

Cork

Inspector's Report 04.VC0104

Development110kv electricity substation
Carrigdandgan, Co. Cork and
associated underground cable
connectionProspective ApplicantKeel Energy Ltd.Type of CasePre-Application Consultation, Section
182E Planning and Development Act,
2000, as amendedInspectorPauline Fitzpatrick

1.0 INTRODUCTION

1.1. Keel Energy Ltd. proposes to construct an electrical substation along with an associated underground cable connection to the national grid at Dunmanway substation to serve two permitted windfarm developments to the north and north west of Dunmanway Co. Cork.

2.0 PROPOSED DEVELOPMENT

- 2.1. The proposed 110kV substation is to replace two substations permitted as part of two wind farm developments, namely Carrigariek windfarm consisting of 5 no turbines granted under ref. 15/730 (PL04.246353) and Shehy More wind farm consisting of 11 no. turbines granted under ref. 13/0551 (PL04.243486). The proposal also entails the 110kV grid connection cable connecting the proposed substation to the Dunmanway substation and the 33kV cable connecting Shehy More wind farm to the proposed substation. The 110kV cable route is to be underground for a distance of c. 11km whilst the 38kV cable route, also underground, would be for a distance of c.7km. The cabling would be predominately along public roads and tracks. The proposal would facilitate the electrical connection of the two wind farms to the 110Kv substation at Dunmanway as an alternative to the original proposal to connect to the proposed Barnadivane substation subject of a current appeal to the Board (14/557 (PL04.248152)).
- 2.2. The location of the proposed substation is approx. 600m to the south-east of the previously approved location in the Carrigariek windfarm, within the site boundary as delineated for the development, and will be accessed from the permitted wind farm road.
- 2.3. The proposed substation is larger than those previously permitted. That permitted at Carrigariek is 38kV with a compound area of 1800 m² and a control building of 157m². Whilst the kV of the substation at Shehy More does not appear to be explicitly referenced, it is comparable to that permitted at Carrigariek in terms of size and configuration and therefore I submit that it is also 38kV. The proposed substation would have a compound area of 7736 m² with 2 control buildings with an approx. overall area of 400 m².

3.0 PROSPECTIVE APPLICANT'S CASE

- 3.1. The request for a determination was lodged with the Board on the 07/02/17. The prospective applicant contends that the proposal does not constitute Strategic Infrastructure for the following reasons:
 - The proposal entails the amalgamation of two previously permitted substations.
 - There are extant permissions for the said substations
 - The proposed substation remains within the site of the previously permitted Carrigariek windfarm.
 - The substation will be accessed via the same roads as already permitted for the Carrigariek wind farm.
 - The associated cable route connection is underground and predominantly follows the public road corridors and existing tracks.

4.0 LEGAL PROVISIONS

- 4.1. The development subject of the request relates specifically to a proposed substation to be constructed in conjunction with permitted windfarm development.
- 4.2. Subsection 1 of section 182A of the Planning and Development Act 2000 Act [inserted by section 4 of the Planning and Development (Strategic Infrastructure) Act 2006] states that where an undertaker

Intends to carry out development comprising or for the purposes of electricity transmission (hereafter referred to in this section and section 182B as 'proposed development'), the undertaker shall prepare, or cause to be prepared, an application for approval of the development under section 182B and shall apply to the Board for such approval accordingly.

4.3. Subsection 9 of section 182A states that

In this section '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.

4.4. In section 2(1) of the Electricity Regulation Act 1999, "transmission" is defined in relation to electricity as meaning

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, from one substation 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.

4.5. "Electric Plant" is defined as:

any plant, apparatus or appliance used for, or for the 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 a consumer.

5.0 ASSESSMENT

- 5.1. At the outset I would submit that the Board's decision on VC0097 for a comparable development in Donegal is of relevance in this regard. In same the Board decided that the provision of a 110kV substation and underground cabling to substitute two substations serving two permitted wind farm developments did not come within the scope of section 182A of the Planning and Development Act, 2000, as amended.
- 5.2. The proposal in this instance is for the substitution of 2 no. substations for 1 no. 110 kV substation to serve two permitted windfarm developments, in addition to underground cabling from the substation to a 110kV substation at Dunmanway and 38kV underground cabling from one windfarm to the other. I note that Carrigariek windfarm secured permission on appeal for 5 no. turbines and a substation under planning reference number PL04.246353. The application was accompanied by an EIS. Shehy More windfarm secured permission for 11 no. turbines and a substation on appeal under ref. no. PL.04243486. This was also accompanied by an EIS. In terms of the latter a separate permission was secured on appeal for the underground electrical connection to Barnadivane under ref.no. PL88.246915.
- 5.3. In total 16 turbines have permission. Whilst dependent on the turbine specifications the projected output of the two windfarms would be in the region of 32-48 megawatts. As per the 7th Schedule of the Planning and Development Act, 2000, as amended, which set out infrastructure developments for the purposes of sections 37A and 37B, the thresholds for wind energy development are 25 turbines or 50MW. Therefore the developments, when taken cumulatively, do not meet or exceed the said thresholds.
- 5.4. I submit that there are two aspects of the proposed development that need to be considered in adjudicating whether the proposal constitutes strategic infrastructure or not. The 1st is the replacement of two permitted substations with one substation. The second aspect is the transmission of the electricity generated by the windfarms to the grid.

