

Inspector's Report ABP-306662-20

Development Onshore transmission connection

infrastructure related to the Arklow

Bank Wind Park offshore wind energy

project.

Location Arklow, Co. Wicklow.

Planning Authority Wicklow County Council

Applicant(s) Sure Partners Limited

Type of Application SID Pre Application Consultation

under S.182E

Date of Site Inspection None

Inspector Stephen Kay

1.0 **Pre-Application Consultation**

- 1.1. The Board received a request on 17th February, 2020 from Sure Partners Limited to enter pre-application consultations under Section 182E of the Planning and Development Act 2000, as amended, in relation to the proposed development in the environs of Arklow, Co. Wicklow.
- 1.2. The Board's representatives met with the prospective applicant on 17th June 2020 and 2nd September 2020. By e mail received by the Board on 28th October, 2020, the prospective applicant commented on the Draft record of the meeting of 2nd September, 2020 to state that it had no further comment to make and formally requested closure of the pre-application consultation process.

2.0 Site Location and Description

- 2.1. The appeal site comprises the onshore grid connection element of the Arklow Bank Wind Park Project, located off the coast of County Wicklow. The current proposal relates to Phase 2 of the overall development, and the total windfarm site was the subject of a foreshore lease that was granted awarded in 2002 by the Department of the Environment. The area of this foreshore lease is extensive, covering a site c.27km in length (north-south) and c.2.5km wide and located c.8-12km offshore. The foreshore lease permits a total of up to 200 turbines with a total installed capacity of at least 520MW.
- 2.2. Phase 1 of the overall wind park development was constructed in 2003 and comprises a total of 7 no. turbines with a total installed capacity of 25.2 MW. This part of the project is owned and operated by General Electric under a sublease from SSE. SSE now propose to complete the remainder of the project under the existing foreshore lease. It is envisaged that Phase 2 of the overall development would have between 57 and 100 turbines of 5.5 to 10MW capacity each.
- 2.3. The onshore elements of the Arklow Wind park development, which form the subject of this pre application request, relate to the connection of the windfarm to the existing grid network. The site is therefore extensive and comprises three principal elements as follows. A coastal landing point, likely to be in the vicinity of Johnstown North, c.5km to the north of Arklow Town. An identified preferred cable route then crosses

the R.750 and runs south west between the N11 and the R750 through undeveloped lands where it meets the northern limits of Arklow. The alignment indicates a likely crossing point of the N/M11 in the vicinity of Kilbride before connecting with the Shelton Abbey site which is the preferred location of the substation. The lands at Shelton Abbey are zoned for Employment use under the Arklow and Environs Development Plan, 2018-2024 and at the northern end of the town the proposed cable alignment runs close to lands zoned for Mixed Use and Existing Residential.

2.4. The length of the proposed cable connection between the landing site and Shelton Abbey is c.10km.

3.0 **Proposed Development**

- 3.1. The development which is the subject of the current pre application consultation comprises the onshore element of Phase 2 of the Arklow Wind Park project. The development is proposed to comprise of the following elements:
 - Connection of the offshore project by underground 220KV AC cable from the proposed landing point to a new onshore substation. The initial information submitted indicated two potential landing points, these being at Johnstown North c.4.5km to the north of Arklow Town and a second potential landing point at Arklow Harbour (see Figure 1 of request for pre application consultation received by the Board on 17th February, 2020). As detailed in the records of the pre application consultations held, studies of the options resulted in a favoured option of landing point at Johnstown North being identified. It is proposed that horizontal directional drilling will be used to connect the onshore and subsea cables at the proposed landing point.
 - The construction of a new onshore 220kv sub station. The initial information submitted with the pre application consultation request indicated four potential substation locations, preferred substation sites that were the subject of more detailed examination, (see Figure 10 of request for pre application consultation received by the Board on 17th February, 2020). As is detailed in the records of the pre application consultations held, studies of the options resulted in a favoured location for the substation at Shelton Abbey being identified. The substation design is proposed to be a gas insulated

switchgear layout (GIS) with the station connected to the Lodgewood - Arklow - Carrickmines 220kv line using a looped in connection. For the connection of the substation to the existing 220KV line, the favoured design involves the construction of three new overhead line towers in the vicinity of the substation and the replacement of an existing overhead line tower with an angle tower. The substation is proposed to accommodate equipment for both SSE (prospective applicant) and Eirgrid, and the stated area of the substation site is c.4ha.

