



An
Bord
Pleanála

Inspector's Report 07.VC0103

Development	Replacement 110Kv Substation Development
Location	Shelton Abbey, Co. Wicklow.
Planning Authority	Wicklow County Council.
Prospective Applicant(s)	ABO Wind Ireland Limited.
Type of Application	Pre application Consultation under s.182E of the Planning and Development Act (as amended).
Inspector	Stephen Kay.

1.0 Site Location and Description

- 1.1. The site of the proposed development is located in the townland of Shelton Abbey, Arklow, Co. Wicklow. The site is located on industrial lands that are located to the west of the N11 and to the north of the Dargle River.
- 1.2. These wider industrial lands have been in industrial use for a significant period and was originally connected with a fertiliser plant operated by IFI. This plant closed in the early 2000's. The site is currently primarily occupied by a plastics company, Holfeld plastics. There are a number of other small scale activities on the lands including a woodworking outlet. Significant parts of the overall lands are currently vacant or underutilised and are hard surfaced.
- 1.3. The industrial background to the lands is reflected in the fact that it is zoned for Employment (E1) under the provisions of the Arklow Town and Environs Development Plan 2011-2017. The existing site has an existing 110 Kv sub station which served existing and past industrial uses on the lands. This existing sub station, which is in private ownership, is located to the north east of the Holfeld plastics facility and connection is made to the 110KV / 220Kv sub station at Arklow approximately 2 km to the east of the site. This connection comprises two overhead lines of which, based on information supplied by Eirgrid, only one is currently energised.

2.0 Proposed Development

- 2.1. The proposed development comprises the construction of a new 110kv sub station on a site immediately to the south east of the existing 110KV Shelton Abbey sub station. The following is a summary of the main elements of the proposed sub station development:
 - Two 38kv cubicles,
 - One 10 MVA 38KV transformer,
 - One 63 MVA 110 / 38 KV transformer
 - One busbar,

- Two line bays,
- One transformer system operator remote terminal unit,
- Lightening masts,
- The decommissioning and disconnecting of the existing 110KV electrical sub station from the network and commissioning of the new sub station facility,
- The erection of palisade security fencing to the sub station site with vehicular access,
- Construction of vehicular access to the sub station compound,
- Landscaping and ancillary site development works.

A plan showing the layout of the proposed sub station has been submitted by the prospective applicant and was received by the Board on 24th November, 2016. A copy of this plan (Site Layout Plan) is on file.

- 2.2. The rationale for the construction of a new replacement sub station is that the existing facility is old and requires significant upgrading to modern standards. The prospective applicants are wind energy developers who are proposing a wind farm development at Ballymanus, c. 15km to the west of the sub station site. This wind farm development would have an on site 38kv sub station, however the prospective applicant is examining alternatives to connect to the grid network. The currently favoured option is a connection via Shelton Abbey and the existing connection onwards to the 110KV / 220 KV sub station at Arklow. As set out above however, the existing Shelton Abbey sub station is not sufficient to cater for the proposed wind farm development and this option requires that a replacement sub station be constructed.
- 2.3. As highlighted above, the prospective applicant is seeking the development of a windfarm at Ballymanus to the west of the Shelton Abbey site. No application for planning permission has been submitted to date. From the description of the proposed wind farm development it would not constitute strategic infrastructure as it does not comprise development of greater than 25 turbines or have an output of greater than 50MW.

The prospective applicant has also referenced a significant a number of precedent SID pre application cases where the Board determined that the proposed development did not constitute SID. These cases have been summarised in the Memorandum on file dated 2nd December, 2016.

