

Inspector's Report ABP-308828-20

Development 110kV substation and underground

electricity cable connecting the

consented Drehid Wind farm (ABP-

306500-20)

Location Townlands of Coolrea, Killyon,

Kilmurry, Mulgeeth and Timahoe East,

Co. Kildare.

Planning Authority Kildare County Council

Type of Application Pre-application consultation

Prospective Applicant North Kildare Wind Farm Limited

Date of Site Inspection 26th January 2021

Inspector Donal Donnelly

1.0 Introduction

- 1.1. The Board received a request on 3rd December 2020 from prospective applicant, North Kildare Wind Farm Limited, to enter into pre-application consultations under Section 182E of the Planning and Development Act, 2000 (as amended) in relation to a proposed 110kV substation and underground electricity cable connecting the consented Drehid Wind Farm to the national grid at Timahoe North Solar Farm substation, Co. Kildare.
- 1.2. The primary purpose of pre-application consultation is to address the issue of whether or not the proposed development constitutes strategic infrastructure for the purposes of the 2000 Act, as amended by the Planning and Development (Strategic Infrastructure) Act, 2006. This Report provides an overview of the proposed project, a summary of the advice provided by the Board and the relevant legislative provisions.

2.0 Site Location and Description

- 2.1. The site of the proposed development is within the townlands of Coolrea, Killyon, Kilmurry, Mulgeeth and Timahoe East in northern Co. Kildare approximately 13km north-west of Clane. The surrounding area is dominated by lands that were formerly used for commercial peat harvesting by Bord na Móna. Planning permission was granted on these lands for a solar farm in July 2020 (ABP-305953-19). Immediately to the west of this site are forestry plantations and agricultural lands that comprise the site of the permitted Drehid Wind Farm (ABP-306500-20).
- 2.2. The proposed substation will be located in the townland of Coolrea within the Drehid Wind Farm site. The cable route will extend for a distance of 6km through agricultural lands and boglands to the permitted Timahoe North substation in the townland of Mulgeeth to the south.

3.0 Proposed development

- 3.1. The proposed development would comprise the provision of the following:
 - 1. 110kV substation replacing permitted 38kV substation at Drehid Wind Farm,

- 2. Footprint of proposed substation compound would measure 69m x 130.5m and will include wind farm control building and EirGrid control building,
- 110kV cable route from permitted Drehid Wind Farm to the existing Timahoe North Solar Farm 110kV substation,
- 4. Cable trenching and joint bays at approximately 500m to 1000m intervals.
- 3.2. The proposed substation would be tail fed by the 110kV transmission cable and would not therefore act as a node on the transmission system.

4.0 **Planning History**

Kildare County Council Reg. Ref: 18/1534 (ABP-306500-20)

- 4.1. Permission granted by the Board in September 2020 for the development of a wind farm comprising 12 no. turbines with tip height of 169m and all associated works, including on-site electricity substation connecting to the existing Dunfierth substation. Kildare County Council Reg. Ref: 18/1514 (ABP-305953-19)
- 4.2. Permission granted by the Board in July 2020 for a solar farm over an area of 200 hectares.
- 4.3. The overall project includes a 110kV substation and overhead line grid connection that was subject to a separate Section 182A application to the Board (see below).
 An Bord Pleanála Ref: ABP-303249-18
- 4.4. The Board approved permission at Timahoe East for a 110kV on-site electrical substation, 110kV overhead line grid connection cabling, upgrade of existing tracks and provision of new site access roads with all associated site development and ancillary works.

5.0 Planning Precedent

5.1. The prospective applicant has quoted a number of precedent cases that are summarised as follows:

An Bord Pleanála Ref: VC0100

5.2. The Board decided in March 2017 that a 110kV electrical substation and underground connection to an existing EirGrid substation in Letter, Co. Galway is not strategic infrastructure development. EirGrid noted in this case that the proposed substation would not function as part of the national electricity grid. The proposed substation and connection to the EirGrid substation would therefore not be necessary to provide for connection to the grid and the proposed development would have had no back up function.

