



Barnesmore Windfarm Repowering

Volume III – EIA Figures

December 2019

Table of Contents

Figure Number	Figure Name
1.1	Site Location Map
1.2	Site Layout Map
1.3	House Locations within 2.5 km of the Development
1.4a	Site Comparison Layout Sheet 1 of 2
1.4b	Site Comparison Layout Sheet 2 of 2
2.1	Proposed Haul Route
2.2	Wind Resource on Site
2.3	Indicative Crane Hardstand General Arrangement
2.4	Indicative Meteorological Mast Details
2.5	Existing Golagh Substation Compound Layout Plan and Section
2.6	Indicative Cabling Trench Details, for Windfarm Collector Circuits
2.7a	Indicative Drainage Details Sheet 1 of 4
2.7b	Indicative Drainage Details Sheet 2 of 4
2.7c	Indicative Drainage Details Sheet 3 of 4
2.7d	Indicative Drainage Details Sheet 4 of 4
2.8	Indicative Contractors Site Compound Details
2.9a	Indicative Site Access Tracks Construction Details Sheet 1 of 2
2.9b	Indicative Site Access Tracks Construction Details Sheet 2 of 2
2.10	Candidate Wind Turbine Details
2.11a	Proposed EirGrid Control Building Floor Plan & Section
2.11b	Proposed EirGrid Control Building Elevations
2.12a	Proposed IPP Control Building Plan
2.12b	Proposed IPP Control Building Elevations
2.12c	Proposed IPP Control Building Section
2.13	Proposed Site Substation Compound Layout Plan
2.14a	Indicative Energy Storage Unit Layout Plan
2.14b	Indicative Energy Storage Unit
3.1	2017 LVIA Feasibility Study Layouts
3.2	Existing Operational Barnesmore Windfarm Layout
3.3	Concept Layouts 1 - 4
3.4	Concept Layouts 5 - 8
3.5	Grid Connection
5.1	Location Map: Geographical Study Areas for Population Analysis
5.2	Local Electoral Divisions of the Development and Environs
5.3	Population Density by Small Areas
5.4	Scenic Amenity Categories
6.1	Geographical Location
6.2	Habitat Survey Area
6.3	Aquatic Monitoring Points
6.4	Freshwater Pearl Mussel (FPM) Survey
6.5	Reptile Refugia Mat Locations
6.6	Close Up of Site and NHA
6.7	Internationally Designated Sites within 15 km
6.8	Nationally Designated Sites within 5 km
6.9	Fossitt Habitats
6.10	Upland Perrin et al Habitats
6.11	EU Annex I Habitats
6.12	Relevé Surveys
6.13	Total Bat Passes by Species Spring
6.14	Total Bat Passes by Species Summer

Figure Number	Figure Name
6.15	Total Bat Passes by Species Autumn
6.16	NHA Boundary Based on NPWS Site Notes Description
7.1	Survey Areas
7.2	Survey Areas Aerial
7.3	Priority Species Survey Areas
7.4	Designated Sites
7.5	Whooper Swan Locations
7.6	Red Grouse Locations
7.7	Survey Areas & Turbine Buffers
7.8	Confirmed Breeding Territories
7.9	Probable Breeding Territories
7.10	Possible Breeding Territories
7.11	Non-Breeding Territories
7.12	2017 Meadow Pipit & Skylark
7.12	2017 Meadow Pipit & Skylark Aerial
7.13	2017-18 Winter Walkover
7.14	Target 2 Flights
7.15	Target 2 Flights
7.16	2017-18 Raven Flights
7.17	2017 Target 1 Flights BVP CONFIDENTIAL
7.18	2017-18 Target 1 Flights WVP CONFIDENTIAL
7.19	2017-18 Target 1 Flights MVP CONFIDENTIAL
7.20	2017 Priority Species Locations Target 1 CONFIDENTIAL
7.21A	2017 Priority Species Locations Target 2 Buffers
7.21B	2017 Priority Species Locations Target 1 Buffers CONFIDENTIAL
7.22	2017 Priority Species Locations RG & SN Buffer
7.23	2017 Priority Species Locations Target 2 5km CONFIDENTIAL
7.24A	2017 Priority Species Locations Target 2 10km
7.24B	2017 Priority Species Locations Target 1 CONFIDENTIAL 10km
7.25	2017-18 Winter Priority Species Locations CONFIDENTIAL
7.26A	2017-18 Winter Priority Species Locations 15km CONFIDENTIAL
7.26B	2017-18 Winter Priority Species Locations 15km CONFIDENTIAL
7.27	2018 Confirmed Breeding Territories
7.28	2018 Probable Breeding Territories
7.29	2018 Possible Breeding Territories
7.30	2018 Non-Breeding Territories
7.31	2018 Meadow pipit & Skylark
7.31	2018 Meadow pipit & Skylark Aerial
7.32	2018-19 Winter Walkover
7.33	2018-19 Target 2 Flights
7.34	2018-19 Target 2 Flights
7.35	2018-19 Raven Flight
7.36	2018 Target 1 Flights Breeding CONFIDENTIAL
7.37	2018 Target 1 Flights Winter CONFIDENTIAL
7.38	2018-19 Target 1 Flights Migration CONFIDENTIAL
7.39A	2018 Priority Species Locations Target 2
7.39B	2018 Priority Species Locations Target 1 CONFIDENTIAL
7.40A	2018 Priority Species Locations Target 2
7.40B	2018 Priority Species Locations Target 1 CONFIDENTIAL
7.41	2018 Priority Species Locations SN & RG