There is a significant planning history relating to the Holfeld plastics / former IFI site and the following is of note:

- Wicklow County Council Ref. 10/3124 – Permission granted by the Planning Authority for the development of a plastics recycling facility on a site at Avoca River Park (former IFI facility), Shelton Abbey, Arklow.
- Wicklow County Council Ref. 13/8382 – Permission granted by the Planning authority for the extension of the appropriate period of a permission - 08/468 - Simple Cycle Gas Turbine peaking power station on a site of approximately 4.25 hectares at the former Irish Fertilisers Industries Ltd site at the Avoca River Park, in the townland of Shelton, Arklow, Co. Wicklow.
- Wicklow County Council Ref. FS2479 – Permission granted by the Planning authority to Holfeld Plastics for a two storey office building on site at Avoca River Park, Avoca. Co. Wicklow.
- Wicklow County Council Ref. FS3060 – Permission granted by the Planning authority for a three storey office building set within an industrial complex on site at Avoca River Park, Avoca. Co. Wicklow.

3.0 Policy and Legislative Context

3.1. Legislative Context

Under 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] 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.

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.

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.

“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.*

3.2. Development Plan

The site is located in an area that is zoned Employment (E1) in the Arklow Town and Environs Development Plan, 2011-2017.

3.3. Natural Heritage Designations

The site is not located within a Natura 2000 site and there are no Natura 2000 sites located in close proximity to the site of the proposed sub station development.

4.0 Submissions

4.1. The Case Made by the Prospective Applicant

The prospective applicant submitted a brief outline of the location, context and nature of the proposed development and how this may be considered by the Board not to come within the scope of s.182A of the Planning and Development Act, 2000 (as amended). The following are the main points raised relating to the determination of whether the proposed development constitutes strategic infrastructure development.

- That the proposed sub station development is not of a type, scale or threshold of infrastructure development listed under the seventh schedule of the Act.

- That the proposed development does involve the development of high voltage electricity infrastructure related to s. 182B of the Act however that no new high voltage lines are proposed. It is not therefore considered the proposed development would constitute strategic infrastructure under s. 182 of the Planning and Development Act, 2000 (as amended).
- Submitted that s.182 of the Act is not specific with regard to the definition of high voltage for sub stations or plant as distinct from lines. It is considered that given the nature and scope of the proposed development that it does not come within s.182 of the Act.
- Notwithstanding the above conclusion, it is not considered that the proposed development would meet the criteria set out at s.37A of the Act having regard to the following:
 - That the proposed development is not explicitly of strategic economic or social importance at a national or regional level having regard to the fact that the infrastructure proposed is not a critical link for other strategic developments in the area.
 - If the development was to progress it would enhance and become a significant part of the economic or social infrastructure of the region. If the development does not proceed the existing infrastructure will continue to operate regardless.
 - That there are no specific objectives in the NSS or regional planning guidelines for the Greater Dublin Area that would be substantially fulfilled by the proposed development.
 - That the proposed development is wholly located within the Wicklow County Council administrative area. That the proposed development would not have a significant effect on the area of more than one planning authority.
 - A significant number of references are given to precedent cases relating to sub station developments. It is stated that in the majority of these cases the Board determined that the proposed development did not constitute SID.

4.2. Request for Information to Eirgrid

In order to clarify the relationship between the proposed sub station and the grid network the Board requested comments from Eirgrid on two issues that can be summarised as follows:

- Clarification of the role and nature of the existing 110KV Shelton Abbey sub station including whether it may form part of the national transmission network and any relationship that the proposed replacement sub station would have with the existing national transmission network.
- Clarification as to whether the proposed new sub station is required to provide a backup role to the existing sub station on the national transmission network.

The following is a summary of the main points made in the response received from Eirgrid dated 17th February, 2017.

- That the existing Shelton Abbey sub station is connected to the national transmission network via two existing overhead 110KV lines, only one of which is currently energised.
- That the Shelton Abbey sub station is only connected to the Arklow 220/110KV sub station (known as a tail feed) and that the connection is part of the transmission network. A map of the transmission network showing this link between Arklow and Shelton Abbey is attached with the Eirgrid response.
- That the purpose of the Shelton Abbey sub station is to serve the existing local industrial use (Holfeld Plastics) and, unusually, the sub station is in private ownership. It (the sub station) is not therefore considered part of the national electricity transmission system.
- While the sub station is not part of the transmission system, the lines connecting to Arklow are and this includes critical apparatus, equipment and overhead line circuits that are located within the sub station. The submission goes on to state '*for the avoidance of doubt, the existing Shelton Abbey sub station could not function independently of its connection to Arklow 220 / 110 KV sub station*'.