An Bord Pleanála Ref: VC0103

- 5.3. The Board decided in May 2017 that a replacement 110kv electrical substation in the townland of Shelton Abbey, Co. Wicklow is not strategic infrastructure.
- 5.4. It was considered by the Inspector in this case, having regard to the nature and scale of the proposed development, to the stated purpose of the 2006 Act as set out in the long title, and to the general description and scale of strategic infrastructure development set out in Section 37(2) that the proposal does not fall within the scope of Section 182A of the Planning and Development Act, 2000 (as amended).

An Bord Pleanála Ref: VC0104

5.5. The Board decided in April 2017 that development comprising the substitution of 2 no. substations for 1 no. 110kV substation and associated underground cable connection at Carrigdandgan, Co. Cork is not strategic infrastructure development.

An Bord Pleanála Ref: VC0097

- 5.6. The Board decided in October 2016 that a proposed substation and associated underground cable connection from permitted Drumnahough and Lenalea Wind Farms to Clogher Substation, County Donegal is not strategic infrastructure.
- 5.7. The proposal in this case replaces two permitted 110 kV substations associated with permitted wind farms, thereby connecting the proposed wind energy development back to an existing node on the national grid.

An Bord Pleanála Ref: VC0112

5.8. The Board decided in November 2017 that underground 110kV cabling and ancillary works including alterations to permitted and existing substations to connect the

permitted Knocknamona wind farm substation to the existing Woodhouse Transmission System 110kV station, Co. Waterford is not strategic infrastructure development.

An Bord Pleanála Ref: ABP-301173-18

5.9. The Board decided in May 2018 that a battery storage facility comprising of a 110kV electrical substation at Millstreet, Co. Cork is not strategic infrastructure.

An Bord Pleanála Ref: ABP-301236-18

- 5.10. The Board decided in May 2018 that the provision of a battery energy storage system at Poolbeg, Dublin 2 is not strategic infrastructure.
- 5.11. Reference is again made in the Inspector's Report to the lack of clarity in the interpretation of Section 182A and to the Board exercising some discretion by using the broad definition of the 2006 Act and the criteria contained in Section 37(A)(2) to determine such matters (although not specifically cited in regard to cases coming forward under Section 182A).

An Bord Pleanála Ref: VC0048

5.12. The Board decided in September 2010 that two 110 kV overhead electricity lines linking the Thornsberry - Cushaling 110kV overhead line with a proposed 110 kV substation in Ballynakill, Co. Offaly is not strategic infrastructure.

An Bord Pleanála Ref: VC0016

5.13. The Board decided in November 2007 that the construction of two new 110kV towers adjacent to the existing Arklow Carrickmines 220kV line, Newtownmountkennedy, Co. Wicklow is not strategic infrastructure.

An Bord Pleanála Ref: ABP-301420-18

5.14. The Board decided in November 2018 that a 110kV tail-fed substation and cable inCo. Laois is not strategic infrastructure.

An Bord Pleanála Ref: VC0069

5.15. The Board decided in January 2014 that the proposed Barnakyle 110kV substation at Grange Castle, Co. Dublin is not strategic infrastructure. The Board came to the view that the proposed substation would serve as a distribution point and would form part of the distribution network rather than part of the transmission network. It was

noted that under the Infrastructure Agreement between ESB and EirGrid, elements of the 110kV system in the Greater Dublin Area and other parts of the country are deemed to constitute distribution assets.

An Bord Pleanála Ref: VC0096

5.16. The Board decided in June 2016 that a development comprising a replacement 110kV substation, on brownfield lands, of limited scale and forming an end-point on the grid as opposed to new development of a substantial nature, does not constitute strategic infrastructure development, (former Mitsui Denman Site at Wallingstown, Little Island, Co. Cork).

6.0 Prospective applicant's case

- 6.1. The prospective applicant's case is that the proposed development should not be considered as strategic infrastructure for the following reasons:
 - Proposal will be a direct connection to the national transmission network via the permitted 110kV Timahoe North Solar Farm substation – purpose of the proposed Drehid 110kV substation and cable route is to facilitate power being brough to the permitted Timahoe North Solar Farm only.
 - The transmission cable feeds the on-site substation and would not be of strategic importance to the State or region as it will only serve the permitted Drehid Wind Farm. 110kV substation and underground cable will not act as a node on the national transmission network.
 - Proposed development serves one privately operated development only (Drehid Wind Farm) and will not contribute to the fulfilment of objectives contained in the National Planning Framework or RSES.
 - Proposed development will not negatively impact on the existing distribution network and will only impact on the permitted wind farm development should the development not succeed.
 - Proposed substation and underground cable are located solely within the administrative area of Kildare County Council and will not have a significant effect on more than one planning authority.