• The connection of the landing point and the substation site is proposed to be via an underground cross country route that largely avoids public roads. The cable configuration is proposed to consist of a trifoil arrangement with two circuits. Horizontal directional drilling may be required at certain points, notably where the alignment crosses watercourses and the N11 national road. A total of 4 no. options for the cable connection route were examined (as indicated in the presentation made at the second pre application meeting) and of these the southernmost option is indicated as being the preferred option.

It should be noted that, in addition the offshore electricity generating element of the project, there are a number of other proposed and / or potential related developments. These are not part of the subject pre application consultation request but would comprise concurrent developments / projects that would require consideration in the context of the overall project and specifically cumulative EIA and in combination assessment for AA. These projects are as follows:

- Operations and maintenance facility to comprise offices, stores, accommodation, warehousing, parking and ancillary areas. The preferred location for this facility is at Arklow harbour and any application for this element would be made to the Planning Authority (Wicklow County Council).
- There is the potential for grid upgrade works in the vicinity of the proposed grid connection location and an assessment of the grid upgrades required in the area to facilitate additional capacity at the Arklow node has been undertaken by Eirgrid (Eirgrid East Coast Generation Opportunity Assessment Report, 2019). The works proposed in this study are stated not to be required

to facilitate the proposed development of the Arklow Wind Park Phase 2 and a Grid Stability Study undertaken by Eirgrid indicates that the system would remain stable even with the proposed development in place. Any grid upgrade works would be the subject of a separate application by Eirgrid but, as with the operations and maintenance facility, the proposals would have to be considered in the context of EIA and AA.

4.0 Case Made by the Prospective Applicant

The proposed 220kV substation and cable connections to the landing point and to the existing 220KV transmission network are considered to be Strategic Infrastructure on the following grounds:

- The development should be considered to comprise Strategic Infrastructure development on the basis that it for the purposes of energy transmission as defined in section 182A(9) of the Planning and Development Act, 2000 as amended.
- That the Arklow Bank windfarm will be an enabler to unlock new investment in Irish ports and maritime businesses.
- It is estimated that development of the form proposed could lead to the creation of c.100 long term jobs in operation and maintenance and well as supporting companies in the supply chain.
- These ancillary activities and economic benefits are evident in SSEs
 experience with offshore renewable energy developments in the UK. For
 example, in the case of the Greater Gabbard development, approximately 95
 percent of the staff at the operations and maintenance base are from the local
 area and supply chain and economic spend sits at approximately 50 percent
 in the region.
- That a multi million euro community benefit fund will be established once the project is operational.
- Section 1.7 of the National Planning Framework relates to the transition to a low carbon and climate resilient society. Developments of the form proposed

- in the Arklow Bank project are envisaged as playing a significant role in decarbonising energy sub heading 2 of section 1.7.
- That the proposed development would be capable of generating at least
 1.8TWhrs of renewable energy per annum, enough to power 435,000 homes
 and offset 530,225 tonnes of carbon emissions annually. The proposal would
 therefore make a significant contribution towards Ireland's 2030 renewable
 energy targets.
- That the proposed development would make a significant contribution towards
 the targets set out in the Climate Action Plan, 2019 for the generation of 70
 percent of electricity from renewable sources by 2030 and the installation of
 1GW of ORE capacity by 2025 and 3.5GW by 2030. The Arklow Bank WF
 project would have a planned installed capacity of 880MW.
- Chapter 7 of the Eastern and Midlands Regional Spatial and Economic Strategy (RSES) relates to climate and the environment and section 7.9 relates to change resilience and transition to a low carbon economy. The form of development proposed is supported by the contents of chapter 7, specifically the support for renewable energy generation in the region and the support of infrastructure associated with renewable energy generation.