- Regarding the backup role of the sub station, Eirgrid state that it is not clear from the information presented whether the proposed development includes the relocation of associated electrical equipment and apparatus as referred to above. If they are it is considered that this equipment would remain as part of the national transmission system.
- That the proposed new sub station would not be required to provide a back up to any existing sub station on the transmission system.
- That the new sub station itself will not form part of the existing national transmission network.

5.0 Assessment

- 5.1. The proposed development comprises the construction of a new 110kv sub station to replace the existing Shelton Abbey sub station located on the Holfeld Plastic site at Avoca River Park, to the west of the N11 and north of the Avoca River in Arklow.
- 5.2. I note the reference in s.182A(9) to section 2(1) of the Electricity Regulation Act, 1999 and to the '*transmission*' being construed in the context of the definition given in s.2(1) of this Act. The definition of transmission given in s.2(1) is as follows:

'transmission' in relation to electricity means 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 electrical plant and which is used for conveying electricity from one generating station to a sub station, from one generating station to another, from one sub station to another 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'.

In the above definition '*the Board*' means the Electricity Supply Board and '*the Commission*' means the Commission for Electricity Regulation.

- 5.3. The proposed sub station infrastructure would in my opinion come within the scope of what is referred to as '*electrical plant*' in the above definition. In terms of voltage, the development as proposed comprises a sub station that has a stated capacity of 110 KV. There is no reference in the definition of '*transmission*' given in s.2(1) of Electricity Regulation Act 1999 to a threshold voltage, however s.182A(9) specifically refers to the transport of electricity by means of a high voltage line which is defined as a line where the voltage would be 110 kilovolts or more. The proposed development would therefore appear to meet the requirement of comprising high voltage equipment.
- 5.4. I note the fact that the submission received from Eirgrid identifies the existing Shelton Abbey sub station as being privately owned and not part of the electricity transmission system. The Eirgrid submission does however go on to note that the existing 110KV circuits which connect Shelton Abbey with the 220 / 110 KV sub station at Arklow are operated by Eirgrid, are owned by ESB networks and do comprise part of the transmission system. It is further noted that Eirgrid state that these lines that form part of the transmission system '*includes the equipment within the substation which permits the circuits to terminate – such as gantry structures (which allow the overhead circuits to drop down into the sub station), and transformer bushings (the apparatus connecting the circuits to the sub station transformers).*'
- 5.5. The Eirgrid submission goes on to state that while it is not clearly stated in the description of the development proposed, it is assumed that the existing overhead circuits connecting Shelton Abbey with the Arklow 220 / 110KV sub station will have to be diverted to the replacement sub station. This was confirmed in discussions with the prospective applicant who stated that this diversion could be undertaken without the necessity to relocate any of the existing pole sets. Eirgrid state that the diverted overhead line transmission circuits and associated sub station equipment apparatus and equipment will remain as part of the national transmission system. In order for the new sub station to connect to the overhead line transmission circuits it is to be assumed that similar connecting equipment in the form of gantry structures and bushings would be required within the sub station. This equipment would form part of the transmission network, would be a part of the proposed development and would come within the definition of electrical equipment as set out in s.2(1) of the

Electricity Regulation Act, 1999. A case could therefore be made that a literal interpretation of the relevant legislation, the location of the proposed development on the network and the form of development proposed is such that the proposed sub station could be considered to come within the scope of s.182A of the Planning and Development Act, 2000 (as amended).