- In other 'tail-fed' cases, or where other circumstances apply such as replacing
 or extending an existing substation, the Board has regarded these as material
 considerations in determining that a proposed development would not be
 strategic infrastructure.
- Board has decided in the past that new substations located on or near to the transmission network and becoming a node on that transmission network, or by virtue of a "looped-in and looped out" circuit, are strategic infrastructure.

7.0 Legislative provisions

- 7.1. Section 182A(1) of the Planning and Development Act, 2000 (as amended) requires that where a person (referred to as the 'undertaker') intends to carryout development comprising or for the purposes of electricity transmission, the undertaker shall prepare an application for approval of the development to the Board.
- 7.2. Section 182A(9) of the Act states that 'transmission', in relation to electricity, shall be construed in accordance with section 2(1) of the Electricity Regulation Act 1999 but, for the purposes of this section, the foregoing expression, in relation to electricity, shall also be construed as meaning the transport of electricity by means of
 - (a) a high voltage line where the voltage would be 110 kilovolts or more, or
 - (b) an interconnector, whether ownership of the interconnector will be vested in the undertaker or not.
- 7.3. Section 2(1) of the Electricity Regulation Act, 1999 defines transmission as follows:
 - "the transport of electricity by means of a transmission system, that is to say a system which consists, wholly or mainly, of high voltage lines and electric plant and which is used for conveying electricity from a generating station to a substation, from one generating station to another, 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, with the approval of the Commission, specify as being part of the distribution system but shall include any interconnector owned by the Board."
- 7.4. Electric plant is defined as follows:

- "any plant, apparatus or appliance used for, or for purposes connected with, the generation, transmission, distribution or supply of electricity, other than –
- (a) an electric line,
- (b) A meter used for ascertaining the quantity of electricity supplied to any premises, or
- (c) an electrical appliance under the control of the consumer.

8.0 Assessment

- 8.1.1. The proposed development comprises a new 110kV substation and 110kV underground electricity cable for the purposes of connecting the Drehid wind farm to the national grid at Timahoe Solar 110kV substation, Co. Kildare. The Drehid wind farm development was granted on appeal by the Board in September 2020 (ABP-306500-20) and was not therefore a Strategic Infrastructure Development itself. At the time, it was proposed to connect the wind farm to the national grid at the existing Dunfierth substation. A Judicial Review against the Board's decision on ABP-306500-20 has recently been received.
- 8.1.2. The Board approved the Timahoe development in July 2020 (ABP-303249-18) comprising a 110kV substation and overhead grid connection to the nearby Derryiron to Maynooth 110kV national grid line. This was a strategic infrastructure development dealt with under the provisions of Section 182A of the Act. The associated solar farm appeal under Ref: ABP-303953-19 (Reg. Ref: 18/1514) was decided by the Board concurrently.
- 8.1.3. The prospective applicant in the current case, North Kildare Wind Farm Ltd., seeks a determination from the Board as to whether the proposed 110kV substation and underground cable over a distance of approximately 6km from Drehid wind farm to the Timahoe substation via a tail fed connection is or is not strategic infrastructure. The prospective applicant considers that it is not strategic infrastructure development.
- 8.1.4. From the outset, it should be noted that Section 2 of the Planning and Development Act, 2000 (as amended) provides interpretations except where the context requires

