
- The Development, specifically the HEMP, proposes a range of blanket bog restoration and enhancement measures encompassing well-established techniques such as the traditional reprofiling, drain-damming and wave dam and zippering methodologies which are commonly

used, high-success, methods of rewetting in peatland environments[1&2]. Alongside the standard, well-established approaches outlined above; Dr Ray Flynn of EHA has proposed the implementation of several additional pioneering approaches to blanket bog restoration within a further *c.* 17.809 ha of blanket bog habitat within the HMEP landholdings. This combined research approach utilising a combination of well-established and pioneering techniques is intended to provide a valuable resource for the success of future peatland restoration projects within Northern Ireland, the UK and Ireland while contributing towards the strategic objectives and targets set within the Peatland Strategy for Northern Ireland[3].

Having regard to the NI energy targets, the prevailing climate change legislation, local and regional planning policy and guidance presented and assessed within this Statement, it is important that renewable energy developments which are acceptable in planning policy terms, such as the Development, are given consent. The Applicant therefore respectfully requests that consent is granted subject to appropriate planning conditions.

[1] Nature Scot Peatland Restoration Techniques. Available Online at: Peatland ACTION - Project resources | NatureScot.
[2] Cris, R., Buckmaster,S., Bain,C. & Bonn, A. Eds.2011. UK Peatland Restoration - Demonstrating Success IUCN: UK National Committee Peatland Programme, Edinburgh.Available Online at: https://www.iucn-uk-peatlandprogramme.org/sites/default/files/header-images/IUCN%20Demonstrating%20Success%20Booklet_UK.pdf
[3] Northern Ireland Peatland Strategy 2021-2040 – Consultation Document. Available Online at: Northern Ireland Peatland Strategy 2021-2040. Consultation Document.pdf (daera-ni.gov.uk)

1.0 Introduction

1.1 The Application

JUNO Planning & Environmental Limited ("JUNO") has prepared this Planning Statement ("the Statement") on behalf of Ørsted Onshore Ireland Midco Limited ('the Applicant') to accompany the planning application ("the Application") for the proposed decommissioning and repowering of the Owenreagh I & II sites, for Owenreagh/ Craignagapple Wind Farm ("the Development") submitted to the Strategic Planning Directorate of the Department for Infrastructure ("DfI Planning").

The Development will consist of 14 no. wind turbines with a tip height up to 156.5m and rotor diameter up to 136m and associated infrastructure. Planning permission is sought for the Development.

1.2 Environmental Impact Statement

Under the Planning (Environmental Impact Assessment) Regulations 2017, as amended ("the EIA Regulations") an Environmental Impact Assessment ("EIA") must be undertaken for certain types and scale of development. Developments that always require, or may require, an EIA to be undertaken, are described in Schedule 1 and 2 of the EIA Regulations, respectively.

The Development does not fall into any of the development descriptions specified in Schedule 1. Specific thresholds and criteria are in place for Schedule 2 windfarm developments (as defined in Schedule 2(3)(j) which states that where the (i) development involves the installation of more than two turbines, or (ii) the hub height of any turbine or height of any structure exceeds 15 metres", an EIA must be undertaken where there is likely to be significant effects on the environment by virtue of factors such as its nature and size of the Development or located within a sensitive area. Given the scale and nature of the development, it is considered that the Development is EIA Development. An EIA has been undertaken and the findings reported in the Environmental Statement ("the ES") which accompanies the Application. The EIA process was informed by a Scoping Opinion issued by the Council on 13th October 2022.

1.3 Purpose and Structure of the Planning Statement

The purpose of the Statement is to consider whether the Development accords with the Development Plan and any other material considerations identified as being relevant to the Development, in determining the Application. This approach is in accordance with Section 45 of 'The Planning (Northern Ireland) Act 2011' ("the Planning Act") which states:

> *"Subject to this Part and section 91(2), where an application is made for planning permission, the Council or, as the case may be, the Department, in dealing with the application, must have regard to the local development plan, so far as material to the application, and to any other material considerations…"*

The Statement is set out as follows:

- Section 1: Introduction
- Section 2: Need for Development
- Section 3: The Application Site, Development Description and Planning History
- Section 4: Section 26 Determination Process, Pre-Application Community Consultation & Pre-Application Discussions (EIA Scoping)
- Section 5: Local Development Plan Assessment
- Section 6: Material Considerations
- Section 7: Conclusion

2.0 Need for the Development

This section of the Statement outlines the need for the Development based on an assessment of the need to implement legally binding national climate change targets by encouraging appropriate renewable energy development throughout Northern Ireland, particularly in the context of the Climate Change Act (Northern Ireland) 2022.

2.1 Wind Farm Repowering

The repowering of a windfarm involves the removal of existing wind turbines from a site and replacing them with new and more efficient turbines. This process normally results in an increased overall site generating capacity and output as well as generally reducing the total number of turbines within the Site. Repowering a windfarm site supports an ongoing use of the land at Owenreagh/ Craignagapple (the Site) by a renewable asset, which is vital to Northern Ireland maintaining and building upon its renewable energy and climate change targets.

Repowering also presents an opportunity to sustain and create additional jobs and to encourage continued investment in the renewable energy industry in Northern Ireland. The repowering of a windfarm differs from that of developing a greenfield site as the area has previously been developed, has demonstrated its suitability for use as a windfarm site, and will continue to be used for the same activity. As a result, the consenting and EIA process can draw on any information already available for the site to assess effects. As well as the inherent benefits of creating and expanding upon the existing mix of renewables in Northern Ireland's electricity system, repowering offers a number of major opportunities:

- Increased site generation;
- Reduces dependency on fossil fuels resulting in lower carbon dioxide (CO2) emissions and output;
- Reduced number of turbines, utilising the latest turbine technology, sustaining and growing the level of renewable energy in Northern Ireland;
- Sustains existing development and construction jobs, and creates opportunities for new supply chain jobs;
- With a supportive planning framework, it can help create a long-term, stable investment platform for a clear pipeline of repowering projects, easing pressure on consenting authorities by easing the pressure to consent new sites; and
- Utilises over two decades of industry knowledge to inform and improve the siting, design and construction techniques to create more efficient projects.

The Operational Owenreagh I and II wind farms are consented in perpetuity, and the repowering of the windfarm with more efficient machines will maximise the benefits of re-using an existing site whilst minimising new environmental effects. Operating for a longer period enables the Applicant to continue to drive down the overall cost of energy with benefits to the Northern Irish consumer.

The proposed repowering project has the potential to result in an increase in the installed capacity of the Site from approx. 10 MW to around between 60.2 and 67.2 MW, approx. six times the existing installed capacity, it should be noted that the final wind turbine installed capacity will be determined as part of a turbine tender exercise, held nearer to the time of construction which will allow the Applicant to avail of the latest turbine technology, within any envelope specified within the ES and/or planning consent given. The proposed larger generator size, coupled with greater wind yields from the use of taller turbines with bigger rotors, and the improved efficiency of the latest turbine models will result in a major increase to total power generated at the Site.

2.2 Northern Ireland Energy Policy & Climate Change Legislation

2.2.1 Northern Ireland Energy Strategy - The Path to Net Zero

In December 2021, the Department for the Economy published the 'Northern Ireland Energy Strategy - The Path to Net Zero'[4] which detailed Northern Ireland's (NI) energy future over the next ten years and set the renewable electricity targets for 2030- identifying that 70% of electrical energy needed to be sourced from renewables by 2030, with flexibility to increase this target.

In June 2023, the Department for the Economy published the 'Electricity Consumption and Renewable Generation in Northern Ireland: Year ending March 2023[5] , which highlighted that for the 12-month period April 2022 to March 2023, 48.5% of total electricity consumption in Northern Ireland was generated from renewable sources, which represents an increase of 4.6 percentage points on the previous 12- month period. Of all renewable electricity generated within Northern Ireland over the 12-month period, 84.7% was generated from wind.

Analysis in System Operator for Northern Ireland ("SONI") "Tomorrow's Energy Scenarios"[6] indicates that an additional 2.5GW of new renewable generation will be required to meet this target, including an additional estimated 1GW of onshore wind and 1GW of solar. These estimates take account of the expected increase in demand for power as a result of the electrification of heat and transport.

The Northern Ireland Investment Strategy 2011-2021[7] highlights the importance of renewable sources in electricity generation.

2.2.3 The Onshore Renewable Energy Action Plan[8] (OREAP)

The Onshore Renewable Energy Action Plan (OREAP) 2013-2020[9] recognises the importance of the contribution of onshore renewable technologies to the 40% renewable energy target for 2020. It considers the impact onshore wind has on the energy network in Northern Ireland, referring to the requirement for grid infrastructure upgrades prior to transmission reinforcement, and noting that this is required in order to achieve the 40% target. OREAP also notes "*the need to increase the rate of deployment of renewables to achieve the 40% target at least cost to the consumer."* The policy provisions of the OREAP have been superseded by the Climate Change Act (Northern Ireland) 2022 and the 2021 Northern Ireland Energy Strategy.

2.2.4 Northern Ireland's Climate Change Act 2022

Northern Ireland's first law to tackle climate change, the 'Climate Change Act (Northern Ireland) 2022[10] (the Climate Change Act), received Royal Assent on 6 June 2022. The Act aims to have Northern Ireland play its part in the global and UK effort to tackle climate change by creating a framework that will establish a pathway to achieving emission reduction targets. This will help to ensure that Northern Ireland develops a greener, low carbon circular economy in which the environment can prosper and be protected.

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[4] Department of the Economy (2021) Northern Ireland Energy Strategy- The Path to Net Zero. Available at: https://www.economy-ni.gov.uk/publications/energy-strategy-path-net-zero-energy

[5] Department for Economy, Available at: https://www.economy-ni.gov.uk/articles/electricity-consumption-and-renewable-generation-statistics

[6] SONI, 2020, Tomorrow's Energy Scenarios Northern Ireland 2020, Available at: https://www.soni.ltd.uk/media/documents/TESNI-2020.pdf

[7] Northern Ireland Executive, 2011, Invest Strategy for Northern Ireland 2011-2021, Available at: https://www.infrastructure-ni.gov.uk/sites/default/files/publications/drd/investment-strategy-for-northern-ireland-2011-2021.pdf

[8] Department of Enterprise, Trade and Investment (2013). Onshore Renewable Electricity Action Plan. Available at: https://www.economy-ni.gov.uk/articles/onshore-renewable-electricity-action-plan

[9] Department of Enterprise, Trade and Investment (2013). Onshore Renewable Electricity Action Plan. Available online at: https://www.economy-ni.gov.uk/articles/onshore-renewable-electricity-action-plan [Accessed: 12/10/2017]

[10] Northern Ireland Executive, 2022, The 'Climate Change Act (Northern Ireland) 2022, Available at: https://www.legislation.gov.uk/nia/2022/31/contents/enacted

The Act includes a target for net-zero emissions by 2050 as well as a set of interim targets for 2030 and 2040 for reducing greenhouse gas emissions in Northern Ireland. Part 1, section 15 of the Climate Change Act specifies that "*The Department for the Economy must ensure that at least 80% of electricity consumption is from renewable sources by 2030."*

3.0 The Application Site and Development Description

3.1 Introduction

This section of the Statement sets out a description of the site on which the Development is proposed ("the Application Site") and its surroundings, including relevant planning history.

3.2 The Application Site & Environs

3.2.1 Overview

The Development consists of the repowering of the existing Operational Owenreagh I and II windfarms located within the Derry City & Strabane District Council administrative area, approximately 5 km east of Strabane and 6 km southeast of Artigarvan, in County Tyrone.

3.2.2 Within the Site

The topography of the Development and the immediate surrounding areas comprises undulating upland. The Development itself varies significantly in elevation, with new infrastructure proposed at elevations from 228 m Above Ordnance Datum (AOD; approximately sea level) in the northern portion, to 368 m AOD in the south-western portion. There are several hilltops bordering the Development, but no summits are located within the actual boundaries of the Development. These hilltops include Owenreagh Hill to the south (453 m AOD), Evish Hill to the west (249 m AOD) and Koram Hill to the southwest (372 m AOD).

There are 4 watercourses that run from the Development to the north and west and drain into the Glenmornan River, located approximately 500 m north of the Site. There is also one water body nearby in Moor Lough, which is approximately 1.2 km north-east of the nearest proposed turbine. Further details on this topic area are provided in Chapter 8- Hydrology and Hydrogeology of the Environmental Statement.

Habitats within the Development include improved acid grassland, acid grassland, improved grassland, modified blanket bog and blanket bog. Further details on the habitats within the Development are provided in Chapter 10: Ecology of the project Environmental Statement submitted as part the planning application.

3.2.2 Description of the Owenreagh I and Owenreagh II Wind Farms

The Application Site hosts 15 no.turbines. The operational Owenreagh I Wind Farm (Planning Ref: J/93/0286) comprises eight turbines with an operational capacity of 5 MW and tip height of 60 m that have been operational since 1997; the consent for the wind farm development is for 16 turbines, ten of which were constructed. The operational Owenreagh II Wind Farm (Planning Ref: J/2004/1015/F) comprises a further six turbines with an operational capacity of 5.1 MW and tip height of 66 m, operational since 2008. The consent for the operational Owenreagh II Wind Farm was a result of an amendment submission to increase the tip height of the six unconstructed turbines permitted by the Owenreagh I Wind Farm planning permission.

3.2.3 Around the Site & Designations

Glenmornan is the closest settlement to the Development, approximately 2.3 km to the north from the nearest proposed turbine. The closest residential property is located at Koram Road, situated approximately 920 m west of the closest proposed turbine location. This property is financially involved in the project. The closest non-financially involved property is located at Napple Road, approximately 1.2km east of the closest proposed turbine location.

The Development is located entirely within the Sperrin Area of Outstanding Natural Beauty (AONB). There are no ecologically designated sites within the Development; however, there are a number of ecological designations located within 15 km of the Site. A summary of key ecologically designated sites is presented below. Further details about the rationale behind the ecology Study Areas used in this ES and on the ecologically designated sites within these Study Areas are provided in Chapter 10: Ecology and Technical Appendix A10.1: Ecological Impact Assessment of the project Environmental Statement.

River Foyle and Tributaries Special Area of Conservation (SAC), approximately 6.6 km west of the nearest proposed turbine;

- Owenkillew River SAC, approximately 6.3 km south of the nearest proposed turbine;
- River Faughan and Tributaries SAC, approximately 10.3 km north-east of the nearest proposed turbine;
- 18 Areas of Special Scientific Interest (ASSI). The closest ASSI is Lisnaragh (ASSI288) located approximately 3.3 km north-east of the nearest proposed turbine; and
- There is one National Nature Reserves (NNR) within 15 km of the Site, the closest being Boorin NNR which is located 12.4 km southeast of the nearest proposed turbine.

There are no designated heritage features within the Development or within 1 km of any proposed Development infrastructure. There are 15 Scheduled Monuments within 5 km of the Development and a further 63 Scheduled Monuments within 15 km of the Development. The nearest Scheduled Monument is Killeen located approximately 1.5 km south-east of the nearest proposed turbine. There are 37 Listed Buildings within 5 km of the Development, with the nearest being a Category B2 House and Outbuilding, located 1.2 km east of the nearest proposed turbine. There are seven Registered Parks, Gardens and Demesnes within 15 km of the Development, the nearest being Holy Hill, located approximately 3.4 km north-west of the nearest proposed turbine. More information on these is provided in Chapter 7: Archaeology and Cultural Heritage of the project Environmental Statement.

There are other operational wind farms and wind energy proposals in the vicinity of the Development, these are listed in Technical Appendix A2.4: Cumulative Developments, and are included in the assessment as described in Chapter 2: EIA Methodology of the project Environmental Statement.

3.3 Development Description & Overview

3.3.1 Development Description

The Development comprises the decommissioning and repowering of the Operational Owenreagh I and II Wind Farms. The Development will comprise of the following main components:

- Decommissioning and removal of the existing turbines;
- Two temporary construction compound/laydown areas (some areas may be reinstated temporarily if required for future operational and decommissioning purposes);
- Removal and restoration of the existing crane hardstandings, access tracks and any other above-ground infrastructure in accordance with the Outline DCEMP and Draft HMEP;
- Construction and/or upgrading of seven Site access points onto the public highway;
- Construction of approximately 3,947 m of new access tracks;
- Upgrade of approximately 382 m of existing access tracks;
- Construction of turning heads and passing places on the access tracks;
- The erection of up to 14 three bladed horizontal axis wind turbines of up to 156.5 m tip height;
- Construction of temporary and permanent hardstanding areas for each turbine to accommodate turbine component laydown areas, crane hardstanding areas and internal or external transformers and/or switchgear;
- Construction of turbine foundations;
- There are no upgraded water crossings and two new water crossings;
- Installation of buried underground electrical and communication cables;
- Construction of a substation and control building, and associated compound, including windfarm and grid connection operating equipment; and

- Associated ancillary works.

In addition to the elements outlined, the Development also includes a number of temporary minor works along the abnormal transport route and construction route, to facilitate the construction phase of the Development. The additional land-take for the Development is shown below and compared to that of the operational Owenreagh I and II Wind Farms footprint. The total land-take required for the Operational Phase will require 0.337 ha of redundant land to be reinstated and 22.186 ha of additional land take.

Table 3.1: Temporary and Permanent Land-Take and Re-instatement Areas

Development Element	Redundant area to be re-instated (ha)	Additional Land-take for the Development (ha)	Total Site area for the Operational Phase (ha)
Turbine Foundations	0	0.439	0.439
Crane Hardstandings, including earthworks and verges	0	9.208	9.208
Blade Laydown Areas, including earthworks and verges	0	3.805	3.805
Access Tracks, including junction improvements	0.337	5.165	5.502
Substation Compound including	0	2.28	2.28
Windfarm Construction Compound	0	1.379	1.379
Total	**0.337**	**22.276**	**22.613**

3.3.2 Micrositing

A micrositing allowance is included in the application and is assessed in the project Environmental Statement to allow the layout to respond to detailed pre-construction ground surveys and the final choice of turbine model and installation equipment. This is common practice for wind farm developments as it facilitates adaptive mitigation and optimisation at the detailed design stage, post-consent, in accordance with the parameters of the approved Development. The micrositing allowance is for the layout of the proposed infrastructure to be varied by up to 50 m (in all directions) from the indicative design footprint, subject to all of the following limitations being met:

- Approval is given by the Ecological Clerk of Works (ECoW) and Geological Clerk of Works (GCoW) appointed for the change;
- Infrastructure will not be relocated such that there is an impact on active peat as assessed in the ES;
- Infrastructure will not be relocated to within 50 m of, or if it is already within 50 m then any closer to, a watercourse that is within the catchment of the River Foyle, to minimise potential effects on the River Foyle and Tributaries SAC; and
- Planning conditions relating to noise would be complied with.

The potential for micro-siting was considered when the detailed survey and assessment work was undertaken. For example, the habitat and archaeological surveys covered a wider area than just the footprint of the proposed turbine and access track locations (full details of survey areas can be found in

the relevant Environmental Statement chapters). Any likely significant effects arising from micro-siting have been considered in the preparation of the project Environmental Statement, and specific areas to be avoided have been identified in technical chapters of the Environmental Statement, where necessary.

3.3.3 The Development Components: Wind Turbines

Planning permission is being sought for the erection of up to 14 three-bladed horizontal axis wind turbines with a maximum height from base to tip that will not exceed 156.5 m. The blades will be made of fiberglass reinforced epoxy and mounted on a tapered tubular steel or steel and concrete tower. The turbines will be of a typical modern, three blade, horizontal axis design, light grey in colour and the finish of the tower and blades will be semi-gloss and semi-matt respectively.

- Each of the turbines comprises of the following components:
- Blades;
- A tower;
- A nacelle;
- A hub; and
- An external transformer and/or external switchgear.

The final choice of turbines will be guided by an assessment of the wind conditions, the submitted Environmental Impact Assessment (EIA) together with feedback from consultation, and a pre-construction tendering exercise which will take account of the available technology at the time of construction. Currently it is considered likely that turbines with up to 4.8 MW capacity may be available within the envelope of the proposed physical parameters as defined within Table 3.2. For the purposes of the assessments a "candidate turbine" has been selected based on the precautionary principle of assessing the worst- case scenario, and this turbine has been assessed by the project Environmental Statement.

Table 3.2: Turbine Physical Parameters

Turbine Parameter	Assessment Envelope
Turbine tip height	Up to 156.5 m
Rotor diameter	Up to 136 m
Tower section length	Up to 90 m
Tower section diameter	Up to 4.38 m

The assessment of the candidate turbine has been based upon a maximum rotor of 136m as this is deemed to be worst case scenario. Turbines are typically of a variable speed type, so that turbine rotor speed will vary according to the energy available in the wind. Turbines with parameters similar to those set out in Table 3.2 typically have a rotational speed of between 9 and 19 revolutions per minute (rpm), depending on variations in wind speed, generating power for all wind speeds between c. 4 and c. 25 metres per second (m/s). At wind speeds greater than c. 25 m/s, the turbines will automatically shut down for self-protection.

The turbines are computer controlled to ensure that at all times, the turbine faces directly into the wind to ensure optimum efficiency. The rotors of all 14 turbines will rotate in the same direction relative to the wind direction, however, the localised wind conditions will determine the orientation of each turbine individually.

