

Inspector's Report ABP-304858-19

Development Proposed 110kV substation and

connections to national grid

Location Derrykillew, County Donegal.

Planning Authority Donegal County Council

Prospective Applicant Derrykillew Wind Farm Ltd.

Type of Application SID Pre-application – Whether

proposed 110kV sub station and

connections to national grid is or is not

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strategic infrastructure

Date of Pre-application meetings 24th October 2019

Date of Site Inspection 17th October 2019.

Inspector Deirdre MacGabhann

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1.0 Introduction

1.1. This report relates to pre-application discussions held with Derrykillew Wind Farm Ltd regarding whether or not their proposed 110kV sub-station and connections to the national grid at Derrykillew, County Donegal, for a permitted wind farm development, constitutes strategic infrastructure, as defined by the Planning and Development Act 2000 (as amended).

2.0 Site Location and Description

- 2.1. The subject site is situated c.7km east of Ballyshannon, in the townland of Derrykillew, Co. Donegal, close to the border with Northern Ireland (Beleek lies c.2km to the south west of the site). It comprises the site of the proposed sub-station and the cable route connecting the it to an existing sub-station at Cliff, c.3km to the south west of the proposed sub-station site. The proposed sub-station site lies in upland open bog. Cable routes are principally via minor local roads. Doo Lough Upper lies to the north of the sub-station site.
- 2.2. The existing Cliff sub-station site is on the southern bank of Assaroe Lake on the River Erne. It transfers hydro power generated at the adjoining Cliff Hydroelectric Power Station to the Cathaleen's Falls sub-station at Ballyshannon, where hydroelectric power is also produced. The two hydroelectric power stations are known as the Erne hydro-electric scheme, with the River Erne dammed in both locations. The two power stations and sub-stations are operated by ESB and power is generated at 10.5kV (see attachments).

2.3. The Proposed Development

2.4. The proposed development comprises the construction of a 110kV sub-station on lands at Derrykillew and the underground connection of the sub-station to the Cliff sub-station. The sub-station will serve the permitted windfarm at Derrykillew (5 turbines granted under PL05.245108). In November 2019 the applicant submitted a planning application to Donegal County Council seeking to optimise/amend the permitted windfarm development, to include one additional turbine, an increase the height of the permitted turbines from 136m to 150m and changes to the location of

- two turbines. At the time of writing this planning application, PA ref. 19/51750, has not been determined.
- 2.4.1. The subject site lies c.150m to the south of Lough Golagh and Breesy Hill Special Area of Conservation (site code 002164). It also lies just east of the Border with Northern Ireland where there are further European designations (albeit more removed from the subject site).

3.0 Consultations

- 3.1. There was one pre-application consultation meeting and minutes of this are on file. The prospective applicant has also submitted correspondence to the Board subsequent to the meeting. In summary the following matters have been raised in the course of consultation meetings and correspondence:
 - Output of the permitted Derrykillew windfarm is c.20MW and, with the proposed alterations to number of turbines and height, output would be c.25MW.
 - The existing sub-station at Cliff is part of the infrastructure for the Cathaleen's Falls/Ballyshannon hydro-electric generating station on the River Erne. The Cliff hydro-generating station is the smaller of the two generating stations. Electricity currently flows from the hydro plant at Cliff to the Cathaleen's Falls substation (110kV) via overhead lines which are part of the transmission system (EirGrid assets). It is the applicant's understanding that Cliff substation forms part of the transmission system.
 - Due to the age and specifications of the Cliff substation, it is not capable of facilitating a direct 'plug-in' of power from the proposed windfarm without major upgrading works. It is therefore proposed to direct power from Cliff substation up to the new substation via the new underground cable, collect the wind farm generated electricity at the new substation, and then transport power back down to the Cliff substation via the new underground cable and on to the existing substation at Cathaleen's Falls. This is considered, by the applicant, to constitute a private plug-in to the network, and not part of the transmission system.

The proposed sub-station may also potentially serve a proposed wind farm (5 turbines) to the north of the Derrykillew site which is currently the subject of an appeal (ABP-305163-19, currently undecided) i.e. it is one of two options being considered.

4.0 The Applicant's Position

4.1. The applicant argues:

Context

- The subject substation and connection to the national grid will be solely used to serve the permitted wind farm development, granted by the Board under PL05E.245108 (Donegal County Council under PA ref. 14/51400).
- The need for the proposed 110kV substation arises from an updated review of the electrical design requirements.
- The proposed cable route was the subject of environmental impact
 assessment under PL05E.245108. The exact location of the cabling in the
 road will be subject to ESB specifications and agreement with Donegal
 County Council and in compliance with a detailed cable installation plan to be
 prepared by the applicant.
- As both the substation and grid connection (from Cliff to the proposed Derrykillew substation and back to Cliff) will constitute 110kV infrastructure that will connect to the transmission system, the applicant is required to engage with the Board under section 182A of the Planning and Development Act.