5.0 **Legislative Provisions**

Under section 182A (1) of the 2000 Act (inserted by section 4 of the 2006 Act) where a person, (thereafter referred to as the '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 development under section 182B and shall apply to the Board for such approval accordingly.

Subsection 9 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 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, 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.

"Distribution" is defined as

"The transport of electricity by means of a distribution system, that is to say, a system which consists of electric lines, electric plant, transformers and switch gear and which is used for conveying electricity to final customers."

"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.

"Generating Station" is defined as '...a station for the generation of electricity'

6.0 **Planning History**

There are a number of planning applications relating to the Shelton Abbey site in the vicinity of the proposed substation site. Specifically, the lands immediately to the south of the substation site have been the subject of a permission for the development of a data centre and it is stated by the prospective applicant during the second pre application meeting that the substation site would likely overlap with part of the permitted data centre site. It was also stated by the prospective applicant that the permitted data centre may seek to connect to the grid via the 220kv substation proposed as part of the Arklow Wind Park development and that this connection would supersede the extant 38kv connection.

 Wicklow Co. Co. Ref. 18/940; ABP Ref. ABP-303938-19 – Permission granted by the Planning Authority and granted on appeal by the Board for development comprising the demolition of buildings and structures on site and construction of Data Storage Facility comprising 3 data storage buildings and all associated site infrastructure.

It is also noted that there is a permitted solar farm development located at Johnstown North a short distance to the north of the proposed cable landfall site.

• Wicklow Co. Co. Ref. 17/1497; ABP Ref. ABP-301726-18 – Permission granted by the Planning Authority and granted on appeal by the Board for the development of a solar farm within a site area of approximately 39 hectares at Johnstown North consisting of solar photovoltaic panels covering an area of up to 27.2 ha on site substation, 8 no inverter / transformer stations, underground cables and ducts, boundary security fence, new internal tracks, CCTV cameras and all associated site services. Permission is sought for a period of 10 years

7.0 Assessment

7.1. As per section 182A(1) of the Act, the relevant test as to whether the proposed development is or is not strategic infrastructure is whether the development is for the purposes of energy transmission.

Consistency with Requirements of s.182A(9)

- 7.2. Section 182A(9) 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.
- 7.3. In the case of the proposed development, the entirety of the connection to the grid running between the landing point and the connection into the Lodgewood Arklow Carrickmines 220kv line is at 220kv and is therefore consistent with the definition contained at s.182A(9)(a) and such that it would comprise electricity transmission. It is therefore considered that the proposed development would constitute SID as per the requirements set out at s.182A(9).

Consistency with Electricity Regulation Act, 1999

7.4. With regard to the definition of transmission section 2(1) of the Electricity Regulation Act, 1999, "transmission" is defined 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, 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.'

- 7.5. In the case of the proposed development, the proposed 220Kv substation would in my opinion be consistent with the definition of electrical plant as cited in the Electricity Regulation Act, being 'plant, apparatus or appliance used for, or for the purposes connected with, the generation, transmission, distribution or supply of electricity other than......An electric line'.
- 7.6. The preferred layout is such that there would be a loop in-loop out connection to the existing circuit (Lodgewood Arklow Carrickmines 220kv line) such that the power of the overall existing circuit will be entirely diverted into the substation and back out again. In effect, therefore the substation will form a new node along that existing circuit and would become part of the transmission system.
- 7.7. As per the above, I therefore consider that the proposed substation and connection from the substation to the existing distribution system are consistent with the definition of transmission cited in the Electricity Regulation Act and such that the proposed development would constitute SID as per the requirements set out at s.182A(9).