In high wind speeds, the wind turbines will 'yaw' out of the wind as instructed by their own control software, to maintain their operation prior to cutting out should the high wind speed conditions exceed the wind turbine's safe operating limits.

When operating, the rotational speed of the blades is transferred and increased through a gearbox, to drive a generator which is located in the hub of the turbine. This produces a three-phase power output typically at 690 Volts (V), which is transferred from the generator to a turbine transformer that is typically located close to the base of the turbine but external to the turbine. The turbines will be controlled and monitored from within the substation and will also be remotely monitored including recording performance details and statistical information for each turbine. Staff servicing the turbines on a routine basis will be based in Ireland. Table 3.3 details the locations of the turbine bases (subject to micrositing, as set out in Section 3.3.2).

Table 3.3 Proposed Turbine Location Co-ordinates

Turbine ID	Co-ordinates	
	Easting	**Northing**
1	241749	397104
2	241697	396512
3	242279	397038
4	242607	396876
5	242209	396377
6	242982	396705
7	243326	397192
8	243450	396645
9	243748	396357
10	243345	395923
11	242969	396059
12	242525	396115
13	243895	397108
14	244218	396755

3.3.4 The Development Components: Turbine Foundations and Crane Hardstandings

A full ground investigation will be completed prior to construction; however, a typical turbine foundation will consist of an octagonal or circular reinforced concrete base approximately 20-25 m in diameter. The area of excavation will be sized accordingly to allow for a stable, clear, and safe working area around the concrete turbine foundation.

Construction of the turbine foundations will require the excavation of subsoil to expose a suitable formation material. The formation will be levelled off prior to the in-situ casting of a steel-reinforced concrete foundation. It is estimated that each foundation will require approximately 450 cubic metres (m^3) of concrete and up to 100 tonnes (t) of steel reinforcement. Cable ducts and other ancillaries will be installed within and adjacent to the foundation. The area above the foundations will be backfilled using suitable fill materials up to the turbine foundation plinth and will form part of the permanent crane hardstanding area for each turbine. The final foundation design will be specific to the turbine model selected and the Site conditions as verified during detailed site investigations undertaken prior to construction commencing.

Each turbine requires an area of hardstanding adjacent to the turbine foundation to provide a stable base on which to site the turbine components and crane for the erection of the turbine. The working area at each hardstanding area will be a maximum size of 173.75 m by 62.8 m. However, the final arrangement of the hardstanding will depend on the selected turbine manufacturer and model, the method of erection and exact specification of the cranes chosen by the turbine erection contractor. The hardstandings will be sufficiently level and with a suitable load-bearing capacity to ensure the safe storage of turbine components and operation of the cranes. Turning areas are provided to facilitate the transportation of turbine components, assembly cranes, and construction traffic onsite. The crane hardstandings and turning areas will remain in place during the lifetime of the Development to facilitate maintenance works.

Surface water and groundwater levels will be managed to ensure that natural drainage patterns are maintained and that water levels within excavations do not rise beyond appropriate and safe limits. Cable ducts and other ancillaries will be installed within the foundations and under the access track crossing points. Further detail on drainage is included within the Environmental Statement, Technical Appendix A3.1: oDCEMP and Technical Appendix A8.5: Outline Surface Water Drainage Strategy.

The hardstanding pads will be left in place during the operation phase in case there is a need to repair or replace any blades. The surrounding areas will be reinstated following construction in accordance with the Environmental Statement Technical Appendix A3.2: Draft Habitat Management Enhancement Plan (HMEP).

3.3.5 The Development Components: Transformers, Switchgear and Cabling

Depending on the final choice of turbine, transformers will either be located within the nacelle which sits at the top of each turbine tower (with internal switchgear), within the tower itself or externally, close to the base of the tower. An external transformer will normally be placed within steel or glass reinforced plastic (GRP) housing along with an external switchgear, on a concrete foundation pad as allowed for as part of the Development. An indicative design of the external transformer is illustrated in the submitted planning application drawings.

The transformers will be either oil-filled with a bunded footing to remove any risk of spillage or a solid cast resin type which is effectively non-polluting. The transformers will increase the electrical voltage typically from 690 V to 33 kiloVolts (kV).

Turbines will typically each be connected by 3 no. single phase power cables which will be laid in shallow trenches alongside the access tracks. The excavated trenches will also include SCADA cables or fibre optic cables. This will allow interrogation and control of individual turbines as well as remote monitoring. A copper cable will also be located in the trench and will be connected to the substation and each turbine to provide an earthing system for protection against lightning strikes and electrical faults.

3.3.6 The Development Components: Onsite Substation and Associated Compound

A new substation will be required as part of the Development. This will be sited within the substation compound and be designed to the standard required by Northern Ireland Electricity (NIE) Networks for the accommodation of substation equipment and will include an operations compound. Subject to NIE approval, the existing substation will be decommissioned, the ground surface will be cut 1m below ground surface and backfilled with reused soils.

The area for the substation is proposed to a maximum size of 90 m by 180 m to account for potential future substation design specifications that may be required by NIE. The area for the substation will contain a substation building and ancillary equipment, including the transformers, switch gear, fault protection, metering, component storage, car parking and other ancillary elements necessary for the operation of the Development. The indicative substation design is detailed on the submitted planning application drawings.

The appearance and finish of the substation buildings will be similar to an agricultural building, while the final appearance would be agreed with DfI Planning via the use of an appropriately worded planning condition.

The wastewater will drain to a cesspit located adjacent to the substation building which will be emptied when necessary. If technically feasible, a rainwater harvesting system will be installed as a source of non-potable water for flushing of toilets, etc. Any rainwater not captured by this system will be drained from the substation building compound footprint to a soakaway or a suitable surface water discharge point located in a suitable area nearby, as detailed in the project Environmental Statement Technical Appendix A8.5.

3.3.7 The Development Components: Temporary Construction Compounds and Laydown Areas

The Development proposed 2 no. temporary construction compounds and laydown areas. These locations have been selected to minimise environmental effects. The compound close to T8 will have dimensions of approximately 100 m by 80 m, while the compound close to T1 will have dimensions of approximately 70 m by 35 m.

The compounds will comprise a hardstanding area for parking and for receipt and storage of plant, equipment and delivered materials. In addition, they will form a laydown area for the decommissioned turbine components prior to their removal from the Site. A waste management area will also be provided along with temporary office and welfare facilities, including portacabin-style toilets with provision for sealed waste storage and removal. Facilities will be provided for diesel storage and generators and an area designated for re-fuelling. The compounds will be restored following the completion of construction works. The area will be stripped of topsoil and subsoil to expose a suitable formation. The stripped material will be stored close by for future re-instatement. A geosynthetic material base or similar will then be laid, followed by a layer of suitable rock material, and then a further geosynthetic material laid prior to the top surface of blended finer aggregate.

Following completion of the decommissioning and construction phase, the compound will be removed, and the areas restored. These areas may be reinstated in support of any future maintenance or decommissioning activity as required.

3.3.8 The Development Components: Access to the Development

Turbine components and other construction vehicles will access the Site via the local road network. The proposed haul route is detailed in Chapter 13 Traffic & Transport of the project Environmental Statement.

Minor works are required to land away from the Site, along the haul route, to facilitate the movement of large components along local roads during the construction phase. Where works are required, best practice measures will be followed. These measures include minimising the length of time any outages or diversions occur, with residents notified of the planned works, in order to minimise any disruption to those residents potentially affected.

The Development will be accessed from the public roads via seven access points along Glenmornan road and Napple road. This was the result of a design process that aimed to minimise the effect on active peat on the Site, such that more use of the public road and a lower on-site footprint was chosen in preference to an extensive network of on-site tracks. The access points are detailed in the submitted planning application drawings.

The access point locations have been selected to maximise visibility of and for vehicles entering and leaving the Site. Visibility splay figures are provided for each access point as planning application figures.

A transport assessment has been undertaken in support of the application for the Development and this provides details on access route options for decommissioning/construction vehicles and provides an estimate of trip generation during this period. The transport assessment includes a routing study to establish the feasibility of the access route for turbine delivery from Foyle Port Derry/Londonderry to

the Site entrances. Details of this and assessment of traffic impacts during the initial decommissioning/construction and operational phases of the Development are provided in Chapter 13: Traffic and Transport.

3.3.9 The Development Components: Onsite Access Tracks

Where possible the existing access tracks will be retained, utilised and upgraded as necessary to access the proposed turbine positions. Tracks required to access new elements of the Development will be retained throughout the operational life of the Development to enable maintenance of the turbines and replacement of any turbine components. In total, approximately 3.947 km of new access tracks will be required, with approximately 382 m of existing track requiring localised widening.

The access track layout has been designed considering a range of environmental and technical constraints, including breeding birds, active peat, sensitive habitats and steep slopes. All tracks are designed to respond to turbine supplier track requirements and will provide a 5 m wide running surface with localised widening on corners or areas of steeper slopes and will enable access to the turbine locations. The track spurs will have 'dead-ends' with turning heads provided where necessary; these turning heads will reuse areas of existing and redundant infrastructure where possible. Tracks will have passing places where necessary.

Access tracks will be constructed with a 'cut track' design where there is less than 1m depth of peat and using a 'floating track' design elsewhere. Analysis of peat-depth survey data, collected as part of the EIA process (see Chapter 9: Geology and Peat of the Environmental Statement), suggests that the average peat depth at proposed new track is 0.7 m and the majority is within topsoil or peat of depth less than one metre.

Access tracks will be constructed with graded stone aggregate won from cut activities, re-use of existing materials from redundant infrastructure or stone imported from local quarries to provide a level surface and will incorporate geosynthetic layers to strengthen the track as necessary. The running surface will be made of a durable surfacing material resistant to crushing, formed from selected crushed and compacted stone.

Construction of a 'cut track' design involves the topsoil and peat being stripped to expose a suitable formation on which to build the track. The track will then be constructed on the formation by laying and compacting crushed rock to a depth dependent on ground conditions and topography, although generally the surface of the track will be flush with, or raised slightly above, the surrounding ground level. Geosynthetic layers will be incorporated at the formation and/or within the crushed rock as required to minimise the amount of material required. The upper soil/peat horizon, together with any vegetation, will be placed to one side for later reinstatement, if appropriate. The construction of the 'floating track'[11] will not require the removal of surface vegetation or peat near the surface. Instead, a geogrid layer will lie on the surface of the ground, with the road being built on an embankment above this base layer.

Access track drainage will be designed to maintain the existing hydrological environment as far as practical. More information on this is provided within the Outline DCEMP of the project Environmental Statement. The number of watercourse crossings has been minimised through the design process. More information on proposed watercourse crossing locations and designs is provided in Technical Appendix A8.4 Watercourse Crossing Inventory of the project Environmental Statement.

3.3.10 The Development Components: Site Signage

During the decommissioning and construction phase, the Site will have suitable signage to protect the health and safety of workers, contractors, and the general public.

During the operational phase, there will be a sign giving the operator's name, the name of the Development and an emergency contact telephone number. On the turbines and the substation, there will be further signs giving information about the component, potential hazards, the operator's name,

[11] *Forestry Civil Engineering and Scottish Natural Heritage (NatureScot) (2010), Floating Roads On Peat [Online] Available at : FCE-SNH-Floating-Roads-on-Peat-report.pdf (roadex.org) (Accessed 25/04/2023)*

the location grid reference and the emergency telephone number. The final location and design of the signage will be defined prior to the Development becoming operational.

3.3.11 Grid Connection

The grid connection will be subject to a separate planning application, which will be accompanied by its own ES. This will either be done by SONI (Northern Ireland's transmission system operator), NIE (Northern Ireland Electricity) or by the Applicant. In initial discussions with SONI, they identified two potential grid connection points: Strabane 110kV substation and Killymallaght 110kV substation. Once an application is made, SONI will conduct studies post consent to determine which is the best point of connection. The windfarm will connect to the substation via either an overhead line (OHL) or underground cable along the public road system. The potential grid connection routes and connection points are detailed in Chapter 3 Development Description of the project Environmental Statement.

3.3.12 Decommissioning & Construction Programme

The first phase of the Development will comprise the initial decommissioning phase and removal of the existing turbines, external transformers, and wind monitoring masts from the Site. It is anticipated that the turbines and external transformers will be carefully dismantled and transported offsite, possibly for resale in the second hand market. For the purposes of undertaking the planning application and EIA, it is assumed that the initial decommissioning and construction phases are likely to commence in 2025 at the earliest. The date can only be confirmed following consent for the Development and confirmation of the grid connection timelines by SONI/ NIE. It will also be influenced by any prevailing market conditions and requirements.

The decommissioning of the Operational Owenreagh I and II Windfarms is expected to take approximately three months following an initial period of four weeks, during which the temporary construction compounds will be constructed and existing tracks and crane hardstandings will be cleared of vegetation and upgraded for use by decommissioning vehicles as required.

Following initial track construction and upgrade, cranes will be used to split the turbines into suitable sections, which will then be transported from the Site by heavy goods vehicles (HGVs). Following removal of the blades, power cables will be disconnected and lowered with control cables left in place before the tower sections are lowered.

In those locations where the areas of the turbine and transformer bases will not form part of the new crane hardstanding and laydown areas, they will be cut to 1 m below the surface and backfilled with suitable topsoil, generated from the construction activities elsewhere in the Site. Those areas of hardstanding and access track which are being reused will be retained, whilst unaffected areas of hardstanding and access track that have already naturally regenerated will either be left in situ, or removed and reinstated, with materials reused in the construction activities elsewhere on the Site and in accordance with Technical Appendix A3.1 and A3.2 of the project Environmental Statement.

It is expected that the construction phase of the Development will run in parallel with the decommissioning of the Operational Owenreagh I and II Wind Farms and take approximately 12 months in total. This period is somewhat weather dependent and could be affected by onsite conditions. It is envisaged that the decommissioning/construction programme would follow the broad outline as detailed in Table 3.4.

Table 3.4 Indicative Decommissioning/Construction programme

Month / Activity	1	2	3	4	5	6	7	8	9	10	11	12
Site Establishment												
Decommissioning of existing turbines												

Month / Activity	1	2	3	4	5	6	7	8	9	10	11	12
Access road, upgrade, widening, removal and construction												
Substation Construction												
Excavation and construction of turbine foundations and hardstandings												
Cable installation and electrical works												
Turbine delivery and erection												
Turbine commissioning												
Site restoration												

It is advantageous for works within the peatland areas of the Site to take place at the driest time of year to minimise disturbance to the peatland habitats and minimise any potential peat slide risk. Whilst the programme for decommissioning and construction will be developed to account for the bird breeding season, should works be required over the summer months best practice measures will be utilised to avoid disturbance to birds. Any such works would be undertaken in line with the mitigation measures described in Chapter 11: Ornithology of the project Environmental Statement. These measures include but are not limited to:

- Utilisation of an ECoW during decommissioning and construction;
- Limiting the use of fencing; and
- Water quality monitoring.

3.3.12.1 Working Hours

In general, working hours for the decommissioning and construction phase will be from 07:00 to 19:00 throughout the week, with reduced working hours at weekends. It should be noted that during the turbine erection phase, operations may proceed around the clock to ensure that lifting operations are completed safely.

3.3.12.2 Site Restoration

Following construction activities, areas of land used temporarily will be restored. These would include the construction compounds and any other working areas around the infrastructure. Environmental Statement Technical Appendix A3.3: Outline Peat Management Plan includes methods used for reinstatement of both disturbance from the decommissioning and construction activities as well as re-instatement of redundant infrastructure. This forms an integral part of the post-construction restoration programme to be carried out in accordance with the Draft HMP and Outline DCEMP (as detailed in the Environmental Statement). These methods will be finally agreed with DfI Planning in consultation with relevant statutory authorities prior to the commencement of restoration works.

3.3.12.3 Decommissioning and Construction Environmental Management Plan

The Applicant will appoint an Infrastructure Contractor who will have overall responsibility for environmental management on the decommissioning/construction site (the Contractor). The services of specialist advisors will be retained as appropriate, such as an archaeologist, project ECOW, ecologist, and geo-technical engineer to be called on as required to advise on specific environmental

issues. The appointed Contractor will ensure construction activities are carried out in accordance with the mitigation measures outlined in the project Environmental Statement.

Environmental Statement, Technical Appendix A3.1 sets out guidance and best practice for adoption during the decommissioning and construction phases of the Development. The oDCEMP provides an overview of the environmental management and decommissioning, and construction best practice designed to reduce the potential for any environmental effects during these phases.

To ensure that the mitigation and management measures detailed within the Environmental Statement are carried out, construction personnel and contractors will be required to adhere to the oDCEMP which will form an overarching document for all decommissioning and construction site management requirements.

Contractors will also be required to adhere to the following to minimise environmental effects of the decommissioning and construction process:

- Conditions required under the planning permission; and
- Any other relevant mitigation measures identified in Environmental Statement Chapter 16: Summary of Effects and Mitigation, of the Environmental Statement, including how the Contractor will implement this mitigation and monitor its implementation and effectiveness e.g. the control of noise and dust, and waste.

The final DCEMP used in the decommissioning and construction phase would be based on the outline DCEMP provided with the Environmental Statement and will be agreed with DfI Planning and the relevant statutory consultees prior to commencement of construction. Performance against the DCEMP will be monitored by the Applicant's Construction Project Manager throughout the decommissioning and construction phases.

Particular environmental impacts and associated mitigation measures required to be addressed within the DCEMP are discussed in the relevant sections of the Environmental Statement. Such as:

- Noise and vibration;
- Dust and air pollution;
- Surface water and groundwater;
- Ecology and ornithology (including the protection of habitats and species);
- Cultural heritage;
- Waste, pollution and incidence response; and
- Site operations, including working hours and health and safety onsite.

The DCEMP will work in conjunction with other documents produced prior to construction, whereby there will also be a requirement to manage other aspects of the Development such as the movement of traffic, to and from the site, including for the movement of abnormal loads and daily workers commute, including mitigation for impacts to public transport and local private access arrangements.

3.3.13 Operational Phase

A 40-year operational lifespan of the Development has been assumed for the purposes of this assessment. If a turbine is non-operational for a period of 1 year or more, it will be decommissioned. When the last turbine is decommissioned, the whole Development (including tracks and other infrastructure) will be decommissioned. The potential effects of decommissioning are included in this ES. More information is provided in Section 3.3.15.

3.3.14 Turbine and Infrastructure Maintenance

Turbine maintenance will be carried out in accordance with the manufacturer's specification. The following routine turbine maintenance will be undertaken:

- Initial service;
- Routine maintenance and servicing;
- Gearbox oil changes;

- Blade, gearbox and generator inspections; and
- Replacement of blades and components as required**.**

Operational site inspections will be undertaken by the Applicant's staff, on a weekly basis and the servicing of turbines will be undertaken as per the turbine manufacturers requirements, usually once per year, but with monthly visits by the manufacturer's servicing team.

Ongoing track maintenance will be undertaken to ensure safe access is maintained to all parts of the Development all year round. It is expected that the Development will continue to employ a site supervisor on a permanent basis, for regular operational and maintenance activities.

3.3.15 Final Decommissioning

It is assumed that the Development will at some point require to be decommissioned, whether because the maintenance of the turbines becomes too expensive or for other reasons. When this happens, the process would be similar to the decommissioning of the Operational Owenreagh I and II Wind Farms described above, although it is possible that some of the access tracks may be left in situ if required by the land owners, to facilitate ongoing land management at that time.

The potential effects arising from such decommissioning will be less than the effects arising as a result of the combined initial decommissioning and construction phase described above. The initial decommissioning and construction phase, therefore, represents the worst-case parameters for the final decommissioning phase for assessment purposes.

As for the decommissioning and construction phase, it is assumed that the final decommissioning phase can be addressed via a decommissioning planning condition. The final wording for this planning condition will be agreed with DfI Planning, as part of the planning application determination process.

3.4 Overview of Planning History

Table 3.5 outlines the planning history associated with the Development and the Site. The Site has an extensive planning history associated with wind energy development and is an established energy resource that has been contributing the Northern Ireland renewable energy portfolio since 1997.

Table 3.5: Planning History Overview

Planning Reference Number & Development Description	Details
J/93/0826/B- Planning permission was granted for the '*Construction of a wind farm consisting of 16 turbines on 40- metre high towers, access road anemometry mast and associated works'* on 3rd April 1996.	The application was approved subject to 10 no. planning conditions. The planning approval is not subject to any operational life-span planning conditions and therefore has an 'in-perpetuity consent'. 10 of 16 no. consented turbines were constructed and have been operational since 1997 and are referred to as Owenreagh I wind farm. The constructed turbines were Zond Z40s, with a tip height of 60m and an operational capacity output of 5 MW. Since 1997, two turbines have been decommissioned.
J/2004/1015/F- Planning permission was granted for the "*Substitution of 6 approved (unconstructed) wind turbines (total height of 60 metres ground to blade tip) with 6 wind turbines with slight specification alterations (total height of 66 metres ground to blade tip) and 475 metres of service roads linking with existing wind farm at Owenreagh Hill with development*	The application was approved subject to 10 no. planning conditions. The planning approval is not subject to any operational life-span planning conditions and therefore has an 'in-perpetuity consent'. The six Vesta V52 turbines, have been operational since 2008 and are referred to as

taking place within existing site boundary" on 10th October 2005.	Owenreagh II wind farm. a tip height of 66m and an operational capacity output of approx. 5.1 MW.
J/2010/0481/F- Planning permission was granted for "*Six wind turbines with an overall height from ground to blade tip of 111m, 33kv substation and compound, construction of internal site tracks and associated works and ancillary works, access points on the Glenmornan Rd and the relocation of the temporary turbine supply compound*" on 15th January 2018.	Derry City & Strabane District Council granted planning permission for Ref No.J/2010/0481/F. the six 111m high turbines were consented to operate beside the existing the Owenreagh I and Owenreagh II wind farms. Planning permission for Ref No.J/2010/0481/F expired in January 2023. The planning permission was not implemented on site.