110kV Substation

- 5.5. With regard to the substation I consider that the provisions of Section 182A of the Act would be the directly relevant legislative provisions relating to this case.
 However the legislation is not specific in terms of defining high voltage for substations or electrical plant unlike high voltage lines.
- 5.6. In these cases due to the lack of clarity in the interpretation of Section 182 A and its requirement in regard to such proposed developments the Board has exercised some discretion and used the broad definition of the SI Act. "developments of strategic importance to the State" and the criteria contained in s.37(A)(2) to determine such matters, although not specifically cited in regard to cases coming forward under s.182A.
- 5.7. In terms of proposals for new substations the Board has, in the past, concluded that such type development has constituted strategic infrastructure, notably VC0049 at Dulla Co. Tipperary and VC0062 near Moycullen Co. Galway. In both instances the infrastructure was required to serve permitted windfarm development. Conversely the Board decided that a 110kV substation did not constitute strategic infrastructure in VC0069 at Grange Castle, Clondalkin, Co. Dublin or that the relocation and enlargement of a 110kV substation to serve a permitted windfarm was strategic infrastructure at Barnadivane under ref. VC0074.
- 5.8. I consider that the case as put forward by the applicant as to why the relocated substation would not constitute strategic infrastructure has a sound basis as follows:
 - Each permitted windfarm entails the construction of a substation.
 - Both applications were accompanied by EIS and were subject to EIA.
 - The location of the proposed substation is c.600m to the south-east of that permitted within the wind farm scheme and is within the site boundary as delineated for same.
 - A need, precedent and decision for the presence of a substation on the site have already been established.
- 5.9. It is my opinion that any detailed and specific issues arising in terms of the revised location, the consequent increased area and size of the substation arising from the increased voltage, associated environmental implications and whether it would be in

accordance with the proper planning and sustainable development of the area are matters that could be addressed in a subsequent application to Cork County Council rather than necessitating reconsideration of whether the revised substation would be of strategic importance to the State and thus requiring an application direct to the Board.

Underground Cabling

- 5.10. In relation to the question regarding the transmission of generated power to the national grid the proposal entails an underground 110kV grid cable connection from the proposed substation to the substation at Dunmanway c. 11km to the south to be routed, in the main, along public roads and private tracks. As indicated above under 'Legal Provisions' transmission shall be construed as meaning the transport of electricity by means of a high voltage line of 110 kilvolts or more. The proposal would therefore come within the specified parameters. Thus where an undertaker "... intends to carry out development comprising or for the purposes of electricity transmission the undertaker shall prepare, or cause to be prepared, an application for approval of development under section 182B and shall apply to the Board for such approval accordingly." However, I submit that it would be reasonable to consider the long title of the Planning & Development (Strategic Infrastructure) Act 2006 in order to understand the intended purpose of the Act. This provides for the making directly to An Bord Pleanala of applications for permission for "developments of strategic importance to the State."
- 5.11. Section 37(A)(2) of the P & D Act 2000-2010 lists 3 requirements of which one or more must be met to constitute strategic infrastructure. It should be noted that the criteria listed under section 37(A)(2) are not repeated under section 182(A), however they do provide a useful reference regarding the nature, importance and extent of a proposed development which is to be regarded as Strategic Infrastructure Development. I note that the Board adopted a similar approach under case ref. VC0048. Having regard to those 3 requirements I do not consider that the underground cable constitutes strategic infrastructure in that the cable is to serve the permitted windfarms, only, it cannot be considered to be of strategic economic importance to the State, the cable would not contribute substantially to the fulfilment

of the NSS or the regional planning guidelines and it is within the catchment of a single planning authority.

5.12. Further to the above the underground cable could be considered ancillary to the main works relating to the electricity generation in this instance, namely the permitted windfarms. For further consideration is Class 26, Schedule 2, Part 1 of the Planning & Development Regulations as amended. Pursuant to that class an *"undertaker authorised to provide an electricity service"* is exempt from seeking permission to lay an underground cable. Depending on whom lays the cable it *may* be considered exempt development but that is a matter for the Planning Authority to make a determination on in the first instance.

6.0 Conclusion

6.1. Having regard to the above and noting the particular circumstances of this case, including the extant permissions for two substations within windfarm developments permitted on appeal by the Board, I consider that the proposed 110kV substation and associated underground cabling as described in the submission and drawings, and having regard 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) would not constitute strategic infrastructure. I conclude that the proposed development does not fall within the scope of section 182A of the Planning and Development Act 2000, as amended, necessitating an application direct to the Board.

7.0 RECOMMENDATION

Having regard to the particular circumstances of this case that the proposed development consisting of a proposed 110kV electricity substation and associated underground cable connection to serve two windfarms permitted under planning reference numbers PL04.246353 and PL04.243486 at Carrigariek and Shehy More, Co. Cork, 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 Cork County Council.

Pauline Fitzpatrick Inspectorate

March, 2017