Other Strategic Considerations Relating to the Proposed Development

- 7.8. The proposal the subject of this pre application consultation relates to development provided for under s.182A of the Act (electricity transmission) and not large scale private development as per the Seventh Schedule of the Planning and Development Act. The criteria for consideration as to whether the development the proposed development would have strategic importance for the State or region is not therefore directly applicable to this case. Notwithstanding this, and having regard to the information submitted with the pre application request, I note the following:
- 7.9. The prospective applicant estimates that development of the form proposed (Arklow Bank Wind Park Phase 2) could lead to the creation of c.100 long term jobs in operation and maintenance and well as supporting companies in the supply chain. Given the scale of the development in terms of number of turbines and economic investment, and the requirement for the proposed development to facilitate this

- project, it is considered that the proposed development would have a potentially significant positive impact on the region in terms of employment and economic multiplier effects.
- 7.10. With regard to national policy, the form of development proposed which would facilitate the provision of up to 880MW of power, would in my opinion be consistent with the provisions of the *Climate Action Plan*, 2019 which require generation of 70 percent of electricity from renewable sources by 2030 and the installation of 1GW of ORE capacity by 2025 and 3.5GW by 2030. I also note that under the current Programme for Government the target for 2030 has been increased to 5GW. I also consider that the proposed development would be consistent with the provisions of the *National Planning Framework*, in particular those relating to offshore renewable energy (National Policy Objective 42) and transition to a low carbon and climate resilient society (National Policy Objective 55).
- 7.11. Similarly, at a regional policy level, I consider that the form of development proposed would be consistent with the provisions of the *Eastern and Midlands Regional Spatial and Economic Strategy (RSES)* relating to climate and the environment and change resilience and transition to a low carbon economy and support for renewable energy generation in the region and associated infrastructure, notably .Chapter 7 and section 7.9.
- 7.12. Therefore, while not directly applicable to the assessment of the subject case, I consider that the form of development proposed is consistent with the stated purpose of the Strategic Infrastructure legislation being development which is of strategic economic and social importance to the State and region.

8.0 **Conclusion**

In conclusion, I consider that the proposed development as described in the submissions and drawings constitutes strategic infrastructure coming within the scope of section 182A of the Planning and Development Act 2000, as amended, comprising infrastructure for the purposes of transmission of electricity having a voltage of 110kv or more. The proposed substation and connection to the existing electricity transmission system is also considered to be consistent with the definition

of transmission as set out in s.2(1) of the Electricity Regulation Act, 1999 and referenced in s.182A(9) of the Act. Finally, the economic and social impacts of the development that would be facilitated by the proposed development are considered to be such that there would be of strategic importance State and region and such as to be consistent with the stated purpose of the Strategic Infrastructure legislation. For these reasons, it is considered that the proposed development requires an application direct to the Board.

9.0 **Recommendation**

I recommend that Sure Partners Limited be informed that the proposed development consisting of an underground 220KV AC cable from a proposed landing point to a new onshore substation, the construction of a new onshore 220kv sub station and connection of this substation to the existing Lodgewood - Arklow - Carrickmines 220kv line as set out in the plans and particular received by An Bord Pleanala on the 17th day of February, 2020, as amended and added to by the plans and particulars received by the Board on 2nd day of September, 2020, falls within the scope of section 182A of the Planning and Development Act 2000, as amended, and that a planning application should therefore be made directly to the Board.

Stephen Kay Senior Planning Inspector

5th November, 2020

Appendix 1

The following is a schedule of prescribed bodies considered relevant in this instance for the purposes of Section 182A(4)(b) of the Act.

- Wicklow County Council
- Minister of Tourism, Culture, Arts, Gaeltacht, Sport and Media
- Minister for Communications, Climate Action and Environment
- Minister for Housing, Local Government and Heritage
- National Parks and Wildlife Service Development Applications Unit
- Eastern and Midlands Regional Assembly
- Environmental Protection Agency
- Transport Infrastructure Ireland
- Irish Water
- Inland Fisheries Ireland
- An Chomhairle Ealaion
- Failte Ireland
- An Taisce
- Heritage Council
- Office of Public Works