3.4.1 Neighbouring Wind Turbine Planning Application

At the time of writing this report (August 2023), there is a planning application for a replacement turbine submitted to the Council, but yet to be determined, located approximately 1km south/ south-west from the Development. The development description for Planning Ref No.LA11/2022/1099/F is as follows:

"Erection of new 59m. hub height and 52m. rotor diameter wind turbine (up to 250 kW. output) to substitute existing 40m. hub height and 35m. rotor diameter wind turbine (J/2010/0410/F) at a site located 540m north-east of No.2 Ballykeery Rd, Strabane, Co.Tyrone."

The details of Planning Ref No.LA11/2022/1099/F have informed cumulative assessments undertaken, as part of the project Environmental Impact Assessment, in particular Chapter 12 Noise of the Environmental Statement.

3.4.2 Neighbouring Planning Application- NIE (Planning Ref No.LA11/2019/1000/F)

During initial consultation Northern Ireland Electric (NIE) indicated that they had no existing utilities on the Site and no objections to the Development. Further consultation subsequently identified that NIE have applied for a 33kV wooden-pole overhead power line (Planning Application Reference LA11/2019/1000/F), which would be located within 29 m and 50 m of turbines T13 and T14, respectively.

The 33kV power line involving both construction of above ground 33kV overhead line supported by wooden poles and underground 33kV cable laid below ground level in ducts, to serve Curraghinalt mine (currently under consideration planning application LA10/2017/1249/F). The 33kV power line in proximity to T13 and T14, is an overhead line supported by wooden poles.

The grid connection application (LA11/2019/1000/F) and the Curraghhinalt mine application are set to be subject to public inquiry by the Planning Appeals Commission. At the time of writing this Statement, the date for the public inquiry hearings have not been scheduled by the PAC, however the PAC commissioner has been appointed[12].

The cumulative effects of the Development with the NIE project have been considered within the Environmental Statement. Should the Development be consented, the Applicant will work closely with NIE to identify solutions and mitigation measures acceptable to both parties and as assessed by the ES to address the proximity of T13 and T14 to the grid connection line. .

[12] *JUNO Planning consultation with PAC on 7th August 2023*

4.0 Section 26 Determination Process & Pre-Application Community Consultation

4.1 Overview of Section 26 Determination Process

On 29th April 2021, JUNO Planning wrote to the Department for Infrastructure (DfI) Strategic Projects Division requesting a determination under Section 26 of the Planning Act (Northern Ireland) 2011 ("2011 Planning Act") in respect of the Development. The request sought clarification on whether the Development constituted a development of 'regional significance' under the provisions of The Planning Act (Northern Ireland) 2011 (Section 26(1)) and The Planning (Development Management) Regulations (Northern Ireland) 2015. The Section 26 Determination submission sought clarification on whether DfI Planning would be responsible for the planning application determination.

On 13th May 2021, in accordance with Section 26(4) of the 2011 Planning Act, DfI Planning issued their Section 26 Determination, which detailed that the Development is development to which Section 26 applies. The Section 26 Determination also detailed that any future planning application should be made to the Department for Infrastructure.

4.2 Pre-Application Community Consultation

4.2.1 Overview of Pre-Application Community Consultation Process

A Pre-Application Community Consultation (PACC) Report is submitted alongside this Planning Statement, in line with the statutory requirements of section 28 of the Planning (NI) Act 2011. The PACC process formally commenced in June 2021, with the submission of a Proposal of Application Notice (PAN) by JUNO Planning to DfI Planning. The PAN outlined how the consultation process consisted of 2 no. stages namely in November 2021 and November/ December 2022. Both stages of consultation were focussed around information events at the Fir Trees Hotel in Strabane and the Owen Roe O'Neills GAC club rooms in Glenmornan. During the Stage 2 consultations, an additional consultation event was held by the Applicant in a local landowner's farm premises (Rouse's barn) to enable local people to access project specific information in their immediate environs. The events were advertised in the local press and invitations to the events were sent to all residential properties within 3km of the development area.

4.2.2 Pre-Application Community Consultation Events

As stated above, two stages of public consultation events were undertaken for this Development, in November 2021, and November/ December 2022. The aims of the first round of public consultation events (November 2021) were to invite comments and obtain feedback in the early design stages to ensure that local considerations helped to inform design decisions. Attendees completed feedback forms.

One key issue that was raised at the Stage 1 consultation events related to the potential impacts of the Development on the local ecology and species in the area. The potential ecological effects of the Development have been assessed in Environmental Statement Chapter 9: Ecology, which concludes that there are no significant environmental effects. There was also interest in the potential noise impacts arising from the Development. The potential noise effects of the Development have been assessed in Environmental Statement, Chapter 12- Noise., which concludes that the Development will not result in significant effects.

At the Stage 2 consultation events, there was particular interest on the potential impacts on the local bat populations. There was extensive, multi-year bat surveys undertaken at the Site, by the project ecologists. The surveys informed a 'Bat Impact Assessment' which is detailed as part of the Environmental Statement, Chapter 9- Ecology. A turbine was omitted from the preliminary layout to negate potential impacts on an identified bat roost.

Further information on all the public consultation events, including feedback from attendees and responses as relevant is provided in the Pre-Application Community Consultation (PACC) Report submitted as part of this planning application. The PACC Report has been submitted to DfI Planning

as a standalone document as part of the planning application. The PACC Report summarises the consultation that has been undertaken with the local community, detailing how comments received were responded to.

4.3 EIA Scoping Opinion Request & Pre-Application Discussions ("PAD") with DfI Planning

On 7th July 2021, JUNO Planning, on behalf of the Applicant and EIA project team, submitted an EIA Scoping Request (under Reg8(1)(b) of the Planning (Environmental Impact Assessment) Regulations (NI) 2017 ("EIA Regulations")) and also a PAD request (Ref No.LA11/2021/0288/PAD) to DfI Planning.

Following submission of the EIA Scoping Request, JUNO Planning agreed a number of extensions of time by DfI Planning for the provision of their EIA Scoping Opinion Response. DfI Planning provided their response on 13th October 2022. The EIA Scoping Opinion Response was informed by statutory consultee consultation responses and feedback. The Applicant also held a number of PAD meetings with DfI Planning and statutory consultees. Further details on the EIA Scoping process, consultation meetings and EIA Scoping Opinion are provided in the Environmental Statement, Chapter 2- EIA Methodology.

5.0 Local Development Plan Assessment

5.1 Introduction

Section 45 of the Planning Act 2011, 'Determination of Planning Applications' states:

> *"45.-(1) Subject to this Part and section 91(2), where an application is made for planning permission, the council or, as the case may be, the Department, in dealing with the application, must have regard to the local development plan, so far as material to the application, and to any other material considerations….."*

5.5.1 The Local Development Plan

In this legislative context, regard must be had to the Strabane Area Plan 1986-2001 ("SAP"). The SAP is the current statutory Local Development Plan (LDP) for this geographic location within the Council area. The SAP 1986-2001 comprises:

- Part 1- Introduction;
- Part 2- Plan Strategy;
- Part 3- Policy Framework;
- Part 4- Statement of Policies, Proposals and Maps- District Towns;
- Part 5- Statement of Policies, Proposals and Maps- Local Towns;
- Part 6- Statement of Policies, Proposals and Maps- Villages;
- Part 7- Statement of Policies, Proposals and Maps- Hamlets; and
- Part 8- Policy Statements and Maps- Rural Area.

The site is located within the 'green belt' area, as designated by the SAP 1986-2001 and also within the Sperrin Area of Outstanding Natural Beauty. The SAP 1986-2001 does not contain planning policies regarding renewable energy or more particularly wind farm development. Given the vintage of the LDP, the retained policies have limited significance in material planning terms, as they are superseded by the policy provision of the retained Planning Policy Statements and the Strategic Planning Policy Statement, which post-date the publication of the SAP 1986-2001.

The Council are currently preparing the Derry City & Strabane District Council Local Development Plan 2032 (Council LDP), which when adopted will replace all existing plans for the Council area. The Council LDP is currently at Draft Plan Strategy Stage (LDP-DPS). The LDP-DPS is scheduled for independent public examination during September and October 2023, and may be adopted later in 2024. Until such time as the Local Development Plan Draft Plan Strategy is adopted, the current Draft Plan Strategy policies should be afforded limited material planning weight in the determination of the planning applications. Further details in respect of the Council LDP- DPS are provided in section 6.2 of this report.

6.0 Material Considerations

6.1 Regional Planning Policy

The 2011 Planning Act states that when determining a planning application, the determining authority shall have regard to the relevant provisions of the development plan and to all other material considerations. The weight to be given to each material consideration is a matter for the determining authority.

Given the vintage of the local development plan (SAP 1986-2001), the regional planning policy (Strategic Planning Policy Statement (SPPS)) is more up to date than the adopted local development plan policy. Furthermore, the SAP is silent on numerous local planning policy issues, notably renewable energy policy and references regional planning policy documents (PPSs) as prevailing policy in a local context rather than specifying local planning policy.

The following regional planning policy documents are considered material in the determination of the Application:

- The Regional Development Strategy 2035 (RDS 2035)
- The Strategic Planning Policy Statement (SPPS)
- Planning Policy Statement 2- Natural Heritage (PPS 2)
- Planning Policy Statement 3- Access, Movement and Parking (PPS 3)
- Planning Policy Statement 6- Planning, Archaeology & Built Heritage (PPS 6)
- Planning Policy Statement 10- Telecommunications (PPS 10)
- Planning Policy Statement 13- Transportation & Land Use (PPS 13)
- Planning Policy Statement 16- Tourism (PPS 16)
- Planning Policy 18- Renewable Energy (PPS 18)
- Planning Policy Statement 21- Development in the Countryside (PPS21)

6.1.1 The Regional Development Strategy 2035 (RDS 2035)

The RDS 2035 strategic guidance actively promotes the shift to a lower carbon economy, the mitigation and adaptation to climate change and the delivery of a secure and sustainable energy supply. The RDS sets out supplementary regional guidance within the document which seeks to increase the contribution of renewable energy to the overall energy mix, to strengthen the grid infrastructure, and to develop 'smart grid' initiatives. Importantly the increase of renewable energy provision is highlighted as a key climate change adaption measure. Policy RG9 states "*Reduce our carbon footprint mitigation and adaption to climate change whilst improving quality".* The climate change adaption measures identified by the RDS include:

- Reduce greenhouse gas emissions from transport.
- Reduce noise and air pollution from transport.
- Use more energy efficient forms of transport.
- Improve the energy efficiency and adaptability of buildings.
- Increase the use of renewable energies.
- Utilise local production of heat and/or electricity from low or zero carbon energy sources.
- Develop strong linkages between policies for managing air pollution and climate change.
- Protect Air Quality Management Areas.

The Development supports the strategic objectives of the RDS 2035, through an increase in the provision of renewable energy, and it represents innovation in the renewable energy sector being among the early Repower projects in NI. The provision of capacity output of over 60MW of electricity from the Development aligns with the shift to a lower carbon economy, the mitigation and adaption to climate change and also the delivery of a secure and sustainable energy supply.

Section 3.53 states *"Planning for physical development, social infrastructure, physical infrastructure and economic development is central to the development of a strong North West."* While section 3.54 highlights the importance of improving the energy infrastructure across the north-west region, ensuring that it has *"access to reliable, sustainable energy supplies to support economic growth and connectivity and to maximise the North West's significant renewable energy resource."* The Development will utilise existing infrastructure, wherever possible to minimise the impact upon the receiving environment. The Development will ensure the continuity of the established renewable energy resource, contributing towards the security of energy supply in NI.

6.1.2 The Strategic Planning Policy Statement (SPPS)

6.1.2.1 Overview

The SPPS is the regional planning policy document for Northern Ireland. It contains a suite of planning policy and is a material planning consideration in the determination of all planning applications in Northern Ireland. As the local development plan is silent on renewable energy policy the policy provision of the SPPS is an important material consideration.

The SPPS (section 3.7) is supportive of sustainable development and expounds that:

> *"furthering sustainable development also means ensuring the planning system plays its part in supporting the Executive and wider government policy and strategies in efforts to address any existing or potential barriers to sustainable development. This includes strategies, proposals and future investment programmes for key transportation, water and sewerage, telecommunications and energy infrastructure (including the electricity network)."*

The SPPS also provides that the planning system should help to mitigate and adapt to climate change through (amongst other measures) the promotion of renewable energy provision. The SPPS acknowledges that NI has significant renewable energy resources and a vibrant renewable energy sector noting at section 6.216 that:

> *"Renewable energy reduces our dependence on imported fossil fuels and brings diversity and security of supply to our energy infrastructure. It also helps Northern Ireland achieve its targets for reducing carbon emissions and reduces environmental damage such as that caused by acid rain. Renewable energy technologies support the wider Northern Ireland economy and also offer new opportunities for additional investment and employment, as well as benefitting our health and well- being, and our quality of life."*

Furthermore, the SPPS (section 6.218) states that the:

> *"aim of the SPPS in relation to renewables is to facilitate the siting of renewable energy generating facilities in appropriate locations within the built and natural environment in order to achieve Northern Ireland's renewable energy targets and to realise the benefits of renewable energy without compromising other environmental assets of acknowledged importance."*

The SPPS (section 6.219) details the regional strategic development objectives for renewable energy which are to:

> *"-ensure that the environmental, landscape, visual and amenity impacts associated with or arising from renewable energy development are adequately addressed;*
>
> *- ensure adequate protection of the region's built, natural, and cultural heritage features; and The PfG contains a target for a reduction in greenhouse gas emissions by at least 35% on 1990 levels by 2025.*
>
> *- facilitate the integration of renewable energy technology into the design, siting and layout of new development and promote greater application of the principles of Passive Solar Design*

The Development is sited at the existing operational Owenreagh I and II wind farms where the local and wider landscape visually accommodates the windfarm. The Development, where possible, utilises existing windfarm infrastructure to minimise environmental and amenity impacts. The Development supports the move to a low carbon economy, helps combat climate change, helps maintain the security of energy supply in NI and creates opportunities for investment and employment within the Council area and NI (detailed in Chapter 14- Land- Use, Socio Economics, Tourism and Recreation' of the Environmental Statement).

6.1.2.2 Renewable Energy Policy

SPPS planning policy outlines that renewable energy development proposals will be permitted where the proposal will not result in an unacceptable adverse impact on (i) public safety, human health, or residential amenity, (ii) visual amenity and landscape character, (iii) biodiversity, nature or built heritage assets, (iv) local natural resources, such as air quality, water quality or quantity, and (v) public access to the countryside. Section 6.225 outlines the following important policy consideration:

> *"The wider environmental, economic and social benefits of all proposals for renewable energy projects are material considerations that will be given appropriate weight in determining whether planning permission should be granted."*

6.1.2.2.1 Public Safety & Human Health

A Human Health Impact Assessment (HHIA) is included as part of the overall EIA process. This is summarised and detailed in Chapter 15-Other Issues in the ES. The HHIA had regard to the findings of the following assessments:

- Traffic & Transportation (ES Chapter 13: Access, Traffic and Transport);
- Noise (ES Chapter 12: Noise)
- Residential Visual Amenity Assessment (RVAA) (ES Technical Appendix A6.2)
- Shadow Flicker (ES Chapter 15: Other Issues)

Regarding public safety and human health, the submitted HHIA indicates that the Development is unlikely to negatively impact people's health and wellbeing in its widest sense. There are no effects that:

- Cause potentially severe or irreversible negative effects;
- Affect a large number of people to an unacceptable level; or
- Specifically, may affect groups of people who already suffer poor health are socially excluded to an unacceptable level.

There are no significant effects predicted for any phase of the Development.

6.1.2.2.2 Residential Amenity

The submitted ES reviews the impact upon residential amenity across a number of ES chapters including:

- Noise (Chapter 12- Noise)
- Shadow Flicker (ES Chapter 15-Other Issues)
- Residential Visual Amenity Assessment (ES Technical Appendix A6.2)

The Noise assessment concluded that the worst-case noise levels due to the Development are below the noise limits at all assessed receptors, and as such are not significant in terms of the EIA Regulations. Decommissioning/construction noise will be limited in duration and confined to working hours, as agreed with the Planning Authority, and therefore can be adequately controlled through the application of good practice measures and secured by planning condition. This will ensure that any noise from the Development site during construction will be adequately controlled. Operational noise has been assessed in accordance with ETSU-R-97 and in line with current best practice. It has been shown that the Development would comply with the requirements of ETSU-R-97 at all receptor (including residential unit) locations. The cumulative effects of the Development in conjunction with the nearby wind energy

development which is subject to a current planning application were taken into consideration in the above assessment, in accordance with ETSU-R-97 and regional planning policy.

The Residential Visual Amenity Assessment (RVAA) details an assessment for each property or property cluster within specified distances from the proposed turbines. The RVAA identifies 79 no. residential properties within 2 km. The significance of the effect on residential visual amenity experienced at each property is dependent on a range of factors considered in the sensitivity and the magnitude of change resulting from the Development. These judgements on sensitivity and magnitude are combined to arrive at an overall assessment as to whether the Development would have an effect that is significant or not significant on residential visual amenity.

The RVAA details that the difference between significant visual effects and what might be considered to be an unacceptable or overbearing effect on residential visual amenity and has evolved through Public Local Inquiry (PLI) decisions over the past decade. The factors considered in such an assessment are widely recognised by professional Landscape Architects and decision makers and are often referred to as 'the Lavender test' after the Inspector who first developed the concept. The factors considered in the so called 'Lavender test' requires a level of visual effect to arise which is greater than a significant visual effect in EIA terms, for the impact to be unacceptable in planning terms. This is referred to as the Residential Visual Amenity Threshold. The magnitude of effect must be to such a degree that a property would become widely regarded as an unattractive place in which to live. This public interest test therefore has a higher threshold than 'significant' in EIA terms. This approach is commonly applied to the assessment of visual effects on residential amenity. The approach has been refined through decisions for Inquiries and Appeals into wind farm applications across the United Kingdom and recognises that, given no person is entitled to a view in law, it is not sufficient for a property to simply sustain a significant visual effect for its residential amenity to be unacceptably harmed. For residential visual amenity to be harmed a higher threshold requires to be triggered, whereby the turbine(s) are at such proximity to a house, or in such number, that they lead to an overwhelming or overbearing effect on the property to the extent that it becomes an unattractive place in which to live. Where this occurs, the matter affects the public interest, as such an outcome would be considered to harm the provision of good housing stock.

Of the 79 no. residential properties considered within the RVAA**,** 11 are considered to have no effect either due to no theoretical visibility of the Development or because visibility is obscured by intervening landscape elements. Of the 68 no. properties that have views of the Development, 54 no. properties are found to have significant effects, while 14 no. properties not have significant effects. The magnitude of change will be high at 15 no. properties, medium-high at 22 no. properties, medium at 14 no. properties, medium-low at eight properties, and low at nine properties. The high magnitude of change experienced at 15 no. properties has meant that these 15 no. properties were required to be considered for a Step 4 Residential Visual Amenity Threshold Assessment. The conclusion of this Step 4 assessment is that whilst a high magnitude of change and major significant effect is predicted, the nature of the visual impact at all 15 properties (five of which have a financial interest in the Development) is not sufficiently adverse to be characterised as an overwhelming or overbearing effect on visual amenity. All properties are located beyond the minimum 500m separation distance.

The Development is not considered to lead to the 'Residential Visual Amenity Threshold' being reached in respect of any of these properties. Moreover, the Development does not have the potential to give rise to overbearing or over whelming effects on any of the properties in respect of the visual amenity of residents at the property. The RVAA concludes that residential visual amenity of existing and committed residential receptors will not be adversely affected to such a degree that the impact results in a property becoming an unattractive place to live.

The 'Shadow Flicker Assessment' is contained within Chapter 15 of the ES. The ES details the effects of shadow flicker upon sensitive receptors, including residential units, during the operational phase of development. In line with prevailing guidance (PPS18 Best Practice Guidance) and additional UK guidance (Planning Practice for Renewable and Low Carbon Energy) a 'Study Area' of ten times rotor diameter distance (1,360m- ten times the maximum rotor diameter of 136m) and 130 degrees either side north around each proposed turbine location was mapped, and the potential impact upon residential units within the study area assessed. A conservative assessment approach was taken,

whereby shadow flicker screening effects provided by trees or buildings have not been taken into account. This reduces or indeed eliminates shadow flicker from occurring in practice.

There are 16 no. receptors located within the shadow flicker study area. A full list of these receptors is presented in Table 6.1.