The proposed development does not constitute SID for the following reasons:

- The proposed substation entails modifications of the substation previously approved by the Board under PL05.245108. The modifications to the substation will be carried out at the same location, but the substation will be enlarged from that previously approved.
- The proposed substation and grid connection to the existing Cliff substation
 has been previously subject to EIA and generally met with approval as
 evidenced in the planning consent issued.

- The grid connections are underground and predominantly along the road corridor (3.3km), with the final section (c.230m) provided by directional drilling under the River Erne.
- The proposed substation and grid connection will solely serve private commercial renewable energy development.
- The subject works (grid connection and substation) will not form part of, or comprise a new node on the national transmission system and will not supply any demand to the local network.
- Geographically the substation is surrounded to the east and south by Northern Ireland border so has limited use for expansion of the local network and it does not form part of any transmission forecast statement.
- The development will not contribute to fulfilment of objectives contained in the NPF or in any regional, spatial and economic strategy and is not a critical link for other strategic development in the area. The NPF and Regional Planning Guidelines advocate the reinforcement of the national electrical network and the necessity of security of supply to promote economic growth. The proposed development will only serve to connect private commercial renewable energy to the national grid.
- The proposed development is essentially modifying/extending (within an
 established wind farm site) a previously approved substation and its
 associated grid connection works to facilitate the connection of renewable
 energy to the national grid.
- In other precedent cases (VC0097, VC0100, VC0104) the Board had regard
 to the long title of the Planning and Development (Strategic Infrastructure) Act
 2006 and found similar development (connection to permitted wind farm
 development and modifications to existing permitted development
 respectively) did not to constitute strategic infrastructure.

5.0 Legislative Context

5.1. Strategic Infrastructure Development

- 5.1.1. Section 182A(1) of the Planning and Development Act, 2000 (as amended) requires, where a person (referred to as the 'undertaker') intends to carryout development comprising or for the purposes of <u>electricity transmission</u>, the undertaker shall prepare an application for approval of the development to the Board. Section 182A(9) of the Act states that the term 'transmission' shall be construed in accordance with section 2(1) of the Electricity Regulation Act 1999, and for the purposes of section 182A, shall also be construed as meaning the transport of electricity by means of a high voltage line (equal to or greater than 110kilovolts) or an interconnector (whether ownership of the interconnector will be vested in the undertaker or not).
- 5.1.2. Section 2(1) of the Electricity Regulation Act, 1999 defines <u>transmission</u> as '...the transport of electricity by means of a transmission system, ... a system which consists, wholly or mainly, of high voltage lines and <u>electric plant</u> and which is used for <u>conveying of electricity</u> from a generating station to a sub-station, from one generating station to another, <u>from one substation to another</u> or to or from any interconnector or to final customers but shall not include any such lines which the Board may, from time to time, ...specify as being part of the distribution system ...'
- 5.1.3. Electric plant is defined as 'any plant, apparatus or appliance used for, or for purposes connected with, the generation, transmission, distribution or supply of electricity, other than by (a) an electric line, (b) a meter..., or (c) an electrical appliance..'

[my emphasis added].

6.0 Relevant Cases

- 6.1. The applicant refers to the following precedent cases:
 - VC0097.
 - VC0100.
 - VC0104.

7.0 Assessment

7.1. Strategic Infrastructure

- 7.1.1. Section 182A(1) of the Planning and Development Act, 2000 (as amended) requires an application to the Board in respect of development comprising or for the purposes of electricity transmission. The term transmission is defined as the transport of electricity by means of a transmission system, including by electric plant, and which is used to convey electricity from one generating station to another. The term electric plant includes any plant for purposes connected with the generation or transmission of electricity.
- 7.1.2. The prospective applicant argues that the sub-station is a 'plug-in' to the transmission system and that it will not function as a node. They also cite cases previously determined by the Board, where it was decided that proposed 110kV substations, serving windfarm development did not comprise strategic infrastructure i.e. VC0097, VC0100 and VC0104.
- 7.1.3. My understanding from the information submitted by the prospective applicant, and from the pre-application meeting, that the existing sub-station at Cliff is operated as part of the transmission system (see letter to Board of 6th December 2019). Due to the age and specifications of the substation it is not capable of facilitating a direct 'plug-in' of power from the proposed windfarm without major upgrading works. It is proposed, therefore, to direct power from Cliff substation up to the new substation via underground cable, collect the wind farm generated electricity at the substation, and then transport power back to Cliff substation via new underground cable and on to the existing substation at Cathaleen's Falls. It is my view therefore, that by virtue of this technical solution the proposed development will become a new node on the transmission system.
- 7.1.4. It is also stated in the submissions made by the prospective applicant, that the substation may serve another windfarm located to the north of the site which is currently before the Board (ABP-305163-19). This would again indicate that the proposed substation would be a new node in the transmission network.
- 7.1.5. The cases referred to by the prospective applicant differ in detail from the proposed development. Under VC0097, a 110kV substation was proposed to replace two