5.6. Against this interpretation, I note the fact that the proposed development constitutes a private development to facilitate private windfarm and industrial development, that the industrial development is existing and that the proposed windfarm development is of a relatively small scale and such that it in itself would not constitute strategic infrastructure. It is not therefore in my opinion clear that the proposed development would comprise development that is clearly of strategic national importance. In these circumstances I therefore consider that it is reasonable to refer to the long title of the 2006 Act, which provides for the making directly to An Bord Pleanála of applications for permission for “*developments of strategic importance to the State*”. Section 37A(2), while referring to 7th Schedule development, generally describes strategic infrastructure development as:

- development of strategic economic or social importance to the State or the region in which it would be situate,
- development which would contribute substantially to the fulfilment of any of the objectives of the National Spatial Strategy or in any regional spatial and economic strategy in force in respect of the area or areas in which the development would be situate,
- development which would have a significant effect on the area of more than one planning authority.

With regard to the role of the proposed development and its ‘strategic’ nature I would note the following:

5.7. Eirgrid have stated that the sub station facility itself is private and does not, as a facility, form part of the transmission system. It has also been clarified by Eirgrid that the existing and proposed sub stations would not have any back up or support function to the national transmission system and is not required for the system to operate.

- 5.8. The windfarm proposal which is the basis for the replacement sub station sought is not SID comprising a proposed development that has less than 25 no. turbines and which would have an output of less than 50MW. The role of the proposed sub station would be to support this wind farm and also the existing industrial facility (Holfeld Plastics) at the site. This scale of economic development is not in my opinion such that it could reasonably be considered to comprise development that is of strategic economic importance to the state or region. It may be the case that additional future development at the Shelton Abbey site could be accommodated with the development of the proposed sub station, however, with the exception of the gas turbine power plant permitted under Wicklow County Council Ref. 13/8382 and not to date developed, there are no other specific projects identified or significant extant permissions on the site. Exact details of the nature of the permitted power plant development are not on file, however it was first permitted by the council in 2008 and did not constitute strategic infrastructure development at that time.
- 5.9. I also note the fact that the connection of the proposed Ballymanus windfarm by ABO Wind does not require a connection via a sub station at Shelton Abbey and that a direct 38kv connection to the existing sub station at Arklow would be a viable alternative. This option is indicated on the Site Location Map submitted to the Board on 24th November, 2016. The fact that an alternative connection for the windfarm development is feasible would in my opinion lend further support to the case that the proposed sub station development is not of strategic economic or social importance.
- 5.10. There are no specific reference in the National Spatial Strategy for the upgrading of electricity sub stations in the area of the proposed development. Figure 3.3 and 3.4 of the NSS sets out objectives for the strengthening of the electricity network, however the site of the proposed development is not clearly identified on these figures.
- 5.11. The site is located within the area covered by the Regional Planning Guidelines for the Greater Dublin Area and this plan recognises the necessity for improvements in regional power infrastructure in order to meet demand and future connections of wind energy. The Plan contains a number of objectives relating to the reinforcement of existing infrastructure and provision of new infrastructure to meet demand. None of these policies or objectives however relate specifically to the location of the proposed development. Objective PIR2 of the guidelines states '*that reinforcements*

and new infrastructure are put in place by the key agencies, and their provision is supported in local authority policies, to ensure the energy needs of future population and economic expansion within designated growth areas and across the GDA can be delivered in a sustainable and timely manner and that capacity is available at local and regional scale to meet future needs’.

- 5.12. The area of the proposed site is not a designated growth area and, as set out above, the scale of economic expansion which would be facilitated by the proposed development is not considered such that it would be of strategic economic or social importance to the state or region.
- 5.13. The nature of the proposed development and the developments which would be supported by its provision are such that it is my opinion that the proposed development would not have significant effects on the area of more than one PA.
- 5.14. 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 a replacement 110Kv sub station at Shelton Abbey, Arklow Co. Wicklow does not fall within the scope of section 182A of the Planning and Development Act 2000, as amended.

6.0 Recommendation

- 6.1. I recommend that ABO Wind Ireland Limited be informed that the proposed development consisting of proposed replacement 110Kv sub station at Shelton Abbey, Arklow, Co. Wicklow 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 Wicklow County Council.

Stephen Kay
Planning Inspector

5th May 2017