Table 6.1: Residential Receptors within the Shadow Flicker Study Area

Receptor ID	Receptor Address	Spatial Coordinates (Meters)	
		Easting	Northing
1	101 Hollyhill Road, Knocklnarvoer, Strabane	242635	398227
3	51 Napple Road, Ballykeery, Dunnamanagh**	245122	396215
4	20 Ballykeery Road, Ballykeery, Dunnamanagh	244898	395648
5	33 Koram Road, Owenreagh, Strabane**	240867	397471
6	105 Hollyhill Road, Knocklnarvoer, Artigarvan	242776	398246
7	109 Hollyhill Road, Knocklnarvoer, Artigarvan**	242988	398424
8	113 Hollyhill Road, Knocklnarvoer, Artigarvan	243054	398435
9	35 Koram Road, Owenreagh, Strabane**	240855	397514
10	9 Balbane Road, Meendamph, Dunnamanagh	245451	396366
11	34 Koram Road, Owenreagh, Strabane	240754	397896
12	111 Hollyhill Road, Knocklnarvoer, Artigarvan**	243037	398390
13	106 Hollyhill Road, Knocklnarvoer, Artigarvan	242692	398319
14	21 Ballykeery Road, Ballykeery, Dunnamanagh	245007	395703
17	Property Along Ballykeery Rd	244844	395550
18	Property Along Koram Rd**	240895	397441
20	50 Crockan Rd	242714	398359

*** Has a financial interest in the Development*

Potential shadow flicker effects were assessed based on the recommended threshold of 0.5 hours per day and/or 30 hours per year. It was determined that 6 of the receptors, 3 of which have a financial interest in the Development, were calculated as theoretically having potential to experience periods shadow flicker exceeding the threshold. Table 6.2 outlines the details of these 6 no. properties. This assessment includes a number of worst-case assumptions in terms of environmental factors (such as wind conditions and screening), and the context of receptors themselves (in terms of window locations) could reduce or eliminate shadow flicker in practice.

Mitigation may be required if shadow flicker is annoying to residents of these properties. Potential mitigation measures could include the following:

- Control at Property: the provision of blinds, shutters, or curtains to affected properties;
- Control on Pathway: for example, screening via planting close to an affected property; and
- Control at Source: for example, a shutdown of turbines at times when effects occur.

Implementation of appropriate mitigation (preferable control at the source), if required, will ensure that shadow flicker levels remain below the recommended threshold at all neighbouring properties, and therefore shadow flicker effects due to the operation of the Development are not significant as per the EIA Regulations. The appropriate shadow flicker mitigation measures can be controlled through the use of an appropriately worded planning condition, requiring the submission of a 'Shadow Flicker Mitigation Scheme'.

Table 6.2: Shadow Flicker Maximum and Average Levels

ID	Receptors	Days per Year on which Shadow Flicker may occur	Maximum Daily Duration of Shadow Flicker Effects	Theoretical Maximum Shadow Flicker Effects per Year	Predicted Shadow Flicker Effects Per Year[13]
		Days	Hours	Hours	Hours
1	101 Hollyhill Rd	66	1.2	79.2	22
6	33 Koram Rd[14]	101	0.6	58.6	16
7	105 Hollyhill Rd	58	1.0	55.7	16
10	35 Koram Rd[15]	102	0.6	57.1	16
15	106 Hollyhill Rd	50	0.9	44.5	12
18	Property along Koram Rd[16]	105	0.6	63	18

The Shadow Flicker Assessment also assessed the potential impact of shadow flicker arising from the Development when considered cumulatively with existing and proposed windfarms and wind turbines. Screening was conducted to identify any other developments within a 10 times rotor diameter distance of the Development that could potentially contribute to cumulative shadow flicker effects. No other developments were within the specified buffer zone where cumulative shadow flicker effects could occur; therefore, a detailed cumulative assessment of shadow flicker is not required and no cumulative shadow flicker effects are likely.

In line with the requirements of the SPPS, the Development will not have an unacceptable adverse impact upon public safety, human health or residential amenity.

6.1.2.2.3 Visual Amenity & Landscape Character

Chapter 6 Landscape & Visual Assessment of the ES provides a comprehensive assessment of the impact of the Development upon the visual amenity and landscape character upon an agreed (with statutory consultees and DfI Planning during the EIA scoping process) within a defined radius of 30 km Study Area of the Site. The is located entirely within the Sperrin Area of Outstanding Natural Beauty (AONB) and the assessment of potential significant effects on the AONB was a key focus of the landscape and visual assessment.

Physical Landscape

In respect of effects on landscape elements, the assessment found no significant effects would arise in relation to the loss of the rough grass moorland as a result of the decommissioning of Operational Owenreagh I & II Wind Farms and construction of the Development. The principal physical effects that the Development would have on the landscape fabric of the Site are the removal of relatively small areas of rough grass moorland. These effects have been assessed as not significant largely owing to

[13] *Considering average annual hours of sunshine (required for shadow flicker to occur) of approximately 28%.*
[14] *Has a financial interest in the Development.*
[15] *Has a financial interest in the Development.*
[16] *Has a financial interest in the Development.*

the extensive nature of this landcover type and the relative ease with which reinstatement can take place both post-construction, in respect of the temporary infrastructure, and post-decommissioning.

Landscape Character Areas

Chapter 6 Landscape & Visual Assessment identified that eight landscape character areas (LCAs) in Northern Ireland have the potential to undergo significant effects and, consequently were assessed in more detail in the LVIA.

- LCA 20: Derg Valley;
- LCA 24: South Sperrins;
- LCA 26: Bessy Bell and Gortin LCA;
- LCA 27: Foyle Valley LCA;
- LCA 28: Glenelly Valley
- LCA 29: Sperrin Mountains;
- LCA 30: Sperrin Foothills;
- LCA 31: Burngibbagh and Drumahoe;

Table 6.3 provides a summary of the LVIA key conclusions on the potential effects on the eight LCAs assessed.

Table 6.3: Summary of Potential Effects on the LCAs

LCA	LCAs- Summary of Significance of Effect
LCA 20: Derg Valley	The effect of the Development on the landscape character of the LCA 20 Derg Valley would be moderate / minor and not significant during both the decommissioning and construction and operational phases. The Development would not redefine the landscape character of this LCA owing principally to its separation distance from this LCA, the greater influence from the immediate and surrounding landscapes, and the existing influence from the closer range operational wind farms to the south-east.
LCA 24: South Sperrins	There would be no change and, therefore, no effect across most of the South Sperrins LCA owing to there being no visibility of the Development. In those localised parts where visibility does arise, the effect would be not significant at a moderate or moderate / minor level owing to the limited levels of visibility, the wider landscape influences on this LCA and the baseline influence of Owenreagh I and II in the same location as the Development.
LCA 26: Bessy Bell and Gortin LCA	The effect of the Development on the landscape character of LCA26 Bessy Bell and Gortin would be moderate or moderate / minor and not significant during the decommissioning and construction phase and operational phase. The Development would not redefine the landscape character of this LCA owing principally to its separation from the Development and the existing influence from the operational Bessy bell I and II in this LCA.
LCA 27 Foyle Valley	The effect of the Development on the landscape character of LCA27 Foyle Valley would be moderate and significant in the localised patch to the north-west of the turbines and moderate / minor and not significant across all remaining parts, during both the decommissioning and construction phase and the operational phase. The Development would not redefine the landscape character of this LCA owing principally to its separation distance from this LCA, the relatively weak association between this LCA and the LCA in which the Development would be located, and the existing influence from the operational Owenreagh I and II Wind Farms in this southerly sector.
LCA 28: Glenelly Valley	There would be no change and, therefore, no effect across most of the Glenelley Valley LCA owing to there being no visibility of the Development. In those localised parts where visibility does arise, the effect would be not significant at a moderate or moderate / minor level owing to the limited levels of visibility, the closer association

	of this valley with the Sperrin Mountains to the north and the baseline influence of Owenreagh I and II in the same location as the Development.
LCA 29: Sperrin Mountains	The effect of the Development on the landscape character of the LCA29 Sperrin Mountains would be major / moderate and significant during the decommissioning and construction phase and the operational phase across the western part out to approximately 4.5km to the west, 4.0km to the east, 5.0km to the south-east and 3.0km to the south, and not significant across all remaining parts of the LCA. The Development would redefine the landscape character of the western part of this LCA owing to the location of the Development close to the boundary of the western part of the LCA. The Development would not redefine the landscape character of the remaining parts of the LCA owing to the greater separation distance and greater influence from the more dramatic hills to the east**.**
LCA 30: Sperrin Foothills;	The effect of the Development on the landscape character of the Sperrin Foothills LCA would be major / moderate or moderate and significant during the decommissioning and construction phase and operational phase across the southern part of the LCA out to approximately 5km and not significant across the remainder of the LCA. The Development would redefine the landscape character of the southern part of this LCA owing to the location of the Development close to the southern boundary of the LCA. The Development would not redefine the landscape character of the remaining parts of the LCA owing to the closer range influence from the existing operational wind farms in this LCA.
LCA 31: Burngibbagh and Drumahoe	The effect of the Development on the landscape character of LCA 32: Burngibbagh and Drumahoe would be moderate / minor and not significant or no change where there would be no visibility, during both the decommissioning and construction phase and the operational phase. The Development would not redefine the landscape character of this LCA owing principally to its separation distance from this LCA and the existing influence from the operational wind farms in the southern part of the LCA from where the Development is also visible.

In respect of effects on landscape character, the assessment found there would be significant effects within a localised 5 km radius of the Development in three of the LCA's, namely LCA 27- Foyle Valley, LCA 29 Sperrin Mountains and LCA 30 Sperrin Foothills. The effects on landscape character would be moderated by the existing presence of Operational Owenreagh I & II Wind Farms which would be replaced by the Development. Collectively, these significant effects would extend out to a radius of approximately 4.5 km to the west, 5 km to the north-west, 5 km to the north, 4.0 km to the east, 5.0 km to the south-east and 3 km to the south. The effect of the Development on all other LCTs and LCAs during the decommissioning and construction phase and the operational phase would be not significant.

Designated Sites

In respect of landscape designations, the Sperrin AONB was identified as having the potential to be significantly affected and was subject to a detailed assessment. The Development lies within the AONB, near its north-western edge. The LVIA detailed that the majority of the Sperrin AONB would remain unaffected by the Development owing to no visibility or limited and low-level visibility. While localised effects would occur, these would be contained within the north-western part of the AONB and largely coincide with the area currently influenced by Owenreagh I and II turbines. The larger scale of the proposed turbines would, however, give rise to major / moderate or moderate and significant effect, that would extend to approximately 4.5km to the west, 5km to the north, 4km to the east, 5km to the south-east and 3 km to the south during the decommissioning and construction phase and operational phase. The identified localised effects would not affect the overall integrity of the Sperrin AONB owing to the relatively small number of turbines and their contained extent in the north-western part of the AONB where there are much stronger human influences from existing developments and the special qualities of the AONB are expressed to a much lesser extent. The detailed assessment of the effects on the Sperrin AONB found that the Development would give rise to significant effects on those parts of the

AONB that correspond with the extent of the significant effects on the three LCAs (LCA 27,29 and 30) as described above.

Visual Amenity

In respect of effects on visual amenity, of the 25 no. viewpoints assessed as part of Chapter 6 of the ES, the assessment found that 11 of the 25 no. viewpoints assessed, would be subject to significant effects during the decommissioning of Operational Owenreagh I & II Windfarms, the construction phase of the Development and the operational stage of the Development. The viewpoints significantly affected during the decommissioning and construction and operational phases all lie within a 6km radius of the Development and comprise:

- Viewpoint 1: Koram Road, Ligfordrum;
- Viewpoint 2: Koram Road, north of Ligfordrum;
- Viewpoint 3: Napple Road, Ballykeery Bridge;
- Viewpoint 4: Moor Lough Picnic Area;
- Viewpoint 5: Holyhill Road, Holly Hill;
- Viewpoint 11: B48 Ballynamallaght;
- Viewpoint 12: B48 Dunnamanagh;
- Viewpoint 20: Meendamph Road, Crockrour Hill
- Viewpoint 21: Glenmornan;
- Viewpoint 22: Aghafad Road; and
- Viewpoint 24: Silverhill Road.

The viewpoints would mostly be affected owing to either their close proximity to the decommissioning and construction works and operation of the Development, or their greater sensitivity from their location in the Sperrin AONB or representing residents. All viewpoints beyond the 6km range would not be significantly affected as a result of the Development.

In respect of the principal visual receptors, settlements within approximately 6km to the north and east, and within approximately 5km to the south and west, are considered likely to experience significant effects during the decommissioning and construction phase and the operational phase, although these effects would be localised within the settlements in relation to the extent and level of actual visibility. Road users within approximately 5km would experience significant effects, and the NCR 92 would be significantly affected across a short section of the route to the south of the Site, within 6km.

Cumulative Assessment

The most relevant wind farms to the cumulative assessment are operational and these form part of the baseline situation. The assessment of the Development in addition to the cumulative situation is, therefore, partly covered by the main assessment as this assessment already accounts all the operational wind farms, including developments within the Slieve Kirk range to the north. Significant cumulative effects are not considered to arise as a result of the Development, due to the limited intervisibility of the Development with consented and application stage wind farms across the Study Area.

Night-time Assessment

Appendix A6.3 sets out the assessment of night-time effects as a result of visible aviation lighting on the peripheral turbines, as required for turbines greater in height than 150m. At night the turbines would not in themselves be conspicuous during times of darkness. Nevertheless, the assessment of night-time effects for the Development has predicted a significant effect for one of the three representative night-time viewpoints, namely at Viewpoint 4: Moor Lough as a result of the 2000 cd scenario and the 200 cd scenario. For the other representative viewpoints, the effect is assessed as not significant.

The LVIA concluded that there will be significant effects on landscape and visual receptors within the local area around the Development. Such effects are to be expected within the local area around the Development, as these tall and dynamic structures will have direct and indirect effects on landscape character out to approximately 5 km and indirect effects on visual amenity out to approximately 6 km

(in locations and in conditions from where clear views towards the Development are available). While landscape and visual receptors beyond these ranges may gain views of the Development, these effects would not be significant. The Development will not have an unacceptable adverse impact upon Visual Amenity and Landscape character. The Development shares a very similar zone of visibility with the Operational Owenreagh I & II Windfarms, with the significant visual effects contained within close proximity (a 5-6km range) of the Development. In this context, Para 6.230 of the SPPS states *"wind farm developments are by their nature highly visible yet this in itself should not preclude them as acceptable features in the landscape".*

6.1.2.2.4 Biodiversity & Natural Heritage

Chapter 10- 'Ecology' and Chapter 11- 'Ornithology' of the ES evaluates the effects of the Development on ecosystems and their components, including designated sites, habitats, flora and fauna. These chapters of the ES are supported by the following Technical Appendix documents provided in Volume 3 Technical Appendices:

Chapter 10- Ecology

- A10.1: Owenreagh / Craignagapple Ecological Impact Assessment (EcIA);
- A10.2: Shadow Habitats Regulation Assessment;
- A10.3: National Vegetation Classification (NVC) Assessment;
- A10.4: Active Peat Assessment (APA);
- A10.5: Confidential badger sett locations; and
- A3.2: Owenreagh / Craignagapple Habitat Management and Enhancement Pan (HMEP).

Chapter 11- Ornithology

- A11.1: Ornithology (synopsis report); and
- A11.2: Avian Collision Risk Modelling (CRM).

Subject to the successful implementation of the proposed mitigation measures and having regard to the current baseline, the Development will have positive effects upon habitats, and may result in a net positive impact for bats. In the case of ornithology, further to the proposed mitigation measures residual impacts that are considered of **low to very low significance**.

Therefore, the Development will not cause any significant negative effects on designated sites, habitats, legally protected species, or any other features of ecological importance.

Proposed mitigation measures include a 'Habitat Management Plan' which encompasses a range of proposed habitat reinstatement and compensation measures. An Ecological Clerk of Works (ECoW) will be employed for the duration of the construction works. The role of the ECoW is to assist the contractor with the interpretation and implementation of the ecological mitigation measures, including the Habitat Management & Assessment Plan (Appendix A3.2 of the ES) and other relevant documents.

Further details on the potential impact of the Development on active peatland habitat is provided in section 6.1.2.3 below. Chapter 11 concludes that there are not considered to be significant effects from the Development on ornithology. In the absence of mitigation, it is not anticipated that bird activity is likely to be significantly affected by the Development. With the full implementation of the prescribed mitigation measures throughout the construction phase, operational phase, and decommissioning phase of the project, significant residual effects on ornithology is not expected as a result of the Development. Mitigation measures can be prescribed via planning conditions

The Development will not have an unacceptable adverse impact on Biodiversity or Natural Heritage.

6.1.2.2.5 Built Heritage Assets

Chapter 7 'Archaeology and Built Heritage of the ES evaluates the effects of the Development on the archaeology and cultural heritage resource within an agreed study area (agreed with Statutory Consultees and DfI Planning during EIA scoping). Chapter 7 is supported by the following Technical Appendices documents:

- Technical Appendix A7.1: Owenreagh / Craignagapple Wind Farm Archaeological Desk-Based Assessment (DBA);
- Technical Appendix A7.2: Setting Sieving Exercise for Designated Assets Between 5 and 15 km;
- Technical Appendix A7.3: Assessment of Indirect Effects for Designated Assets within 5 km;
- Technical Appendix A7.4: Assessment of Indirect Effects for Designated Assets Between 5 and 15 km; and
- Technical Appendix A7.5 - Cultural Heritage Wirelines.

Statutory protection for archaeology is principally outlined in:

- Historic Monuments and Archaeological Objects (Northern Ireland) Order 1995[17]; and
- The Planning (Listed Buildings) Regulations (Northern Ireland) 2015[18], as amended.

Chapter 7 concludes that there would be no direct effects likely upon known archaeological features within the Core Study Area during the decommissioning and construction phase, and the operational phase of the Development subject to suitable mitigation measures. The assessment of potential effects indirect upon designated assets, including their setting, within a 5km radius, and between a 5km and 15km radius were supported by cultural heritage wirelines. There would be no significant indirect effects, associated with changes to settings, upon heritage assets in the surrounding historic environment from the Development, either in isolation or cumulatively with other windfarm development. The Development will therefore not have an unacceptable adverse impact on Built Heritage Assets.

Further details in respect of the SPPS Archaeology and Built Heritage policy is provided in section 6.1.2.10 of this Statement.

6.1.2.2.6 Local Nature Resources- Air Quality & Water Quality or Quantity

Chapter 8 of the ES evaluates the effects of the Development on Hydrology and Hydrogeology, while Chapter 9 evaluates the effects on Geology and Peat.

Chapter 8 is supported by the following ES Technical Appendices:

- A8.1 Hydrological Unit Assessment;
- A8.2 Private Water Supply Risk Assessment (PWSRA);
- A8.3 Note on Indirect Effects of Dewatering;
- A8.4 Watercourse Crossing Inventory (WCI);
- A8.5 Outline Drainage Strategy;
- A8.6 Dipwell Monitoring Dataset;
- A3.1: Outline Decommissioning and Construction Environmental Management Plan (oDCEMP);
- A10.2 Habitat Regulations Assessment (HRA).

Chapter 9 is supported by the following ES Technical Appendices:

- A9.1: Peat Slide Risk Assessment (PSRA);
- A3.3: Outline Peat Management Plan (oPMP); and
- A3.1: Outline Decommissioning and Construction Environmental Management Plan (oDCEMP)

The hydrology and hydrogeology Study Area is based on the Site Boundary at the time of EIA Scoping (the Study Area), and a second wider study area includes a 10 km radius from the Study Area (the Wider Study Area) in order to assess the potential effects of the Development on the wider hydrological environment. The study area for potential effects on public and private water supplies is defined as a 2

[17] Historic Monuments and Archaeological Objects (Northern Ireland) Order 1995. Available at http://www.legislation.gov.uk/nisi/1995/1625/contents/made
[18] The Planning (Listed Bridlings) Regulations (Northern Ireland) 2015. Available at http://www.legislation.gov.uk/nisr/2015/108/contents/made

km radius of the Site Boundary as agreed at the time of EIA Scoping. Further detail on the potential impact of the Development on peat is provided in section 6.1.2.3.

Embedded mitigation measures are set out within the outline Decommissioning & Construction Environmental Management Plan (provided as Technical Appendix A3.1). The embedded mitigation measures are consistent with best practice hydrology and hydrogeology mitigation measures and therefore the project team hydrological consultant has confidence in the effectiveness of the measures set out in the ODCEMP to be treated as part of the Development and therefore are considered embedded mitigation. The embedded mitigation measures include:

- 50m watercourse buffers for construction works, with the exception of watercourse crossings, a crane hardstand outpad, and sections of access track. The deviations from the 50m buffer are required to negate potential effects on areas of active peat.
- The avoidance of potential indirect effects on active peat through potential dewatering.
- Standard good practice methods and works for protection of hydrological receptors, as outlined in Technical Appendix A3.1 Outline DCEMP submitted as part of the Environmental Statement. The requirement for access tracks crossing watercourses has been minimised.

The requirement of a DCEMP, in line with provisions of the outline DECMP, can be secured as part of a planning condition, is considered standard practice for Developments of this nature.