- 110kV substations permitted as part of two wind farm developments and connecting the proposed wind energy development back to an existing node on the national grid i.e. there was no change to the principle or means by which to connect to transmission system.
- 7.1.6. Under VC0100, a 110kV substation was proposed to serve a permitted wind farm development. In this instance EirGrid had stated that the substation would not form part of the transmission system and the Board had regard to the long title of the Planning and Development (Strategic Infrastructure) Act, 2006 and decided that the development did not comprise strategic infrastructure.
- 7.1.7. Under VC0104, a 110kV substation was proposed to connect two permitted wind farms to the transmission system, replacing two permitted 38kV sub-stations. In this instance the Board decided that the development did not constitute strategic infrastructure having regard to the long title of the Act and the specific nature and purpose of the development, 'which replaces two permitted substations associated with permitted wind farms, thereby connecting the proposed wind energy development back to an existing node on the national grid'.
- 7.1.8. In this instance the prospective applicant proposes to replace a 38kV substation with a 110kV substation, therefore changing the principle of connectivity of the wind farm from one which is associated with the distribution of electricity (38kV), to one which is associated with the transmission system (110kV). Further, there has been no evidence submitted from the applicant or EirGrid to indicate that the development will not form part of the transmission system and, as stated, the applicant has been indicated that the substation may serve a future wind farm development to the north of the site. I do not consider therefore, that the cases referred by the applicant, form appropriate precedents for the proposed development. For the same reasons I do not consider it appropriate to refer to the long title of the Planning and Development (Strategic Infrastructure) Act 2006 i.e. from the information available it is apparent that the proposed development extends the transmission system in this area, provides a potential new node on the transmission network and comprises part of the national strategic infrastructure for the transmission of electricity in the state.

7.2. Planning and Environmental Considerations

7.2.1. The proposed sub-station, of itself, does not fall within any Class of development does for which environmental impact assessment is required. I note however, that the proposed development comprises part of a larger development which requires environmental impact assessment i.e. the permitted development under PL05.245108. Further, the applicant's proposals to modify this permission under PA ref. 19/51750 include an EIAR and NIS. Any application to the Board for the subject development, should address the environmental effects of the proposed development within this context.

7.3. Prescribed Bodies

7.3.1. In view of the location and nature of the proposed development, as described in this report, it is recommended that the prospective applicant should consult with the prescribed bodies listed in the attached Appendix in respect of any future application for approval.

8.0 Conclusion and Recommendation

8.1. Having regard to the above, I recommend to that the Board serve a notice on the prospective applicant under section 182A of the Planning and Development Act, 2000, as amended, stating that it is of the opinion that the proposed sub-station constitutes strategic infrastructure for the following reasons and considerations.

9.0 Reasons and Considerations

9.1. Having regard to the provisions of the Planning and Development Act 2000, as amended, and the nature of the proposed development which comprises a 110kV electrical substation and underground cable for a permitted windfarm, it is considered that the proposed substation comprises part of the electricity transmission system and therefore falls within the scope of section 182A of the Planning and Development Act, 2000, as amended. Accordingly, the proposed development would be strategic infrastructure within the meaning of the Act and any application for approval must therefore be made directly to the Board, and

Deirdre MacGabhann Planning Inspector

19th March 2020

Appendix

Prescribed Bodies

Minister for the Environment, Heritage and Local Government

Minister for Communications, Marine and Natural Resources

Donegal County Council

Transport Infrastructure Ireland

Minister for Transport

An Chomhairle Ealaion

Fáilte Ireland

An Taisce

The Heritage Council

The Northern and Western Regional Assembly

Inland Fisheries Ireland

Commission for Energy Regulation

Irish Water

Environmental Protection Agency

Health Services Executive

Commission for Energy Regulation