- otherwise. Strategic infrastructure development means *inter alia* (d) any proposed development referred to in Section 182A(1). Under this Section, an undertaker shall apply to the Board for approval of a development comprising or for the purposes of energy transmission. Section 182A(9) states that *'transmission'* shall be construed in accordance with Section 2(1) of the Electricity Regulation Act, 1999 and shall also be construed as meaning *inter alia* the transport of electricity by means of a high voltage line where the voltage would be 110kV or more.
- 8.1.5. There is no threshold under Section 182A(9) of the Planning and Development Act, 2000 (as amended) in respect of a substation. However, this Section explicitly refers to high voltage lines of 110kV or more. The proposed development contains a 110kV underground electricity cable that will facilitate a "tail fed" connection for a wind farm to the national grid via a 110kV solar farm substation.
- 8.1.6. Transmission shall also be construed in accordance with Section 2(1) of the Electricity Regulation Act, 1999 as "the transport of electricity by means of a transmission system, that is to say a system which consists, wholly or mainly, of high voltage lines and electric plant and which is used for conveying electricity from a generating station to a substation, from one generating station to another, 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, with the approval of the Commission, specify as being part of the distribution system but shall include any interconnector owned by the Board." The Board refers to the Electricity Supply Board and the Commission refers to the Commission for Electricity Regulation. EirGrid took over the operation and development of the national grid in 2006.
- 8.1.7. There is no correspondence on file from either the ESB or EirGrid on the future relationship between the proposed substation and the Timahoe North Solar Farm substation. However, EirGrid has provided advice to the Board on previous occasions that similar such "tail fed" developments would not function as part of the national grid notwithstanding the voltage of such being 110kV. Conversely, grid connections in proximity to transmission lines that essentially see power in the transmission line being diverted into the substation and back out again, thereby forming a node on the transmission system, have been determined by the Board in the past to constitute strategic infrastructure development.

- 8.1.8. The Board has also given consideration in previous cases as to whether or not the development in question is of strategic national importance. The long title of the 2006 Act provides for the making directly to An Bord Pleanála of applications for permission for "developments of strategic importance to the State". Section 37A(2) refers to 7th Schedule development but generally describes strategic infrastructure development as falling within one or more of the following:
 - (a) the development would be of strategic economic or social importance to the State or the region in which it would be situate,
 - (b) the development would contribute substantially to the fulfilment of any of the objectives in the National Planning Framework or in any regional spatial and economic strategy in force in respect of the area or areas in which it would be situate,
 - (c) the development would have a significant effect on the area of more than one planning authority.
- 8.1.9. Having regard to the precedent set by the Board within similar cases, I would agree that the current proposal would not be of strategic importance to the State or region as it will serve only the Drehid wind farm. As submitted by the prospective applicant, the proposal serving only a private development is not a critical link for other strategic developments in the area and is solely of economic importance to the developer. In these circumstances, the proposed development cannot be considered of economic or social importance to the State or Region.
- 8.1.10. The National Planning Framework recognises that new energy systems and transmission grids will be necessary to harness the potential of wind power. Furthermore, the Regional Spatial and Economic Strategy supports the reinforcement and strengthening of the electricity transmission and distribution networks. However, the proposed development is not of a scale or of such importance that would contribute substantially to the fulfilment of the objectives of the NPF and RSES. The proposal will also be located entirely within Co. Kildare and will not therefore have a significant effect on more than on planning authority.
- 8.1.11. The Board will note previous decisions on pre-application consultation requests in relation to electricity transmission infrastructure under Section 182E where it was determined that tail fed connections to the national grid serving only a single

- development are not strategic infrastructure development. Several such cases are set out in Section 4 of this report. I consider that the current case is comparable.
- 8.1.12. Having regard to the nature and scale of the proposed development as described, to the stated purpose of the 2006 Act as set out in the long title, and to the general description and scale of strategic infrastructure development set out in section 37A(2), I conclude that the proposed development consisting of proposed 110kV substation and underground electricity cable connecting the consented Drehid Wind Farm to the national grid at Timahoe North Solar Farm substation, Co. Kildare does not fall within the scope of section 182A of the Planning and Development Act 2000, as amended.

9.0 **Recommendation**

9.1.1. I recommend that North Kildare Wind Farm Ltd. be informed that the proposed development consisting of a 110kV substation replacing the permitted 38kV substation at Drehid Wind Farm, together with the 110kV cable route connecting the permitted Drehid Wind Farm to the existing Timahoe North Solar Farm 110kV substation in the townlands of Coolrea, Killyon, Kilmurry, Mulgeeth and Timahoe East in Co. Kildare, as set out in the plans and particular received by An Bord Pleanala on the 3rd December 2020, does not fall within the scope of section 182A of the Planning and Development Act 2000, as amended, and that a planning application should be made in the first instance to Kildare County Council.

Donal Donnelly
Senior Planning Inspector

7th April 2021