Chapter 8 has assessed the likely significance of effects of the Development on hydrology and hydrogeology resources. The Development has been assessed as having the potential to result in effects of Minor to Negligible significance. Given that only effects of moderate significance or greater are considered significant in terms of the EIA Regulations, the potential effects on hydrology and hydrogeology are assessed as being not significant. Further details in respect of the SPPS- Hydrology & Hydrogeology policy are discussed in section 6.1.2.8 of this Statement.

Chapter 12 of the ES- Traffic & Transport assesses the impact of the increase of traffic associated with the Development upon air quality. The assessment considers that as the increase in traffic on haul routes is temporary and reversible that the effect on air quality is negligible and not significant in terms of the EIA Regulations.

The Development will not have an unacceptable adverse impact upon the local resources which includes air quality, water quality or quantity.

6.1.2.3 Active Peatland

The SPPS highlights that active peatland is of particular importance to Northern Ireland for biodiversity, water and carbon storage qualities. Renewable energy development on active peatland will not be permitted unless there are imperative reasons of overriding public interest as defined under The Conservation (Natural Habitats, etc.) Regulations (Northern Ireland) 1995 as amended. **Chapter 10 Ecology** assesses the impact of the Development upon active peat. The assessment was also informed by the following ES documents

- A10.1: Owenreagh / Craignagapple Ecological Impact Assessment (EcIA
- A10.3: National Vegetation Classification (NVC) Assessment;
- A10.4: Active Peat Assessment (APA);
- A8.1 Hydrological Unit Assessment;
- A3.2: Owenreagh / Craignagapple Habitat Management and Enhancement Pan (HMEP).
- A9.1: Peat Slide Risk Assessment (PSRA);
- A3.3: Outline Peat Management Plan (oPMP);

In recognition of the high importance afforded to active peatland in the SPPS, additional assessments were undertaken for any habitats that could qualify as 'active peat'. Classification of active peat habitats can be complex, particularly in disturbed habitats and around the margins of peatland bodies, so a bespoke classification system was developed for this Development, in order to provide a systematic and transparent approach. The classification of peat types for the Active Peat Assessment (APA) is predicated on a Constraints mapping approach informed by:

- Areas where active peat has been identified;
- Areas of inactive peat which have the potential to become active upon the successful implementation of restoration practices (but are unable to regenerate on their own due to existing land management), which investigated further in the draft Habitat Management and Enhancement Plan (draft HMEP) report;
- Areas of non-intact inactive peat, for which restoration practices would be unlikely to successfully recover the peatland habitat to an active status; and
- Areas which are not actively peat forming such as flush or acid grassland.

Mapping of Areas of Active Peat

The habitat assessment input for the APA has been informed by Joint Nature Conservation Committee (JNCC)[19] Phase 1 habitat walkover surveys undertaken within the ESA during summer and autumn in 2018 and 2021. JNCC habitat classification was supplemented by the collation of peat status points during these walkovers. Peat status points were undertaken to provide fine-scale mapping of areas of 'active peat'. This assessment was based on the presence of indicator plant species, the depth of the underlying peat layer and the hydrological condition of the peatland unit; based on NIEA-NED Guidance note on Active Peat (NIEA, 2012).

Subsequently, habitat classifications were confirmed and refined using relevé data collected according to National Vegetation Classification (NVC) standard guidance[20] during October 2019 and October 2021 (see ES Technical Appendix A10.3: NVC Assessment for summary information). Additional point locations for active peat were conducted in July 2022. The following surveys were completed ESA as part of the APA by Woodrow's team of ecologists specialising in botanical surveys:

- JNCC Phase 1 Habitat Walkover Survey (conducted in July 2018);
- NVC Survey (conducted in October 2019);
- JNCC Phase 1 Habitat Walkover Survey, including assessment of point locations for active peat (conducted in June, July, August, and September 2021);
- NVC Survey (conducted in October 2021);
- Assessment of additional point locations for active peat (conducted in July 2022); and
- An assessment of the proposed substation location (conducted in October 2022).

During walkovers of the Ecology Study Area (ESA) in May 2019, initial notes were made regarding the indicators for 'Active Peat' throughout this area. These walkover surveys highlighted the highly mosaic nature of the general area and identified areas where land management practices were influencing the peatland conservation status, as well as locations where existing infrastructure has affected these habitats. Follow-up surveys in autumn/winter 2021 and summer 2022 were undertaken in order to assess potential for active peat at a series of points across the ESA, focussing on areas proposed for Development infrastructure at that time. At each point assessed, the following parameters were recorded, in line with the NIEA Guidance Note on Active Peat (NIEA 2012):

- % cover of Sphagnum and Eriophorum spp.;
- Approximate peat depth (measured using a peat probe);
- General surface hydrology and the presence or absence of drains;
- % cover of bare peat and/or algal mats;
- Presence of typical or non-typical bog community species/ positive and negative indicator species; and
- Any obvious management/grazing observations.

With reference to NIEA active peat guidance, each assessment point was then initially classified as either 'Active Peat Likely' or 'Active Peat Unlikely' (indicating whether the vegetation was assessed as

[19] JNCC, (2010), Handbook for Phase 1 habitat survey – a technique for environmental audit, JNCC, Peterborough. Available at: https://hub.jncc.gov.uk/assets/9578d07b-e018-4c66-9c1b-47110f14df2a (Accessed 28/01/2021)
[20] National Vegetation Classification (NVC) [Online]. Available at: https://jncc.gov.uk/our-work/nvc/ (Accessed 28/01/2021)

being potentially peat-forming or not, at that specific point location; allowing for a later classification of Active Peat or otherwise depending on whether a unit comprised a “significant area” of peat forming vegetation). Observations at each assessment point were recorded in the field using the ArcGIS application ‘Survey 123' in order to provide a georeferenced record of each point assessed.

The Active Peat Assessment, coupled with Phase 1 and NVC habitat survey data and supported by the interpolated peat depth analysis (see ES Chapter 9: Geology and Peat) and the Hydrological Unit Assessment undertaken by ERM (ES Technical Appendix A8.1), were used to inform the final constraints mapping of the ESA, which classifies habitat status at the site and identifies areas of high, medium and low constraint. Active Peat was represented as a high constraint. The results of the Active Peat Assessment conducted across the ESA were used to compile a constraints map, highlighting areas where active peat was more likely to be present. The constraints classification system was as follows:

Table 6.4: Approach to Active Peat Classification Systems for Active Peat Assessment

Active Peat Constraint Classification	Rationale
Areas of High Constraint	These are significant areas of relatively intact blanket bog where peat-forming vegetation was evident or was considered likely in the light of the field assessments and, based on the NIEA description, are considered to be Active Peat. The vegetation in these areas corresponds principally to the NVC community M19 *Calluna vulgaris – Eriophorum vaginatum* blanket mire.
Moderate to High Constraint	These encompass areas that have clearly been modified in the past, resulting in development of a modified vegetation type, but where the overall hydrology remains relatively intact, and pockets of recovering blanket bog vegetation are evident. These areas support both active (M19 *Calluna vulgaris – Eriophorum vaginatum*) blanket mire and inactive (M19 *Calluna vulgaris – Eriophorum vaginatum*) blanket mire that has been modified by drainage and cutting in the past. It now consists of a mosaic habitat containing M19b *Empetrum nigrum ssp. nigrum* sub-community and M20b *Eriophorum vaginatum* blanket mire, *Calluna vulgaris – Cladonia spp.* sub-community peatland habitats, and has drains which have been cut into the peatland throughout these areas. If management practices in these areas changed appropriately, it might be possible for these areas to become Active Peat, however, these areas do not currently meet the requirement to be classified as Active Peat. Where this blanket bog is potentially affected (following site-specific surveys of the vegetation at that time) the ECoW will seek to agree to microsite infrastructure with the aim of avoiding any peat-forming vegetation pockets within this habitat type.
Moderate-Low Constraint	These are areas that, although underlain by peat, are generally quite dry underfoot, where turbary, overgrazing, burning and drainage have given rise to a modified vegetation community that contains peatland species such as heather (*Calluna vulgaris*), bilberry (*Vaccinium myrtillus*) and hypnoid mosses, often with a high proportion of graminoid species, but where the hydrology has been significantly compromised, and peat forming species such as *Sphagnum* spp. are very sparse or absent. These areas do not currently meet the requirements to classified as Active Peat. They include: • Where the vegetation remains heather dominated, but the hydrology is clearly compromised, the vegetation is considered to correspond to the NVC community M19b *Calluna vulgaris – Eriophorum vaginatum* blanket mire, *Empetrum nigrum ssp. nigrum* sub-community; and • Where the vegetation appears to be transitional to acid grassland, this has been classified as a mosaic between this community and M20b *Eriophorum vaginatum* blanket mire, *Calluna vulgaris – Cladonia spp.* sub-community. As stated in Rodwell (1991), M20 mire communities can develop from M19 blanket mire as a result of drainage, intensive grazing and burning.

Low Constraint	These encompass non-peat habitats, such as improved and semi-improved grassland, scrub and conifer plantation. This category also includes habitats that may be underlain by peat, such as flush, which by its nature does not retain water and as such would not support significant accumulation of peat. These areas are not Active Peat.

The Development, as proposed, will not impact directly on high constraint areas, i.e., areas identified as 'active peat'. Development is not proposed on areas of active peat, as defined by the APA. There is potential for indirect effects on a high constraint area, estimated at 170 sqm at an edge of habitat area in proximity to the T12 hardstand area. The Habitat Management and Enhancement Management Plan (HMEMP) prepared for this Development (Technical Appendix A3.2 to the ES) outlines proposals to restore and/or enhance c. 42.719 ha (427,190 m^2) of modified blanket bog habitat with the aim of re-establishing active peat status in these areas, in addition to an area of c. 35.047 ha (350,470 m^2) of drain blocking (within red grouse management area 3A of the HMEP). Alongside the standard, well-established approaches outlined above; Dr Ray Flynn of EHA has proposed the implementation of several additional pioneering approaches to blanket bog restoration within a further *c.* 17.809 ha of blanket bog habitat within the HMEP landholdings. These innovative approaches have the potential to provide a valuable resource for future peatland restoration projects within the NI, Ireland and the rest of the UK. During PAD consultations with NIEA-NED, they welcomed the innovative HMEP blanket bog restoration methods, noting that potential educational benefits of the innovative approach and potential for development of a scientific evidence base in respect of blanket bog restoration methods.

Areas of active peat have been avoided by the Development and associated infrastructure, and no development is proposed on active peat. Therefore, as the loss of active peat during construction works will be negligible at all locations, and the habitat management measures are expected to an overall increase in the extent of active peat in the Study Area, the Development will have a slight positive effect on active peat in the short to medium term. This approach is consistent with the PAC decision on Planning Appeal Ref No.2012/A0070 (5 no. turbines at Altnagolan, Co.Tyrone) whereby the Commissioner highlighted that in respect of potential impact upon active-peat, non-active blanket bog and upland heathland NIEA-NED were "*satisfied that appropriate habitat management measures will be implemented on the site that would compensate for the loss of and damage to Northern Ireland priority habitats."* Having regard to PAC decision on Planning Appeal Ref No.2012/A0186 (11 no.turbines at Meenablagh, Co.Tyrone) the applicants have ensured that adequate mitigation and compensatory measures are detailed in the submitted ES documents (Chapter 10, A10.4- Active Peat Assessment, A3.2- Draft Habitat Management & Enhancement Plan (DHMEP))to provide surety to the consenting authorities that the proposed mitigation and compensation measures are technically achievable. The Development proposes the implementation of a largescale Habitat Management and Enhancement Plan which will undergo monitoring to support its success throughout the lifetime of the wind farm.

6.1.2.4 Impact Upon Designated Landscapes & Wider Environmental Economic and Social Benefits of Renewable Energy

The SPPS espouses a cautious approach for renewable energy proposals within designated landscapes such as AONBs and World Heritage Sites, and their wider settings. SPPS policy states that the wider environmental, economic and social benefits of renewable energy proposals are material considerations that will be given appropriate weight in the planning application determination process.

6.1.2.4.1 Impact Upon Designated Landscapes

Chapter 6 of the ES - 'Landscape & Visual Assessment' assesses the impact of the Development upon designated landscapes, specifically the Sperrin AONB. As noted in section 6.1.2.2.3 of this Statement, the Development lies within the AONB, near its north-western edge. The LVIA detailed that the majority of the Sperrin AONB would remain unaffected by the Development owing to no visibility or limited and low-level visibility. While localised effects would occur, these would be contained within the north-western part of the AONB and largely coincide with the area currently influenced by Owenreagh I and

II turbines. The larger scale of the proposed turbines would, however, give rise to major / moderate or moderate and significant effect, that would extend to approximately 4.5km to the west, 5km to the north, 4km to the east, 5km to the south-east and 3 km to the south during the decommissioning and construction phase and operational phase. The identified localised effects would not affect the overall integrity of the Sperrin AONB owing to the relatively small number of turbines and their contained extent in the north-western part of the AONB where there are much stronger human influences from existing developments and the special qualities of the AONB are expressed to a much lesser extent. The Development will not adversely impact the special qualities of the Sperrin AONB, or indeed the setting of the AONB. Therefore, the Development aligns with this policy provision of the SPPS. It must also be highlighted that the Site is an existing established renewable energy site, with wind energy established from the 1990s. During the EIA scoping and pre-application discussions, the proposed wind turbines were reduced from 180m to 156.5m in recognition of the designated status of the Sperrin AONB, amongst other issues.

6.1.2.4.2 Wider Environmental, Economic and Social Benefits of Renewable Energy

The SPPS states that the wider environmental, economic and social benefits of all proposals for renewable energy projects are material considerations that will be given appropriate weight , which in many instances can be significant weight as outlined in Policy RE1 of PPS18, in determining whether planning permission should be granted. Chapter 14 Land-Use, Socioeconomics, Tourism and Recreation**,** prepared by Biggar Economics and ERM assesses the impact of the Development on the social and economic resource of Derry City and Strabane District Council (local) and on Northern Ireland as the wider region. In order to do this, it was necessary to estimate the proportion of each type of contract that might be secured within each of the Study Areas. To estimate the expenditure for each contract in each of the study areas these percentages were applied to the estimated size of each component contract. The assumptions were based on a report on the economic impact of onshore wind in Northern Ireland commissioned by RenewableNI[21]., analysis of the industries and professions in each of the Study Areas, BiGGAR Economics previous experience and information provided by the developer.

Based on a total generating capacity of up to 67.2 MW from 14 turbines, Biggar Economics estimated that the development and construction of Owenreagh/Craignagapple Wind Farm could cost up to £96.1 million. To consider the economic impact of the wind farm, the spend was split across the following contract categories:

- development and planning;
- turbines;
- balance of plant (including decommissioning); and
- grid connection.

Regarding economic benefits arising from the Development, Chapter 14 outlines that during the development/decommissioning/ construction phases the following positive direct benefits will be accrued.

Positive Direct Economic Benefits- Development/Decommissioning/ Construction

- It is estimated that business within the DC&SDC could secure contracts worth £12.4 million which is equivalent to 13% of capital expenditure. It is considered that this represents a temporary positive effect of moderate significance to the local economy.
- It is estimated that business within NI could secure contracts worth £31 million which is equivalent to 32% of capital expenditure. It is considered that this represents a temporary positive effect of low magnitude significance to the local economy.
- The spending on each of the contract categories was then split across smaller contract areas, with each one of these being allocated to a sector based on the codes from the Standard

[21] *RenewableNI (2021), Powering a Green Economy.*

Industrial Classification (SIC)[22]. Sectoral spending was divided by the relevant turnover per GVA ratio, as sourced from the UK Annual Business Survey (ABS)[23]. In this way, it was estimated that the construction and development of Owenreagh/Craignagapple Wind Farm could generate £6.0 million direct GVA in DC&SDC and £15.1 million direct GVA in Northern Ireland.

- The employment effects during the development/ decommissioning/construction phases are reported in job years rather than Full-time equivalents (FTE's) because the contracts would be short term. It is anticipated that the decommissioning construction phase would support 90 job years in DC&SDC and 260 job years for Northern Ireland. Given the levels of unemployment at the Borough level and in Northern Ireland, this represents a temporary, beneficial effect of minor significance to the local and regional economy.

Chapter 14 outlines the positive indirect economic benefits arising from the Development during decommissioning/ construction including:

Positive Indirect Economic Benefits- Development/Decommissioning/ Construction

- To estimate indirect impacts, Northern Irish Type 1 GVA and employment multipliers[24] were applied to the direct GVA and employment supported by the construction and development of the wind farm
- It is anticipated that the decommissioning and construction phase would indirectly support 20 job years in Derry City and Strabane, 160 job years in Northern Ireland. This would add £1.3 million GVA in Derry City and Strabane and £4.7 million in Northern Ireland.

The total impact during the decommissioning and construction phase is the sum of direct, indirect, and induced impacts from expenditure of direct employees. The total combined impact is estimated to be up to £8.3 million GVA and support 130 job years of employment in DC&SDC and £27.4 million GVA and support 500 job years of employment in Northern Ireland. It is considered that this represents a temporary effect of minor positive significance to DC&SDC and NI resulting in an effect on the economy that is minor in DC&SDC (low sensitivity) and NI (medium sensitivity), and is not significant.

Positive Direct Economic Benefits- Operational Phase

Chapter 14 identifies the positive direct economic benefits arising from the Development during operational phase including:

- Once operational, the Development will require routine maintenance and servicing. It was estimated that the annual operations and maintenance expenditure associated with the Development could be up to £2 million. As an illustration of the effect over time, after 40 years this could amount to £40 million.
- It is estimated that business within the DC&SDC area could secure 25% of operation and maintenance contracts worth £0.5 million annually and worth £20 million over 40 years. In NI as a whole, it was estimated that it could secure approx. 75% of contracts, worth £1.5 million annually and £60 million over 40 years. This represents a long-term, reversible, low magnitude direct positive effect in DC&SDC (low sensitivity), Northern Ireland (medium sensitivity) and not significant in terms of the EIA Regulations.
- It was estimated that the Development could support £0.2 million direct GVA and less than 10 direct jobs in DC&SDC, £0.7 million and 10 direct jobs in Northern Ireland.
- The Development will result in lease payments to the landowner for the land. This local financial input may be spent locally or otherwise.

[22] Office for National Statistics (2009), UK Standard Industrial Classification of Economic Activities 2007 (SIC 2007).
[23] Office for National Statistics (2018), Non-financial business economy, UK (Annual Business Survey) Statistical bulletins.
[24] Northern Ireland Statistics and Research Agency (NISRA) (2022), NI Economic Accounts Project - 2017 and 2018 Experimental Results.

- In addition to land-owner rents, the Development would be liable for non-domestic rates, the payment of which would contribute to public sector finances. It is estimated that the Development could contribute £0.47 million annually to public finances. Over a 40-year period this would be expected to contribute £18.8 million, although the actual contribution would depend on variables such as the actual load factor of the Development.

Positive In- Direct Economic Benefits- Operational Phase

The direct GVA and employment supported by operational spending were then multiplied by the relevant Type 1 and Type 2 GVA and employment multipliers to estimate indirect and induced impacts. Adding together direct, indirect and induced impacts, it was estimated that the operations and maintenance of Owenreagh/Craignagapple Wind Farm could generate the following each year:

- £0.3 million GVA and support less than 10 jobs in Derry City and Strabane;
- £1.4 million GVA and 20 jobs across Northern Ireland;

Ørsted has committed to providing a community benefit fund (CBF) worth £5,000 per MW of installed capacity. Based on a maximum generating capacity of 67.2MW, up to £340,000 would be available each year to those communities living in proximity of the wind farm, with final details of the CBF to be agreed in partnership with the local community. This would be used to enhance local communities and contribute to increased local economic activity.

The Development will have positive direct and indirect economic benefits in the Council area and wider NI region during decommissioning/ construction which are detailed in Chapter 13 of the ES and summarised in this Statement. There will be continued direct and indirect economic benefits accruing from the Development during the operation of the Windfarm. However, despite the positive economic impact of the Community Fund it is noted that section 5.71 of the SPPS states that such voluntary funds cannot be considered material considerations in decision-taking.

Environmental Benefits

In December 2021, the Department for the Economy published the 'Northern Ireland Energy Strategy - The Path to Net Zero'[25] which detailed Northern Ireland's (NI) energy future over the next ten years and set the renewable electricity targets for 2030- identifying that 70% of electrical energy needed to be sourced from renewables by 2030, with flexibility to increase this target.

This strategy was further refined by the 'Climate Change Act (Northern Ireland) 2022[26] (the Climate Change Act). The Act aims to have Northern Ireland play its part in the global and UK effort to tackle climate change by creating a framework that will establish a pathway to achieving emission reduction targets. The Act includes a target for net-zero emissions by 2050 as well as a set of interim targets for 2030 and 2040 for reducing greenhouse gas emissions in Northern Ireland. Part 1, section 15 of the Climate Change Act specifies that "*The Department for the Economy must ensure that at least 80% of electricity consumption is from renewable sources by 2030"*.