Figure Number	Figure Name
7.42A	2018 Priority Species Locations Target 2 5km
7.42B	2018 Priority Species Locations Target 1 CONFIDENTIAL 5km
7.43A	2018 Priority Species Locations Target 2 10km
7.43B	2018 Priority Species Locations Target 1 CONFIDENTIAL 10km
7.44	2018-19 Winter Priority Species Locations CONFIDENTIAL
7.45A	2018-19 Winter Priority Species Locations 15km CONFIDENTIAL
7.45B	2018-19 Winter Priority Species Locations 15km CONFIDENTIAL
7.45C	2018-19 Winter Priority Species Locations 15km CONFIDENTIAL
7.46	Track Layout – 2017 Confirmed Breeding Territories
7.47	Track Layout – 2017 Probable Breeding Territories
7.48	Track Layout – 2017 Possible Breeding Territories
7.49	Track Layout – 2017 Meadow Pipit & Skylark
7.50	Track Layout – 2018 Confirmed Breeding Territories
7.51	Track Layout – 2018 Probable Breeding Territories
7.52	Track Layout – 2018 Possible Breeding Territories
7.53	Track Layout – 2018 Meadow Pipit & Skylark
7.54	Track Layout – 2017 PSS CONFIDENTIAL
7.55	Track Layout – 2017-18 PSS CONFIDENTIAL
7.56	Track Layout - 2018 PSS CONFIDENTIAL
7.57	Track Layout – 2018-19 PSS CONFIDENTIAL
7.58A	Track Layout – 2017 RG & SN
7.58B	Track Layout – 2018 RG & SN
7.59	Track Layout – 2017-18 winter walkover
7.60	Track Layout – 2018-19 winter walkover
7.61A	CRM Flights CONFIDENTIAL
7.62A	CRM Flights CONFIDENTIAL
7.63A	Golden Eagle Territories CONFIDENTIAL
7.63B	Golden Eagle Territories CONFIDENTIAL
7.64A	Other Target 1 Territories CONFIDENTIAL
7.64B	Other Target 1 Territories CONFIDENTIAL
7.65	2017 PSS 500m Buffer Infrastructure CONFIDENTIAL
7.66	2017-18 PSS 500m Buffer Infrastructure CONFIDENTIAL
7.67	2018 PSS 500m Buffer Infrastructure CONFIDENTIAL
7.68	2018-19 PSS 500m Buffer Infrastructure CONFIDENTIAL
7.69A	Cumulative Turbines 2017 Target 2
7.69B	Cumulative Turbines 2017 Target 1 CONFIDENTIAL
7.70A	Cumulative Turbines 2017-18 Target 2
7.70B	Cumulative Turbines 2017-18 Target 2 CONFIDENTIAL
7.71A	Cumulative Turbines 2018 Target 2
7.71B	Cumulative Turbines 2018 Target 1 CONFIDENTIAL
7.72A	Cumulative Turbines 2018-19 Target 2
7.72B	Cumulative Turbines 2018-19 Target 1 CONFIDENTIAL
7.73	VP All 180 Viewshed
7.74	VP All 360 Viewshed
9.1	Rainfall Trends - Regional - Monthly
9.2	Rainfall Data - Barnesmore Bog - Daily
9.3	One in a 100 Year Rainfall Events – Extreme Storm Events (Fitzgerald, D.L., 2007)
9.4	Haul Route and Required Culverting
10.1	Turbines & Nearest Noise Receptors
10.2	Noise Contour Map
10.3	Cumulative Noise Contour Map
11.1	LVIA Study Area - OS/OSI Background Map

Figure Number	Figure Name
11.2	LVIA Site Context
11.3	LVIA Study Area - Aerial Image
11.4	Donegal County Development Plan (2018-2024) Scenic Amenity Designations
11.5	County Donegal Landscape Character Types
11.6	County Donegal Landscape Character Areas
11.7	Northern Ireland Landscape Character Areas
11.8	Draft Northern Ireland Regional Landscape
11.9	Donegal County Council Wind Energy Zoning Areas
11.10a	Zone of Theoretical Visibility (ZTV) Map – Tip Height
11.10b	Zone of Theoretical Visibility (ZTV) Map – Hub Height
11.11	Comparative Zone of Theoretical Visibility (ZTV)
11.12	Theoretical Visual Intensity Map Operational Barnesmore Windfarm Turbines
11.13	Theoretical Visual Intensity Map Barnesmore Windfarm Repowering Turbines
11.14a	Route Screening Analysis (RSA) Maps Standard Map
11.14b	Route Screening Analysis (RSA) Maps RSA "Open View" Refinement Map
11.15	Landscape Scenic Amenity Designations and Sensitive Views
11.16	Wild Atlantic Way Route in Donegal
11.17	Viewpoint Locations Map
11.18	Cumulative Wind Farms within the Study Area
11.19	Comparative Zone of Theoretical Visibility (ZTV) Map Barnesmore Repowering vs Meenadreen Wind Farm
11.20	Comparative Zone of Theoretical Visibility (ZTV) Map Barnesmore Repowering vs Meenbog Wind Farm
11.21	Comparative Zone of Theoretical Visibility (ZTV) Map Barnesmore Repowering vs Meenbog and Meenadreen Wind Farms
11.22	Comparative Zone of Theoretical Visibility (ZTV) Map Barnesmore Operational vs Meenbog and Meenadreen Wind Farms
12.1	Telecommunications Assessment Map
12.2	Shadow Flicker Occurrences
13.1	Archaeological & Architectural Heritage Sites
13.2	Extract from 17th century Down Survey mapping
13.3	Extract of study area from 6-inch 1st edition OS map c. 1829-41
13.4	Extract of study area from 6-inch Cassini edition OS Map c. 1940
14.1	Proposed Construction Materials Haul Route
14.2	Upgrade Works at the L-2095 L-2015-1 Junction