In the Future Energy Scenarios[27], the National Grid outlines several ways in which the UK's energy system will require to change to be compliant with the Net Zero targets. Under all scenarios, an increase in electricity generation from onshore wind is required. The electricity generation capacity from installed onshore wind will have to increase by at least 9 GW by 2030 and 16 GW by 2050 across the UK

The development has the capacity output potential to provide approx. 60MW to 67MW, a six-times increase in the existing capacity output at the Site. The Development will contribute to the legislated requirements for climate change targets. The repowering Owenreagh I & II wind farms supports the continued use of the Site as a renewable asset, which is vital to Northern Ireland maintaining and

[25] Department of the Economy (2021) Northern Ireland Energy Strategy- The Path to Net Zero. Available at: https://www.economy-ni.gov.uk/publications/energy-strategy-path-net-zero-energy
[26] Northern Ireland Executive, 2022, The 'Climate Change Act (Northern Ireland) 2022, Available at: https://www.legislation.gov.uk/nia/2022/31/contents/enacted
[27] National Grid (2022), 'Future Energy Scenarios', available at: https://www.nationalgrideso.com/document/263951/download

building upon its renewable energy and climate change targets. The proposed larger generator size, coupled with greater wind yields from the use of taller turbines with bigger rotors, and the improved efficiency of the latest turbine models will result in a major increase to total power generated at the Site.

6.1.2.5 Residential Separation Distances

The SPPS states that a separation distance of 10 times rotor diameter with a minimum distance of not less than 500m will generally apply between windfarms and occupied properties. The SPPS does not provide further context on this policy guidance however Para 6.229 of the SPPS states "*proposals will also be assessed in accordance with normal planning criteria, including such considerations as: access arrangements, road safety, good design, noise and shadow flicker; separation distance; cumulative impact; communications interference; and, the inter-relationship between these considerations.*" In the context of separation distances further consideration is given to noise, shadow flicker and visual impacts and public safety and human health.

There are 16 no. habitable dwellings located within a 10 times rotor diameter from the nearest turbine, which in the case of the Development is a separation buffer of 1,360m. Table 6.5 provides details of these properties, while Figure A15.1 of ES Chapter 15-ES shows the location of receptors detailed in Table 6.5 We note that properties are located outside the minimum 500m separation distance requirement.

Table 6.5: Residential Properties located within 10 times Rotor Diameter

Receptor ID	Receptor Address	Spatial Coordinates (Meters)		Nearest Turbine	Distance to Nearest Turbine
		Easting	Northing		
1	101 Hollyhill Road, Knocklnarvoer, Strabane	242635	398227	T12	1,245m
3	51 Napple Road, Ballykeery, Dunnamanagh**	245122	396215	T15	1,053m
4	20 Ballykeery Road, Ballykeery, Dunnamanagh	244898	395648	T15	1,299m
5	33 Koram Road, Owenreagh, Strabane**	240867	397471	T2	937m
6	105 Hollyhill Road, Knocklnarvoer, Artigarvan	242776	398246	T12	1,189m
7	109 Hollyhill Road, Knocklnarvoer, Artigarvan**	242988	398424	T12	1,278m
8	113 Hollyhill Road, Knocklnarvoer, Artigarvan	243054	398435	T12	1,274m
9	35 Koram Road, Owenreagh, Strabane**	240855	397514	T2	976m
10	9 Balbane Road, Meendamph, Dunnamanagh	245451	396366	T15	1,292m
11	34 Koram Road, Owenreagh, Strabane	240754	397896	T6	1,272m
12	111 Hollyhill Road, Knocklnarvoer, Artigarvan**	243037	398390	T12	1,232m

13	106 Hollyhill Road, Knocklnarvoer, Artigarvan	242692	398319	T12	1,293m
14	21 Ballykeery Road, Ballykeery, Dunnamanagh	245007	395703	T12	1,314m
17	Property Along Ballykeery Rd	244844	395550	T15	1,358m
18	Property Along Koram Rd**	240895	397441	T2	895m
20	50 Crockan Rd	242714	398359	T12	1,301m

** *Has a financial interest in the Development*

Five of the identified properties within the ten times rotor diameter have financial interest in the Development. From the 16 no. properties identified within the 1,360m buffer, 10 no. properties are located beyond a 1,200m buffer from the closest turbine. The submitted ES reviews the impact upon residential amenity, including the properties within the ten times rotor diameter buffer, across a number of ES chapters including:

- Noise (Chapter 12- Noise)
- Shadow Flicker (ES Chapter 15-Other Issues)
- Residential Visual Amenity Assessment (ES Technical Appendix A6.2)

Section 6.1.2.2.2 of this Statement provides an overview of the residential amenity assessment of the Development and concludes that the Development will not have an unacceptable adverse impact upon public safety, human health or residential amenity. The potential for shadow flicker effects on six residential properties, as detailed in section 6.1.2.2.2, can be addressed via standard shadow flicker mitigation measures, that can be secured via planning condition.

6.1.2.6 SPPS- Renewable Energy Policy- Conclusion

The Development complies with the renewable energy provision of the SPPS. As the SAP 1986- 2001 is silent on renewable energy, the renewable energy policy provisions of the SPPS will be an important material consideration in the determination of the planning application. This should be afforded material weight in the determination of the planning application. The Development complies with the SPPS renewable energy planning policy requirement, and will have wider positive economic and environmental benefits that should be afforded significant weight in the planning application determination.

6.1.2.7 SPPS- Ecology, Fisheries & Ornithology Policy

SPPS planning policy (Natural Heritage) outlines that planning permission will only be granted for a development proposal that, either individually or in combination with existing and/or proposed plans or projects, is not likely to have a significant effect on a European site (Special Protection Area, proposed Special Protection Area, Special Areas of Conservation and Sites of Community Importance) or a listed or proposed Ramsar site. A development which could adversely affect the integrity of a European or Ramsar site may only be permitted in exceptional circumstances as laid down in relevant statutory provisions. Chapter 10 (Ecology) & Chapter 11 (Ornithology) of the ES provides a comprehensive assessment of potential impacts upon European sites which in this instance include the River Foyle & Tributaries SAC, River Finn SAC, the Lough Foyle SPA, and Lough Foyle Ramsar site. These Chapters combined with the submitted Appendix A10.2: Habitats Regulations Assessment conclude that the Development is not likely to have a significant effect on the identified European designated sites.

The SPPS (Natural Heritage) states that planning permission will only be granted for a development proposal that is not likely to harm European protected species except in exceptional circumstances. Exceptional circumstances are defined as '*there are no alternative solutions'* and '*it is required for imperative reasons of over-riding public interest'* and 'there is no detriment to the maintenance of the population of the species at favourable conservation status'; and 'compensatory measures are agreed

and fully secured.' SPPS policy states that planning permission will only be granted for a development proposal that is not likely to harm other statutorily protected species. Chapters 10 & 11 of the ES assess the impact of the Development on European protected species or other statutorily protected species. The HEMP submitted as Technical Appendix A3.2, details a range of compensatory, mitigation and habitat enhancement measures. The measures are summarised below:

- HEMP Key Management Area 1: 47.2 hectares for the restoration peatland habitats (including NI Priority Peatland Habitat Blanket Bog)
- HEMP Key Management Area 2: 60.22 hectares for the enhancement of wader habitat (for breeding waders, snipe and curlew)
- HEMP Key Management Area 3: 51.65 hectares for red grouse heather management and blanket bog restoration (red grouse and NI Priority Peatland Habitat)
- HEMP Key Management Area 4: Screening approx. 25,000 sqm and Planting 500-700m of a riparian buffer (commuting, foraging and breeding fauna, bats, birds and other mammals and invertebrates).

Within this HMEP, specialist management plans have been provided with regard to peatland restoration. In relation to peatland restoration, specialist technical input has been provided by Dr Raymond Flynn of Queen's University Belfast, an Environmental Hydrologist and Ecohydrologist who has undertaken extensive research in the field of hydrology and restoration of Irish peatlands.

Alongside the standard, well-established peatland restoration methods; Dr Ray Flynn of EHA has proposed the implementation of several additional peatland restoration methods approaches to blanket bog restoration within a further *c.* 17.809 ha of blanket bog habitat within the HMEP landholdings. The proposed techniques include cell-bunding and methods of flow-redistribution within Key Management Areas 1C, 1D and 1E (within HEMP Key Management Area 1). This combined research approach utilising a combination of well-established and pioneering techniques is intended to provide a valuable resource for the success of future peatland restoration projects within Northern Ireland. It is envisaged that the implementation of these methods, coupled with the significant long-term monitoring proposed will provide a valuable information resource and help bridge knowledge gaps within this scientific field.

The SPPS (Natural Heritage) details that planning permission should only be granted for development proposals which are not likely to give rise to unacceptable adverse impact on; (i) priority habitat, (ii) priority species, (iii) active peatland, (iv) ancient and long established woodland, (v) features of earth science conservation importance, (vi) features of the landscape which are of importance for wild flora and fauna, (vii) rare or threatened native species, (viii) wetlands (including river corridors) or, (ix) other natural heritage features worthy of protection, including trees and woodland. The SPPS states that a development proposal which is likely to result in an unacceptable adverse impact on, or damage to, habitats, species or features listed above, may only be permitted where the benefits of the proposed development outweigh the value of the habitat, species or feature. In such cases, appropriate mitigation and/or compensatory measures will be required. Chapter 10 of the ES details the impact of the Development upon the existing habitats Subject to the successful implementation of the proposed mitigation measures, when compared with the current baseline, the overall residual impacts upon habitats are determined to be ***positive*** given the proposed implementation of a largescale Habitat Management and Enhancement Plan (which will undergo monitoring to support its success). Therefore, the Development will not cause any significant negative effects on designated sites, habitats, legally protected species, or any other features of ecological importance. Therefore, the Development meets these tests and will not result in an unacceptable adverse impact on priority habitats and species, the other policy tests identified by this SPPS policy.

6.1.2.8 SPPS- Hydrology & Hydrogeology

The SPPS section entitled 'Development at Surface Water (Pluvial) Flood Risk Outside Floodplains' requires that all development proposals that exceed 1 hectare will require the submission of a 'Drainage Assessment' (DA) as part of the planning application. Development requiring a DA will be permitted where it is demonstrated through the DA that adequate measures will be put in place so as to effectively mitigate the flood risk to the proposed development and from development elsewhere.

Regarding the 'Artificial Modification of Watercourses', the SPPS prescribes that Planning Authorities should only permit the artificial modification of a watercourse in the exceptional circumstance where the culverting of a short length of watercourse is necessary to provide access to a development site (or part thereof), or where such operations are necessary for engineering reasons unconnected with the development proposal.

Chapter 8 Hydrology & Hydrogeology of the ES evaluates the effects of the Development on the hydrology, hydrogeology, geology and peat resource. **Chapter 8 of the ES** is supported by the following Technical Appendices.

- A8.1 Hydrological Unit Assessment;
- A8.2 Private Water Supply Risk Assessment (PWSRA);
- A8.3 Note on Indirect Effects of Dewatering;
- A8.4 Watercourse Crossing Inventory (WCI);
- A8.5 Outline Drainage Strategy;
- A8.6 Dipwell Monitoring Dataset;
- A3.1: Outline Decommissioning and Construction Environmental Management Plan (oDCEMP);
- A10.2 Habitat Regulations Assessment (HRA).

Areas potentially at risk of flooding have been identified within Section 8.4.7 of Chapter 8. Chapter 8, in respect of flood risk, concludes that the effect on flood risk of High sensitivity are considered to be of Negligible magnitude and therefore Negligible significance and is **not significant** in terms of the EIA Regulations. An Outline Drainage Assessment has been provided as Technical Appendix A8.5. ERM, (formerly Arcus) has submitted Schedule 6 application[28] to DfI Rivers. As a design parameter, a 50 m buffer of watercourses has been implemented throughout the Development, there are a number of exceptions and further detail is provided in Chapter 8 (section 8.5.1). No watercourses will be artificially modified as part of this Development for access purposes. Watercourse crossings which may require culverting have been identified within Technical Appendix A8.4: WCI.

With the embedded mitigation measures proposed, the Development has been assessed as having the potential to result in effects of negligible or minor significance.

6.1.2.9 SPPS Noise

The SPPS does not reference any specific noise planning policy over and above the references made to noise in the renewable energy policy. As detailed in section 6.1.2.2.2 of this statement the submitted noise assessment concluded that all noise effects likely to arise from the Development were not significant, and met with recognised noise limits, upon the existing and permitted residential properties in the vicinity. Decommissioning/construction noise will be limited in duration and confined to working hours, as agreed with the Planning Authority, and therefore can be adequately controlled through the application of good practice measures and secured by planning condition.

6.1.2.10 SPPS- Archaeology & Built Heritage

The SPPS has an additional archaeology and built heritage policy, to the SPPS renewable energy which includes protection of built heritage policy. The SPPS outlines that Developments which would adversely affect the integrity of scheduled monuments or the integrity of their setting will only be permitted in exceptional circumstances. The SPPS details that development proposals which would adversely affect archaeological remains of local importance or their settings should only be permitted where the planning authority considers that the need for the proposed development or other material considerations outweigh the value of the archaeological assets or their setting. The SPPS identifies appropriate mitigation options, which include for the preservation of remains in situ, licensed excavation or recording examination and archiving of the archaeology by way of planning condition.

[28] Schedule 6 consents are required If you plan to discharge to a watercourse or intend to carry out works that will impact on the free flow of a watercourse. Approval is required from DfI Rivers, and does not form part of the planning application process.

The SPPS outlines that planning permission for developments that would lead to the loss of, or cause harm to, the overall character, principal components or setting of 'Historic Parks, Gardens & Demesnes' will not be permitted. In assessing applications for development in or adjacent to 'Historic Parks, Gardens & Demesnes', particular account should be taken of the impact of the proposal on the archaeological, historical or botanical interest of the site.

As outlined in section 6.1.2.25 of this Statement, Chapter 7 of the submitted ES concludes that there would be no direct effects likely upon known archaeological features within the Core Study Area as none are recorded within the Development footprint. Standard archaeological mitigation measures are proposed, which can be secured via planning condition.

Chapter 7 also assessed the potential direct and indirect effects of the Development on built heritage assets, including scheduled monuments, within a 5km buffer and also a 5km- 15km buffer. Historic Parks, Gardens & Demesnes were also considered as part of this assessment process. The assessment considered the potential effect of the turbines on the setting of heritage assets (the largely visual surroundings of a heritage asset that can contribute to the understanding and importance of the asset). There would be no significant direct or indirect effects, associated with changes to settings, upon heritage assets in the surrounding historic environment from the Development, either in isolation or cumulatively with other windfarm development, and consequently adheres to the SPPS policy provision

6.1.2.11 SPPS- Transportation

The SPPS states that in assessing development proposals, planning authorities must apply the Department's published guidance and recommends that planning authorities should require the submission of a Transport Assessment (TA) for proposals that are likely to generate a significant volume of traffic. Chapter 13- 'Traffic & Transport' of the ES assesses the impact of the Development upon the existing traffic and transport environment and the addresses the traffic and transportation issues that would form part of a TA. Chapter 13 is supported by the following technical appendices:

- Technical Appendix A13.1: Abnormal Load Route Assessment;
- Technical Appendix A13.2: Traffic Count Data;
- Technical Appendix A13.3: Construction Development Programme; and
- Technical Appendix A13.4: Access Junction Design and Visibility Splay Assessment.

Chapter 13 concludes that subject to (i) embedded design mitigation measures which include the provision of temporary passing bays to facilitate construction traffic and traffic management measures at the splays at the existing Hollyhill Road / Glenmornan Road junction and Gorticrum Road / Glenmornan Road junction, and (ii) identified mitigation measures which will form part of an agreed 'Construction Traffic Management Plan' (CTMP) that the Development will not result in an adverse impact upon the existing traffic and transport environment. The CTMP will be submitted for the approval by the relevant authorities prior to the commencement of construction of the Development to ensure that the proposed mitigation measures are implemented successfully. The measures would include:

- Advance warning signs shall be installed on the approaches to the affected road network. Temporary signage advising drivers that abnormal loads and construction traffic will be operating shall be erected on the local road sections of the route;
- An advance escort shall be required to warn oncoming vehicles ahead of the abnormal loads convoy, with one escort staying with the convoy at all times. The escorts and convoy will remain in radio contact at all times where possible;
- A police escort shall also be implemented, where necessary, to facilitate the delivery of the predicted loads; and
- The times in which convoys travel shall be agreed with the police. Typical delivery times for similar projects has seen the early morning periods used in constrained sections, as traffic levels are generally lighter than those found in the afternoon.

6.2.1.12 SPPS- Tourism

Section 6.262 of the SPPS highlights the importance of built and natural heritage of Northern Ireland regarded as tourism assets, citing examples such as historical and archaeological sites, certain

beaches and AONBs. SPPS planning policy states that planning permission should not be granted for development that would, in itself or in combination with existing and approved development in the locality, have an adverse impact on a tourism asset, such as to significantly compromise its tourism value. The majority of the SPPS tourism policy relates to tourism development.

Chapter 14: Land-Use, Socioeconomics, Tourism and Recreation of the ES assesses the impact of the Development upon tourism assets. Chapter 6 Landscape & Visual Assessment of the ES assesses the impact of the Development upon the Sperrin AONB and the natural heritage assets, as discussed in Section 6.1.2.2.1 Chapter 7- 'Archaeology and Built Heritage of the ES' evaluates the impact of the Development upon built heritage assets and is discussed in section 6.1.2.10.

Chapter 14 of the ES details that, despite being located within the Sperrin AONB, there are no recognised tourism or recreation resources located within the Site Boundary and identifies a tourism and recreation study area (5km from the site) and then goes on to consider the tourism and recreation assets located therein. Chapter 14 concludes that the effects of the Development on tourism and recreation during the decommissioning/construction and operational phases, including cumulative effects, are assessed as negligible**.** All effects on the tourism and recreational receptors were assessed as 'not significant', therefore, no tourism asset will be significantly compromised, as a result of the Development.

6.2.1.13 SPPS- Telecommunications and Other Utilities

The provisions of the SPPS Telecommunications and other utilities planning policy are primarily related to telecommunications and utility development, rather than the protection of the telecommunication and utility assets. The protection of telecommunications and utility assets and infrastructure is addressed by Policy RE1 of PPS18, which requires that there will not be unacceptable adverse impacts upon communication infrastructure. This policy consideration is addressed further in section 6.1.3.1 of this Statement.

6.2.1.14 SPPS- Development in the Countryside

Sections 6.61 to 6.78 of the SPPS outline regional planning policy for development in the countryside. The SPPS policy relates to 'residential' and 'non-residential' development. The policy for 'non-residential' development does not explicitly reference renewable or wind energy development. Section 6.74 states:

> *"Other types of development in the countryside apart from those set out above should be considered as part of the development plan process in line with the other policies set out within the SPPS."*

As part of this Statement, the Development has been assessed against the renewable energy policy provisions of the SPPS, and the other SPPS policy topic areas. In this context, it is considered that the Development aligns with the SPPS policy in respect of development in the countryside.

Section 6.77 of the SPPS states:

> *"In all circumstances proposals for development in the countryside must be sited and designed to integrate sympathetically with their surroundings, must not have an adverse impact on the rural character of the area, and meet other planning and environmental considerations including those for drainage, sewerage, access and road safety. Access arrangements must be in accordance with the Department's published guidance."*

The siting and design development of the wind farm layout was informed by wider landscape and visual amenity considerations. The design of the wind farm seeks to minimise impacts on the existing rural character of the area. Further details on the design development including landscape and visual amenity considerations in provided in Chapter 4- Site Selection & Design of the ES, while Chapter 6- Landscape & Visual Impact Assessment assess the impact of the Development on the surrounding area, including the rural character. The proposed site accesses comply with the site access requirements of Development Control Advice Note 15- Vehicular Access Standards. The details of the site access

arrangements are provided in Technical Appendix A13.4: Access Junction Design and Visibility Splay Assessment.

Section 6.78 of the SPPS states "Supplementary planning guidance contained within 'Building on Tradition': A Sustainable Design Guide for the Northern Ireland Countryside' must be taken into account in assessing all development proposals in the countryside". The Building on Tradition guidance is not relevant in the context of the Development. There is nothing in the guidance to assist with wind farms or design of substation buildings.

6.1.3 Planning Policy Statements

The suite of existing planning policy statements are material planning considerations in the determination of planning applications. There is currently a transitional period in planning policy terms that will operate until such time as the Local Development Plan 'Plan Strategy' for the DC&SDC area has been adopted. During the transitional period planning authorities will apply existing retained policy (including PPSs) together with the SPPS. Relevant supplementary and best practice guidance will also continue to apply. Where a Council adopts its Plan Strategy, existing policy retained under the transitional arrangements shall cease to have effect in the district of that council and shall not be material from that date, whether the planning application has been received before or after that date.

Any conflict between the SPPS and any retained policy (PPS) must be resolved in favour of the provisions of the SPPS. For example, where the SPPS introduces a change of policy direction and/or provides a policy clarification that would conflict with the retained policy the SPPS should be accorded greater weight in the assessment of individual planning applications. However, where the SPPS is silent or less prescriptive on a particular planning policy matter than retained policies this should not be judged to lessen the weight afforded to the retained policy. PPS 18 and its associated best practice guidance (BPG) and supplementary planning guidance (SPG) are retained as regional planning policy.

For the purposes of this Planning Statement it will be clarified whether the respective PPS policy is consistent with the corresponding SPPS policy. If the SPPS introduces a change of policy direction this will be highlighted in the context of the retained PPS policy. If the PPS are more prescriptive in particular policy areas the Development will be assessed in respect of the more prescriptive PPS policy. This approach will facilitate a more coherent planning policy review and avoid duplication in terms of policy assessment.

6.1.3.1 Planning Policy Statement 18 (PPS 18)

PP18 planning policy (Policy RE1) aligns with the SPPS renewable energy policy insofar as it propagates that renewable development proposals will be permitted, provided the proposal will not result in an unacceptable adverse impact upon; (a) public safety, human health or residential amenity, (b) visual amenity and landscape character, (c) biodiversity, nature conservation or built heritage interests, (d) local natural resources such as air quality or water quality, and (e) public access to the countryside. PPS 18 policy states that the wider environmental, economic and social benefits of renewable energy proposals will be given significant weight in the determination of planning applications. The SPPS states that the wider environmental, economic and social benefits of renewable energy proposal are material considerations, will be given appropriate weight in the planning application process. PAC planning appeal decisions have established precedent argued that where the wider benefits are significant, the "appropriate" weight to be given is significant weight as per RE1. The PAC has accepted this approach on numerous appeal decisions, including Barr Creg windfarm (PAC Ref No.2015/A0102), Gortnagross windfarm (PAC Ref No.2014/A0180) and Altagolan windfarm (PAC Ref No.2012/A0070). The conclusions outlined at section 6.1.2.2 of this Statement, that the Development complies with the renewable energy provision of the SPPS is also applicable to the overarching policy provision of PPS 18 Policy RE1.

Policy RE1 specifies additional provision noting that wind energy proposals will be required to demonstrate that; (i) the development will not have an unacceptable impact on visual amenity and landscape character, (ii) that the development has taken into consideration the cumulative impact of existing and approved turbines, (iii) that it will not create a significant risk of landslide or bog-burst, (iv)

that no part of the development will give rise to unacceptable electromagnetic interference to communication installations, (v) that the development will not have an unacceptable impact on rails, roads or aviation safety, (vi) that the development will not cause significant harm to the safety or amenity of sensitive receptors and that (vii) above-ground redundant plant and associated infrastructure shall be removed and the site restored.

In respect of the additional policy provision further commentary is provided to demonstrate that the Development adheres to PPS 18 policy in addition to the provisions of the SPPS. Section 6.1.2.2.3 of this Statement outlines that the Development will not have an unacceptable impact upon the visual amenity and landscape character. All ES chapters assessed the cumulative impact of the Development with existing and approved turbines and windfarms within a study area agreed with the Council and statutory consultees during the EIA Scoping process.

The submitted 'Peat Slide Risk Assessment' (PSRA) (Appendix A9.1) and Chapter 9-, Geology, S& Peat' of the ES, reviews the potential peat slide risk associated with the Development. The PSRA**'** was carried out in accordance with the 'Peat Landslide Hazard & Risk Assessment- Best Practice Guide for Proposed Electricity Generation Development.[29]' the PSRA has indicated that the majority of the PSA is of 'negligible' or 'low' hazard ranking, with two zones highlighted as 'medium' and one as 'high' hazard ranking. There is no proposed infrastructure located within any of the 'medium' or 'high' ranked zones and the mitigation measures proposed have reduced the overall risk in these areas to 'low'. On this basis, the Development is considered to result in negligible risk of landslide or bog-burst.

Chapter 15- 'Other Issues' of the ES assessed whether the Development will give rise to electromagnetic interference to communications installations and concludes that the Development will not give rise to unacceptable electromagnetic interference to communication installations. There have been discussions with Arqiva regarding their existing infrastructure and potential conflicts with the Development. Based on the information received during consultation and the results from 3-D modelling, no effects are predicted on telecommunications or radio reception as a result of the Development. The Applicant will remain in contact with Arqiva, and agree appropriate mitigation measures to negate the potential impacts on their infrastructure.

Chapter 13- 'Access, Traffic & Transport' of the ES details that subject to mitigation measures the Development will not have an unacceptable impact upon roads or road users. Chapter 15- 'Other Issues' of the ES outlines that potential effects on aviation as a result of the Development, including the proposed infra-red aviation lighting, will be negligible and therefore will not result in an unacceptable impact upon aviation safety.

Section 6.1.2.2.2 of this Statement details that the Development will not cause significant harm upon the safety or amenity of sensitive residential receptors. No further sensitive receptors were identified during the EIA process beyond those considered and addressed within the ES. A future decommissioning plan for the Development can be secured through the application of an appropriately worded planning condition.

Best Practice Guidance (BPGs) to Planning Policy Statement 18- Renewable Energy

The advice and guidance contained within the BPGs should be read in conjunction with PPS 18. Published in 2009, it provides specific guidance in respect of a range of planning and environmental issues, and cross references a range of other Planning Policy Statements. For the purposes of this Statement, we highlight key guidance in the BPGs in the context of the Development.

Section 1.2.24, in respect of grid connections to windfarms, states "*Whilst the routing of such lines by NIE is usually dealt with separate to the planning application for the wind farm, developers will generally be expected to provide indicative details of likely routes and the anticipated method of connection (over ground or underground).*" The indicative routing of the gird connection is detailed in Chapter 3- Development Description of the ES. Section 1.3.25 provides advice and guidance in respect of the

[29] *Scottish Government, 2017. Peat Landslide Hazard and Risk Assessments: Best Practice Guide for Proposed Electricity Generation Developments [Online] Available at: Peat Landslide Hazard and Risk Assessments: Best Practice Guide for Proposed Electricity Generation Developments (www.gov.scot)*

visual impact of the wind energy development. The BPGs states that "*Developers should seek to ensure that through good siting and design, landscape and visual impacts are limited and appropriate to the location."* The BPGs provide a general guide to the effect which distance has on the perception of wind energy development in an open landscape, as follows:

> *"Up to 2km: Likely to be a prominent feature.*
>
> *2-5kms: Relatively prominent.*
>
> *5-15kms: Prominent in clear visibility- seen as part of the wider landscape.*
>
> *15-30kms: Only seen in very clear visibility- a minor element in the landscape."*

The BPG advice is considered and addressed further in Chapter 6- Landscape & Visual Impact Assessment of the ES. Chapter 6 identifies that the Development will be a prominent feature within the 2-5km buffer, consistent with the guidance.

In respect of windfarm noise, section 1.3.46 of the BPGs states that the report *"the Assessment and Rating of Noise from Wind Farms' (ETSU-R-97), describes a framework for the measurement of wind farm noise and gives indicative noise levels calculated to offer a reasonable degree of protection to wind farm neighbours, without placing unreasonable restrictions on wind farm development",* and notes that it should be used in the assessment and rating of noise from wind energy developments. Chapter 12- Noise of the ES uses ETSU-R-97 as part of the noise assessment for the Development. Chapter 12 concludes that the Development will not give rise to significant noise effects and is consistent with ETSU-R-97.

Supplementary Planning Guidance (SPG) on Wind Energy Development in Northern Ireland's Landscapes, 2010

Published in 2010, the SPG is intended to provide broad strategic guidance in relation to the Northern Ireland landscape and visual impacts of wind energy development. The guidance is intended to share the aim of PPS18 to facilitate the siting of renewable energy generating facilities in appropriate locations, in order to achieve Northern Ireland's renewable energy targets. The SPG identifies 130 Landscape Character Areas across Northern Ireland. The Development is located in the wester parts of LCA No.29- Sperrin Mountains, where the hills are slightly lower and operational wind farms already existing, namely Owenreagh I and II wind farms. Chapter 6- Landscape & Visual Impact Assessment of the ES assesses the impact of the Development upon LCA No.29, and other LCAs within the 30km landscape and visual amenity study area. Chapter 6 noted that assessment of effects on landscape character found that significant effects, during the decommissioning and construction and operational phases would arise as a result of the Development within parts of three of the LCAs, including LCA No.29, LCA No.30- Sperrin Foothills and No.27 Foyle Valley, that occur in the Study Area. Collectively, these significant effects would extend out to a radius of approximately 5.0 km. The effect of the Development on all other LCTs and LCAs during decommissioning and construction and operation would be not significant. The potential for significant effects out to 5km, aligns with the BPGs advice in respect of wind energy, which notes that turbines will be prominent within a 0-2km radius relatively prominent within a 2km to 5km radius.

6.1.3.2 Planning Policy Statement 2-Natural Heritage (PPS 2)

The policy provisions of PPS 2 align with the Natural Heritage planning policies of the SPPS. Section 6.1.2.7 of this Statement details the policy assessment in respect of the Development in terms of the SPPS. This assessment is also applicable to PPS2 planning policy and the conclusions are consistent. Policy NH6- Areas of Outstanding Natural Beauty represents an additional planning policy, in comparison to the SPPS natural heritage policy. The policy cites that planning permission will only be granted within AONBs, where it is of an appropriate design, size and scale for the locality and certain criteria are met. The criteria include the:

a. *the siting and scale of the proposal is sympathetic to the special character of the Area of Outstanding Natural Beauty in general and of the particular locality; and*
b. *it respects or conserves features (including buildings and other man-made features) of importance to the character, appearance or heritage of the landscape;*
c. *the proposal respects local architectural styles and patterns, traditional boundary details, by retaining features such as hedges, walls, trees and gates; and local materials, design and colour.*

As noted in Section 6.1.2.2.3, Chapter 6 of the ES assessed the impact of the Development on the Sperrin AONB. Chapter 6 detailed that the majority of the Sperrin AONB would remain unaffected by the Development owing to no visibility or limited and low-level visibility. While localised effects would occur, these would be contained within the north-western part of the AONB and largely coincide with the area currently influenced by Owenreagh I and II turbines. The larger scale of the proposed turbines would, however, give rise to major / moderate or moderate and significant effect, that would extend to approximately 4.5km to the west, 5km to the north, 4km to the east, 5km to the south-east and 3 km to the south during the decommissioning and construction phase and operational phase. The identified localised effects would not affect the overall integrity of the Sperrin AONB owing to the relatively small number of turbines and their contained extent in the north-western part of the AONB where there are much stronger human influences from existing developments and the special qualities of the AONB are expressed to a much lesser extent. In this regard, it is considered that the Development is compliant with Policy NH6 of PPS2. The Development complies with PPS2 planning policy.

6.1.3.3 Planning Policy Statement 3-Access Movement and Parking (PPS 3)

In terms of PPS3, there is considered to be no conflict with the equivalent provisions in the SPPS, therefore until the Council adopts its Plan Strategy, PPS3 will apply, together with the SPPS, with no less weight attached to PPS3 policy. Policy AMP 2- Access to Public Roads outlines that planning

permission will only be granted for a development proposal involving direct access, or the intensification of the use of an existing access, onto a public road where: such access will not prejudice road safety or significantly inconvenience the flow of traffic and the proposal does not conflict with Policy AMP 3 'Access to Protected Routes'. Policy AMP7 'Car Parking and Servicing Arrangements' details that development proposals will be required to provide adequate provision for car parking and appropriate servicing arrangements.

Chapter 13 concludes that subject to the identified mitigation measures, which will form part of an agreed 'Construction Traffic Management Plan' that the Development will not result in an adverse impact upon the existing traffic and transport environment. The use of the seven new site access during the decommissioning/ construction phases will not prejudice road safety or significantly inconvenience the flow of traffic. The Development does not conflict with Policy AMP 3 of PPS3. The measures associated with the decommissioning/construction phases of the Development have been thoroughly assessed and will not prejudice road safety, road users or inconvenience the traffic flow to an unacceptable level. Additionally, the operational phase of the Development has been assessed and it is concluded that that Development (including new site accesses) will not prejudice road safety, road users, or significantly inconvenience the flow of traffic.

6.1.3.4 Planning Policy 6- Planning, Archaeology & Built Heritage (PPS 6)

The planning policy provisions of PPS 6 and the SPPS are consistent, with the archaeological and built heritage policy of the SPPS. The PPS 6 policy includes:

- Policy BH1- The Preservation of Archaeological Remains of Regional Importance and their Settings:
- Policy BH2- The Protection of Archaeological Remains of Local Importance and their Settings:
- Policy BH3: Archaeological Assessment and Evaluation:
- Policy BH4: Archaeological Mitigation:
- Policy BH 6 The Protection of Parks, Gardens and Demesnes of Special Historic Interest

Section 6.1.2.10 of this Statement details the policy assessment in respect of the Development in terms of the SPPS. The assessment is also applicable to PPS6 and the conclusions are consistent. The Development complies with PPS 6 planning policy.

6.1.3.5 Planning Policy Statement 10- Telecommunications (PPS 10)

Policy TEL2- Development and Interference with Television Broadcasting Services of PPS10 was cancelled by the provisions of the SPPS and is no longer a material planning consideration. Policy RE1 of PPS18 requires that wind energy development will not give rise to unacceptable adverse impacts upon communications infrastructure.

6.1.3.6 Planning Policy Statement 13- Transportation & Land Use (PPS 13)

The policy provisions of PPS13 are consistent with the policy provision of the transportation policies in the SPPS. Section 6.1.2.11 of this Statement details the policy assessment in respect of the Development in terms of the SPPS. General Principle 3 of PPS13 details the "*The process of a Transport Assessment (TA) should be employed to review the potential transport impacts of a development proposal"*. The assessment detailed at section 6.1.2.11 is also applicable to PPS13 and the conclusions are consistent. The Development is consistent with the policy provisions of PPS13.

6.1.3.7 Planning Policy Statement 16- Tourism (PPS16)

The tourism policy provision of PPS16 and the SPPS is largely consistent. PPS 16 provides clarification on the definition of 'tourism assets' while the SPPS does not provide the same clarification. 'Tourism assets' are defined by PPS 16 as "*any feature associated with the built or natural environment which is of intrinsic interest to tourists."* **Policy TSM 8- Safeguarding of Tourism Assets prescribes:**

> *"Planning permission will not be granted for development that would in itself or in combination with existing and approved development in the locality have an adverse impact on a tourism asset.*

This policy provides for the safeguarding of all tourism assets, including those which are subject to protection for other reasons under various legislative or policy instruments and those which are not subject to such protection."

Section 6.2.1.12 of this Statement details the policy assessment in respect of the Development in terms of the SPPS. This assessment is also applicable to PPS16 and the conclusions are consistent. The Development is consistent with the policy provisions of PPS16.

6.1.3.8 Planning Policy Statement 21- Development in the Countryside (PPS 21)

Policy CTY1- 'Development in the Countryside' details the types of development considered suitable in the countryside. In relation to 'renewable energy' projects in the countryside Policy CTY1 states that renewable energy proposals will be permitted provided that they are in accordance with PPS 18. Section 6.1.3.1 of this Statement details that the Development adheres to the policy provision of PPS18 and is also compliant with the provisions of Policy CTY1 of PPS21

A substation is proposed as part of the Development, and therefore the provisions of PPS21- Policy CTY13 Integration and Design of Buildings in the Countryside and Policy CTY14- Rural Character are engaged in respect of the building. The impact of the Development, including the substation was assessed as part of Chapter 6 Landscape and Visual Impact Assessment of the ES. The design of the Development has sought to integrate the substation building with the surrounding environment. Chapter 6 assessed the impact of the substation, in landscape and visual amenity terms, and did not identify any significant environmental effects arising from the substation building. The Development complies with policy CTY15 and CTY15 of PPS21.

6.1.3.9 Planning Policy Statement 15- Planning & Flood Risk

PPS 15 details a range of planning policies associated with flood risk, to minimise and manage flood risk to people, property and the environment. The PPS 15 policy provisions align with the provisions of the SPPS. Section 6.1.2.8 of this Statement details the policy assessment in respect of the Development in terms of the SPPS hydrology policy. This assessment is also applicable to PPS15 and the conclusions are consistent. The Development is consistent with the policy provisions of PPS15.

6.1.3.10 Planning Policy Statements- Conclusions

The Development complies with the retained PPS policy provision. This is of particular importance in the areas where the SAP 1986- 2001 is silent and in particular on renewable energy policy in PPS18, whereby in the absence of local development policy greater material weight should be afforded to regional planning policy

6.2 Material Considerations- Derry City & Strabane District Council Local Development Plan Draft Plan Strategy

At the time of preparation of this ES (Q2 2023), the Council are in the process of preparing their Local Development Plan for the Council Area – the Derry City & Strabane District Council Local Development Plan 2032 (DC&SDC LDP). The LDP is currently at draft Plan Strategy (LDP dPS) stage. The Council had scheduled that the LDP dPS would be at Independent Examination during Q4 2022/ Q1 2023, however the schedule has been amended and the Independent Examination will take place over September/ October 2023.

The final timeframe for the adoption of the Plan Strategy is unclear. At this stage, the LDP dPS should be afforded limited material planning weight in the planning determination process, however this may be subject to change if the LDP PS is adopted while the application is being determined. We note that the dPS may be subject to change following the scheduled public examination process.

For the purposes of this Planning Statement it will be clarified whether the new dPS policy is consistent with the existing SPPS and retained policy provision. If the dPS introduces a change of policy direction this will be highlighted in the context of the SPPS and retained PPS policy. If the dPS are more prescriptive in particular policy areas the Development will be assessed in respect of the more

prescriptive dPS policy. This approach will facilitate a more coherent planning policy review and avoid duplication in terms of policy assessment.

6.2.1 LDP- dPS General Development Principles & Policies

The LDP dPS details a series of general development principles, which the Council considers are consistent with the provisions of the SPPS. Key principles GDP1 to GDP8 sets out the key criteria, which Development in the Council area must meet. The dPS also sets out general policy (GDPOL 1 & GDPOL 2) requirements that Development proposals should meet in order to secure planning permission. Of particular note in the key principles are the following policies:

- GDP 1 Sustainable Development
- GDP 2 Climate Change
- GDP 6 Importance of Ecosystem Services
- GDP 7 Development Principles: Preserving and Enhancing the Natural Environment
- GDP 8 'Development Principles: Preserving and Enhancing the Historic Environment.

Policy GDP 1, does not introduce any new policy direction not already addressed by the SPPS. Policy GDP 2, advocates that Development must mitigate against the effects of climate change, adapt to impacts and to ensure resilience.

Policy GDP 6 notes that the Council "*aims to reduce the effects of climate change, promote sustainable eco-friendly developments with sustainable transport methods, promote green and blue infrastructure, protect animal habitats from the effects of an increasing human presence, protect and promote ecosystems."* It requires that Development proposals must:

i) "take into account any demonstrable adverse effects on established ecosystems;
ii) give due consideration for the promotion and inclusion of Green infrastructure;
iii) where possible and practicable, include measures to prevent and adapt to environmental change

Development proposals are required to be sensitive to all protected species and sites and should be designed to protect them, their habitats and prevent deterioration and destruction of their breeding sites or resting places."

Chapter 10- Ecology and Chapter 11- Ornithology of the ES reviews the impact of the Development on animal habitats and established eco-systems. The Development has been designed to minimise impacts on established habitats. The Development will deliver a range of compensation, management and enhancement measures to improve the existing ecological habitats and eco-systems at the Site and the surrounding area. The Development aligns with the provisions of policy GDP 6.

Policy GDP 7 Development Principles- Preserving & Enhancing the Natural Environment states that *"Development should accord with the principles of the protection and enhancement of the natural environment, including landscape, biodiversity and geodiversity and especially those areas designated as being of international, national and local importance".* Chapter 10- Ecology and Chapter 11- Ornithology of the ES reviews the impact of the Development on the natural environment, including biodiversity. Technical Appendix A10.2: Shadow Habitats Regulation Assessment of the ES assesses the impact of the Development upon European designated sites. The Development aligns with the provisions of policy GDP 7.

Policy GDP 8 Development Principles: Preserving and Enhancing the Historic Environment outlines principles relating to the preservation and enhancement of the historic environment. Of relevance for the Development are the following principles:

> *"Development affecting the historic environment should:*
>
> *promote sustainable development and environmental stewardship with regard to our historic environment;*

secure the preservation, conservation and where possible, the enhancement of buildings and areas of cultural, historic or archaeological interest including conservation areas, historic parks, gardens, areas of archaeological interest and listed buildings and their settings".

The impact of the Development on the historic environment including built heritage and archaeology is assessed by Chapter 7- Archaeology and Cultural Heritage. The chapter concludes that the Development will not give rise to significant environmental effects on Built Heritage Assets, either directly or indirectly. Thus, the Development will promote the stewardship of the archaeological and built heritage in the Council, and will not impact negatively upon the preservation and conservation of the built heritage and archaeological assets.

Policy GDPOL 1- General Development Management Policy details essential criteria that must be met by all development proposals subject to their relevance to a given proposal. Policy GDPOL 1 does not introduce any new policy direction, from that assessed under the provision of the SPPS in respect of the Development.

6.2.2 LDP- dPS Transport & Movement

LDP-dPS policies TAM 2- Access to Public roads and TAM 6- Transport Assessment are material to the Development. TAM 2- Access to Public Roads states:

"Planning permission will only be granted for a development proposal involving direct access, or the intensification of the use of an existing access, onto a public road where:

a) such access will not prejudice road safety or significantly inconvenience the flow of traffic; and
b) the proposal does not conflict with Policy TAM 3 Access to Protected Routes".

TAM 6 Transport Assessment states:

"In order to evaluate the transport implications of a development proposal the LDP will, where appropriate, require developers to submit a Transport Assessment. Adopted guidance on Transport Assessments is contained within the 2006 published Transport Assessment – Guidelines for Development Proposals in NI. Where a development necessitates the provision of additional transport infrastructure improvements, these costs shall be borne by the developer."

These dPS policies are consistent with the policy provisions of the SPPS, PPS3- Access, Movement and Parking, PPS13- Transportation and Land Use. The Development is consistent with the provisions of TAM 2 and TAM 6.

6.2.3 LDP- dPS Tourism Development

Policy TOU 1- Safeguarding of Tourism Assets states *"Planning permission will not be granted for development that would in itself, or in combination with existing and approved development in the locality have an adverse impact on a tourism asset such as to significantly compromise its tourism value. This policy provides for the safeguarding of all tourism assets, including those which are also subject to protection under built and natural heritage legislation."* The dPS defines a tourism asset as "*any feature associated with the built or natural environment which is of intrinsic interest to tourists"* and highlights that the Sperrin AONB is a tourism asset within the Council area. Policy TOU1 is consistent with the policy provisions of PPS16 and the SPPS. Section 6.2.1.12 of this Statement details the policy assessment in respect of the Development in terms of the SPPS and tourism and the same conclusions apply in the context of the Development and policy TOU 1.

6.2.4 LDP- dPS Natural Heritage

The dPS has a range of natural heritage planning policy, summarised below:

- NE 1: Nature Conservation Sites
- NE 2 Protected Species and their Habitats

- NE 3 Biodiversity or Features of Natural Heritage Importance
- NE 4 Development adjacent to Main Rivers and Open Water Bodies
- NE 5 Development within or affecting the setting of the Sperrin AONB
- NE 6: Development within Special Countryside Areas (SCA)
- NE 7 Development within Areas of High Landscape Importance (AHLIs)
- NE 8: Development within Local Landscape Policy Areas (LLPAs)

Policies NE 1, NE 2, NE 3, NE 4 and NE 5 are consistent with the policy provisions of the SPPS and PPS 2. Section 6.1.2.7 of this Statement details the policy assessment in respect of the Development in terms of the SPPS, and the conclusions also apply to the dPS natural heritage policies. The Development is not located within a SCA, an AHLI or a LLPA and therefore these dPS policies are not engaged.

6.3.5 LDP- dPS Historic Environment

The dPS outlines historic environment planning policy, that is engaged by the Development, as follows:

- HE 1 Archaeology & Upstanding Remains
- HE 2 Archaeological Assessment, Evaluation and Mitigation
- HE 7 Historic Parks, Gardens, Demesnes and their Settings

Policies HE 1, HE 2, HE 7 are consistent with the policy provisions of PPS 6 and the SPPS. Section 6.1.2.10 of this Statement details the policy assessment in respect of the Development in terms of the built heritage policy of the SPPS. The assessment is also applicable to the historic environment provisions of the dPS.

6.3.6 LDP- dPS Renewable & Low Carbon Energy Development

Policy RED 1- Renewable and Low Carbon Energy Development details the planning policy criteria for renewable energy development in the Council area. Policy RED 1 is largely consistent with the policy provisions of the SPPS Renewable Energy policy and PPS 18- Policy RE1. There are a range of objections to Policy RED 1 including challenges to the 'soundness'; of the policy. The objections will be considered during the public examination of the dPS.

However, there are policy differences, that will be reviewed in more detail. The dPS seeks to introduce spatial designations to limit renewable energy development, except where exemptions are identified- refer below.

- Proposals for renewable energy must accord with the relevant LDP landscape designations which include Wind Energy Capacity Area (WECA), Special Countryside Area (SCA), Areas of High Landscape Importance (AHLI), Areas of Outstanding Natural Beauty (AONB).

As noted, previously the Development is not located within a designated WECA, SCA or AHLI. However, the Development is located within the Sperrin AONB. In respect of the Sperrin AONB, the policy states that there is "*general presumption against individual or cumulative development proposals unless demonstrated that the proposal would not adversely impact or erode the intrinsic appeal of the Sperrin AONB".* As noted in Section 6.1.2.2.3 of this Statement, Chapter 6 of the ES assessed the impact of the Development on the Sperrin AONB. Chapter 6 detailed that the majority of the Sperrin AONB would remain unaffected by the Development owing to no visibility or limited and low-level visibility. While localised effects would occur, these would be contained within the north-western part of the AONB and largely coincide with the area currently influenced by Owenreagh I and II turbines. The larger scale of the proposed turbines would, however, give rise to **major / moderate** or **moderate** and **significant effect**, that would extend to approximately 4.5km to the west, 5km to the north, 4km to the east, 5km to the south-east and 3 km to the south during the decommissioning and construction phase and operational phase. The identified localised effects would not affect the overall integrity of the Sperrin AONB owing to the relatively small number of turbines and their contained extent in the north-western part of the AONB where there are much stronger human influences from existing developments and the special qualities of the AONB are expressed to a much lesser extent. In this regard, it is considered that the Development does not conflict with the spatial designation approach of Policy RED 1.

In addition to the general policy requirements of Policy RED 1, the policy also identifies specific policy criteria for wind energy development, and also the repowering of existing wind farms. This is similar to the approach by PPS18 and the SPPS renewable energy policy. Policy RED 1 makes provision for some additional policy criteria outlined below:

"vi. turbines proximate to any public road, public right of way or railway line are set back a minimum distance of the fall over distance plus 10% from the edge of same.

vii. turbines proximate to any occupied or occupiable buildings are set back a minimum distance of the fall over distance plus 10% from the curtilage of same;

ix. above-ground redundant plant (including turbines), buildings and associated infrastructure shall be removed and the site restored to an agreed standard appropriate to its location. A time limit condition of 30 years will normally be attached;"

The Development is compliant with the additional criteria with adequate separation distances provided to the public road and occupied buildings. The Development is seeking a 40 year planning permission, whereby all above ground redundant infrastructure, buildings and associated infrastructure will be removed and the site restored.

Policy RED 1 is largely consistent with the policy provisions of SPPS and policy RE1 of PPS 18. Where the dPS has introduced a departure from the established policy framework, i.e., the introduction of prohibitive spatial designations and the additional wind energy criteria requirements, the Development has been assessed in respect of these policy requirements. The Development complies with the policy requirements of the dPS policy RED 1 requirements.

6.3.7 LDP dPS- Development & Flooding

The dPS outlines historic environment planning policy, that is engaged by the Development, as follows:

- FLD 2 Protection of Flood Defence and Drainage Infrastructure
- FLD 3 Development and Surface Water (Pluvial) Flood Risk Outside Flood Plains
- FLD 4 Artificial Modification of Watercourses

Policies FLD 2, FLD 3 and FLD 4 are consistent with the policy provisions of PPS 15 and the SPPS. Section 6.1.2.8 of this Statement details the policy assessment in respect of the Development in terms of the SPPS flood risk and drainage policy. The assessment is also applicable to the flooding and drainage policy of the dPS.

6.3.8 LDP dPS- Conclusion

As previously stated, given the stage of the LDP process, the LDP dPS should be afforded limited material planning weight in the planning determination process. We note that the material weight to be afforded may be subject to change if the LDP PS is adopted while the application is being determined, with or without potential amendments to the Strategy. Notwithstanding the material weight to be afforded to the LDP dPS at this time, the Development complies with the planning policy framework of the LDP dPS.

6.4 Material Consideration- Strategic Planning Policy Review for Renewable & Low Carbon Energy

The DfI planning policy review for renewable and low carbon energy is ongoing. The draft policy document was published in April 2023, and subject to public consultation until the end of June 2023. At this juncture (August 2023),there is no further update on timelines for the potential amendment and/or adoption of the updated policy provision. Therefore, at this stage the draft policy should be afforded limited material planning weight.

The draft consultation document notes that "*The aim of the SPPS is to maximise sustainable renewable and low carbon energy from a wide range of technologies, at various scales, in appropriate locations within the built and natural environment, without compromising other environmental assets of*

acknowledged importance. Full account should be taken of the target to generate 80% of electricity consumption from renewable sources by 2030, as well as prevailing environmental legislation and relevant strategies which will support Northern Ireland's Climate Action Plan."

In terms of planning policy, the draft consultation document introduces a number of new policy directions, which are outlined below:

"1.19. Whilst advancements and changes in technology may mean schemes are not like for like, life extension and re-powering of existing development has the potential to continue to maintain or enhance installed renewable energy generation, where appropriate. Therefore, a presumption in favour of proposals to re-power, expand and extend the life of existing solar and wind farms applies unless the impacts identified (including cumulative impacts) are unacceptable and cannot be mitigated. Approvals for renewable and low carbon energy development proposals may be time-limited. However, areas identified as appropriate for wind farms are expected to be suitable for use in perpetuity."

***"**1.26 ……... Proposals for renewable and low carbon energy must, therefore, be rigorously assessed for their environmental impacts (covering installation, operation and decommissioning stages, as appropriate) and comply with relevant environmental legislation and policy. Active peatland, for example, is of particular importance to Northern Ireland for its biodiversity, water and carbon storage qualities. Degraded peatlands can also have natural heritage and carbon storage value and their protection and restoration potential can, therefore, be a material consideration in the determination of planning applications on a case by case basis."*

The draft document introduces a presumption in favour of repowering existing wind farms, and that areas identified as appropriate for wind farms are expected to be suitable for use in perpetuity. This policy direction supports the principle of the Development and the repowering of the Owenreagh I & II wind farms. We note that this presumption in favour of repowering projects is not promoted by the LDP dPS, whose publication predates the draft regional policy consultation. This represents a potential policy conflict, and the resolution of the potential conflict may be resolved through the local LDP process as it progresses.

The Development, specifically the HEMP, proposes a range of blanket bog restoration and enhancement measures encompassing well-established techniques such as the traditional reprofiling, drain-damming and wave dam and zippering methodologies which are commonly used, high-success, methods of rewetting in peatland environments[30&31]. Alongside the standard, well-established approaches outlined above; Dr Ray Flynn of EHA has proposed the implementation of several additional pioneering approaches to blanket bog restoration within a further *c.* 17.809 ha of blanket bog habitat within the HMEP landholdings. This combined research approach utilising a combination of well-established and pioneering techniques is intended to provide a valuable resource for the success of future peatland restoration projects within Northern Ireland, the UK and Ireland while contributing towards the strategic objectives and targets set within the Peatland Strategy for Northern Ireland.

[30] Nature Scot Peatland Restoration Techniques. Available Online at: Peatland ACTION - Project resources | NatureScot.
[31] Cris, R., Buckmaster,S., Bain,C. & Bonn, A. Eds.2011. UK Peatland Restoration - Demonstrating Success IUCN: UK National Committee Peatland Programme, Edinburgh.Available Online at: https://www.iucn-uk-peatlandprogramme.org/sites/default/files/header-images/IUCN%20Demonstrating%20Success%20Booklet_UK.pdf

7.0 Other Material Considerations

7.1 The Operational Owenreagh I & II Wind Farms

Repowering a windfarm site supports an ongoing use of the land at the Site by renewable energy assets. Repowering also presents an opportunity to sustain and create additional jobs and to encourage continued investment in the renewable energy industry in Northern Ireland. The repowering of a windfarm differs from that of developing a greenfield site as the area has previously been developed, has demonstrated its suitability for use as a windfarm site, and will continue to be used for the same activity. Importantly the Operational Owenreagh I & II windfarms can operate in perpetuity and the Development will increase the efficiency of the existing renewable energy asset. The established renewable energy use at the Operational Owenreagh I & II windfarms, the adaptability of the local environment and population to wind energy provision, and the increased energy output efficiency of the Development should be material considerations in the determination of the planning application.

7.1.2 Craignagapple Wind Farm Approval (J/2010/0481/F)

Whilst planning permission for the Craignagapple wind farm expired in January 2023, it is considered material that the Site was determined as suitable in planning policy and LVIA terms to accommodate 6 no.111m turbines in addition to the operation Owenreagh I & II wind farms. The approval of the Criagngapple wind farm was made by the Council in the same legislative and planning policy framework as currently in place, indeed before the introduction of the Climate Change Act (NI) 2022. The recent planning history and decision-making at the Site is material to Development and should be afforded material weight.

7.2 Corlacky Wind Farm (LA09/2016/0232/F)

DfI Planning issued approval for the Corlacky wind farm (Planning Ref No.LA09/2016/0232/F) on 16th March 2021. The Corlacky wind farm was a regionally significant planning application for the erection of a windfarm development comprising 11 no. wind turbines, each up to a maximum of 149.9m tip height, with a total installed capacity of up to 36.3MW. The development is located approx. 3km west of Swatragh, north of Maghera, off the Corlacky Road. The site is wholly located within the Sperrin Area of Outstanding Natural Beauty (AONB).

The application was subject to a public inquiry, following an initial DfI Planning Notice of Opinion to refuse the application based on reasons relating to (i) policy BH1 of PPS6 and policy RE1 of PPS18 and impacts of the Development on the setting of scheduled monuments, (ii) policy RE1 and the unacceptable adverse LVIA impacts of the Development on the Sperrin AONB and (iii) policy NH6 of PPS2, and that the development would be an inappropriate design, size and scale and would be unsympathetic to the special character of the Sperrin AONB. The applicant, RES Ltd, requested the opportunity to be heard before the Planning Appeals Commission (PAC). The hearing took place on 24 October 2019 and the PAC report issued on 22nd January 2020 which recommended the grant of planning permission. The DfI Minster recommended approval of the planning application, in line with the recommendations of the PAC.

Of particular note in the PAC public inquiry report (1018/C009), is their approach to consideration of the development's location within the Sperrin AONB. The relevant extracts are summarised below:

> *"3.55 The BPG contains numerous references to wind farms, many of which are directly applicable to single turbines. Paragraph 1.3.18 acknowledges that there are no landscapes into which a wind farm will not introduce a new and distinctive feature. It is stated at Paragraph 1.3.25 that at a distance of up to 2 kilometres, a wind farm in an open landscape is likely to be a prominent feature and at a distance* ***of 2 to 5 kilometres it will generally be perceived as relatively prominent****……..*
>
> *3.69 The Development Management Report said that the proposed wind farm would be particularly prominent in the landscape when viewed from the minor roads to the east of the application site. Reference was made to the visual impact of the access and tracks within an extremely open landscape and of the turbines and compound buildings along a*

substantial stretch of Corlacky Road to the south of the proposed access. ***Visual prominence is inevitable as the Drumbane, Corlacky and Knockoneill Roads all come within a 2-kilometre radius of the proposed turbines. But that does not in itself justify the withholding of planning permission****.*

3.72 Paragraph 6.223 of the SPPS mandates a cautious approach to renewable energy development proposals within designated landscapes of significant value, such as AONBs. It says that in such sensitive landscapes, it may be difficult to accommodate wind turbines without detriment to the region's natural heritage assets. ***That does not however represent a blanket ban on wind farms in AONBs.***

*3.**74** Words such as tranquillity and wildness were used in the Department's evidence as descriptors of the Sperrin landscape. The NED witness stated, however, that while some preliminary work has been done, there is no official publication setting out the special character of the Sperrin AONB. He confirmed that there is no design guide and no management plan for the AONB. Other Northern Ireland AONBs have such documentation. In these circumstances, there is no benchmark against which a judgment can be made as to whether the proposed wind farm would or would not be sympathetic to the special character of the Sperrin AONB*

3.75 *The NED witness conceded that the proposed wind farm would not have a significant impact on the Sperrin AONB as a whole. Although it is proposed to site the turbines in a relatively small and peripheral location within the AONB, a full assessment of the impact on visual amenity and local character is nonetheless a policy requirement. In carrying out that assessment, I have found no unacceptable adverse impact from any of the viewpoints to which I was directed. I have found the proposal broadly consistent with principles relating to upland landscapes set out in the SPG. In making my findings, I have taken account of the number, scale, size and siting of the proposed turbines, the sensitivity of the landscape and their cumulative effects when added to the existing wind farm at Brockaghboy.*

We highlight that the Corlacky decision indicates a number of issues that are material to the determination of the Development. Importantly, the Corlacky decision indicates that there is not a 'blanket ban' on development within AONBs and applications should be considered on a case by case basis. There is a recognition that in the context of LVIA considerations, turbines are likely to be visually prominent within a 2-5km buffer from the Development, however this prominence does not represent a refusal reason in its own right. The PAC considered the impact of the Development, on the integrity of the AONB as a whole and whilst acknowledging the localised visual prominence of the turbines the overall decision was based upon the general principles outlined in the SPGs and overall LVIA impacts. The PAC approach and recommendations was endorsed by the DfI Minister who approved the Development.

8.0 Conclusion

In accordance with the Section 45 of the Planning Act (Northern Ireland) 2011, the Statement has assessed the Application against the provisions of the Local Development Plan (Northern Area Plan 2016) and relevant material considerations.

Considerable support can be drawn from regional and national energy policy, and the recent Climate Change Act (NI) 2022 which promotes and supports renewable energy development, recognising its contribution towards sustainable development and tackling climate change, to safeguarding the UK and Northern Ireland's energy supply. The Development will sustain and build upon a contribution (up to a capacity output of 67.2 MW) towards NI's and the UK's legally binding targets for reductions in carbon emissions and energy from renewable resources. Importantly the Development will be one of the leading planning applications made to repower an existing operational windfarm in Northern Ireland and will maintain and increase the renewable energy output at an already established renewable energy asset.

Based on the findings of the accompanying ES and the assessment of the Development's compliance with the relevant policies of the extant Local Development Plan, the Development's compliance with the relevant regional planning policies and associated Supplementary Guidance, it is concluded that the Development fully accords with the Development Plan and regional planning policy guidance (which is an important material consideration where the Local Development Plan is silent on policy issues) when read as a whole. As per the accompanying ES, the Development will not give rise to any unacceptable adverse impacts.

The development process adopted by the Applicant has represented a good practice approach to the responsible development of a renewable energy scheme, minimising the potential impact of the Development by utilising existing infrastructure where possible and through multiple design iterations and modifications to minimise the impact on the receiving environment and ensure compliance with the suite of planning policy. The layout of the Development presented in the Planning Figures and ES represents the optimum fit with the technical and environmental parameters of this project having specific regard to the existing infrastructure of the Operational Owenreagh I & II Windfarms.

The primary aim of the Development is to generate energy from a renewable resource. With this there are tangible environmental, economic and social benefits (identified in **Chapter 1** and **Chapter 14** of the ES) which include:

- Up to a capacity output of to 67.2MW of installed renewable energy electricity generating capacity that will contribute to regional and national renewable energy targets;
- The Development will increase the renewable energy output from the existing Operational Owenreagh I & II Windfarms c. six-fold increasing the efficiency of an established renewable energy asset;
- The electricity generated from the Development will contribute towards increased site electricity generation, reduce dependency on fossil fuels lowering carbon dioxide emissions and output, sustain existing development and construction jobs and create opportunities for new supply chain jobs.
- The Development will (development/decommissioning/construction phases) support 90 job years in the DC&SDC area and 260 job years for Northern Ireland. The employment effects during the development/decommissioning/construction phases are reported in job years rather than Full-time equivalents (FTE's) because the contracts would be short term.
- In addition to land-owner rents, the Development would be liable for non-domestic rates, the payment of which would contribute to public sector finances. It is estimated that the Development could contribute £0.47 million annually to public finances. Over a 40-year period this would be expected to contribute £18.8 million, although the actual contribution would depend on variables such as the actual load factor of the Development.
- The Development, specifically the HEMP, proposes a range of blanket bog restoration and enhancement measures encompassing well-established techniques such as the traditional reprofiling, drain-damming and wave dam and zippering methodologies which are commonly

used, high-success, methods of rewetting in peatland environments[32&33]. Alongside the standard, well-established approaches outlined above; Dr Ray Flynn of EHA has proposed the implementation of several additional pioneering approaches to blanket bog restoration within a further *c.* 17.809 ha of blanket bog habitat within the HMEP landholdings. This combined research approach utilising a combination of well-established and pioneering techniques is intended to provide a valuable resource for the success of future peatland restoration projects within Northern Ireland, the UK and Ireland while contributing towards the strategic objectives and targets set within the Peatland Strategy for Northern Ireland[34].

Having regard to the NI energy targets, the prevailing climate change legislation, local and regional planning policy and guidance presented and assessed within this Statement, it is important that renewable energy developments which are acceptable in planning policy terms, such as the Development, are given consent. The Applicant therefore respectfully requests that consent is granted subject to appropriate planning conditions.

[32] Nature Scot Peatland Restoration Techniques. Available Online at: Peatland ACTION - Project resources | NatureScot.
[33] Cris, R., Buckmaster,S., Bain,C. & Bonn, A. Eds.2011. UK Peatland Restoration - Demonstrating Success IUCN: UK National Committee Peatland Programme, Edinburgh.Available Online at: https://www.iucn-uk-peatlandprogramme.org/sites/default/files/header-images/IUCN%20Demonstrating%20Success%20Booklet_UK.pdf
[34] Northern Ireland Peatland Strategy 2021-2040 – Consultation Document. Available Online at: Northern Ireland Peatland Strategy 2021-2040. Consultation Document.pdf (daera-ni.gov.uk)