

Inspector's Report ABP-311778-21

Development Provision of a 110kV substation and

associated development.

Location North of the existing Kish Business

Park, Arklow, Co. Wicklow

Planning Authority Wicklow County Council

Type of Application Pre-application consultation

Prospective Applicant Crag Wicklow Limited

Date of Site Inspection 11th February 2022

Inspector Donal Donnelly

1.0 Introduction

- 1.1. The Board received a request on 27th October 2021 from prospective applicant, Crag Wicklow Limited to enter into a pre-application consultation under Section 182E of the Planning and Development Act, 2000, as amended in relation to a proposed 110kV substation and associated development on a site to the north of Kish Business Park, Arklow, Co. Wicklow. The proposed substation is to support the power demand of an ICT facility on these lands permitted under Reg. Ref: 20/1088.
- 1.2. A consultation meeting was subsequently held between An Bord Pleanála and the prospective applicant on 16th February 2022. The prospective applicant formally requested closure of the pre-application consultation process by written correspondence dated 11th March 2022.
- 1.3. The primary purpose of pre-application consultation meeting was 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. The pre-application consultation also considers matters relating to the proper planning and sustainable development of the area or the environment which may have a bearing on the Board's decision, and the procedures involved in making the application.
- 1.4. This Report provides an overview of the proposed project, a summary of the meeting and the advice provided by the Board, the legislative provisions, and a recommended list of Prescribed Bodies that should be forwarded copies of the application.

2.0 Site Location

2.1. The site of the proposed development is located to the north of Kish Business Park in the townland of Bogland in south-eastern Co. Wicklow. Kish Business Park is situated approximately 2.8km from Arklow town centre on the north side of Clogga Road (L2188). Clogga Road commences at a 'T' junction with the R772 before continuing over the Dublin to Wexford railway line and past the business park. The R772 forms one of the arms of Junction 21 on the M11 motorway.

2.2. The site of the proposed substation forms part of a wider site on which permission has been granted for an ICT facility (data centre). The site is currently greenfield and is traversed from north to south by a stream aligned with mature trees/ hedgerow. The site is elongated from south-west to north-east and widens out at the northern end. Access to the site is from Kish Business Park to the south.

3.0 **Proposed Development**

- 3.1. The proposed development would comprise of the construction of a 110kV GIS substation and associated development, including a GIS building, MV control building and four transformer bays located within a compound with 2.6m high security fencing.
- 3.2. The proposal also includes four options for the provision of an underground transmission line connection from the proposed substation to existing / permitted electricity transmission infrastructure in the vicinity. Option 1 and 2 follow similar routes to the north through Arklow, with Option 1 continuing to the existing Arklow 220kV substation and Option 2 branching off to the west to the permitted Pollahoney 110 kV substation (ABP-309252-21). Both these options would require directional drilling.
- 3.3. Option 3 proceeds west to a loop-in / loop-out of the existing Arklow-Banoge 110kV overhead line. The railway line would be crossed under this option via an existing bridge. There are several sub-options under Option 4, ultimately reaching the Arklow 220kV substation.
- 3.4. It is stated that the proposed development will also provide capacity for other potential future developments in the vicinity.

4.0 Arklow and Environs Local Area Plan 2018-2024

4.1. The proposed substation site is zoned 'E – Special Employment' where the objective is "to provide for a large, single, undivided employment development." The zoning objective seeks "to facilitate the development of a particular type of employment provision, that is, to provide for large, single, undivided employment development, such as 'direct foreign investment' businesses and would be likely to appeal to

multinationals or significant IT (such a data centres) / green technology / pharmaceutical industries."

5.0 **Planning History**

Wicklow County Council Reg. Ref: 20/1088

- 5.1. Ten year permission granted to Crag Wicklow Limited in May 2021 for the following:
 - Demolition of existing outbuildings on the subject site, along with all site clearance and enabling works;
 - Construction of 3 no. part one storey, part two storey, information and communication technology (ICT) facility buildings, each with a gross floor area (GFA) of C. 22,210 sq. m (66,630 sq. m GFA in total), and with a height (to parapet level) of c. 10.4 metres;
 - Each of the 3 no. ICT facility buildings will accommodate ICT equipment rooms, associated electrical and mechanical equipment rooms, loading bays, maintenance and storage space, office administration areas, and staff facilities;
 - Emergency generators (20 no. for each ICT facility building), flue stacks and associated plant are provided in fenced compounds adjacent to each ICT facility;
 - Extension of the existing road serving Kish Business Park to access the subject site, with gated access points to the proposed ICT facility development to be provided off this roadway on its eastern side. The proposed roadway will form part of the inner relief road planned under Objective IT7 of the Arklow Town and Environs LAP 2018-2024;
 - Construction of internal road network and circulation areas, footpaths, provision
 of 180 no. car parking spaces (60 no. spaces to serve each ICT facility) and 18
 no. cycle parking spaces;
 - Landscaping and planting, boundary treatments, lighting, security fencing, gatehouse (with a GFA of 175 sq. m), and all associated site works including underground foul and storm water drainage network, attenuation and percolation areas, and utility cables, on an application site area measuring c. 24.16 hectares.
 Site located to the north & north-east of the existing Kish Business Park.

Wicklow County Council Reg. Ref: 21/677 (ABP-312181-21

- 5.2. Permission sought within Kish Business Park for the construction of biofuel facility. The proposal includes the extension of the existing Kish Business Park access road, footpaths, drainage and water supply to serve the subject site, as well as new internal roads, footpaths, parking, 2 no. vehicular entrances, pedestrian access, boundary treatment and landscaping, ESB substation, new underground foul and storm water drainage system and associated works.
- 5.3. The application site area is 1.6 hectares. An Environment Impact Assessment Report (EIAR) has been prepared.
- 5.4. The Board has yet to reach a decision on this case.

6.0 Planning Precedent

An Bord Pleanála Ref: ABP-300793-18

6.1. The Board decided that an underground double circuit 110kV transmission line between the existing Belcamp 220kV and 110kV substation to the permitted Darndale 110kV substation to serve an Amazon data centre and surrounding area at Clonshaugh Business and Technology Park, Dublin 17 is Strategic Infrastructure Development.

An Bord Pleanála Ref: ABP-301188-18

6.2. The Board decided that a 220kV substation and underground cables connecting to a previously consented 220kV substation and loop-in system to serve the Facebook data centre at Clonee, Co. Meath is Strategic Infrastructure Development.

An Bord Pleanála Ref: ABP-303412-19

6.3. The Board decided that a 220 kV electricity substation, 2 no. 220 KV circuits forming a loop-in/loop out to the existing Maynooth-Woodland 220 kV Overhead Line and 3 no. 220 kV circuits connecting the proposed substation to electricity transformers is Strategic Infrastructure Development. This proposal was to serve the electricity demands of the Intel facility at Leixlip, Co. Kildare.

An Bord Pleanála Ref: ABP-305657-19

6.4. The Board decided that a substation and associated grid connection at Bracetown, Gunnocks, to the north of Clonee, Co. Meath to serve a data centre is Strategic Infrastructure Development.

An Bord Pleanála Ref: ABP-307074-20

6.5. The Board decided that the construction of a 110kV GIS substation and associated grid connection works to connect to the Castlebaggot substation on lands in the Grange Castle Business Park South to serve a data centre development is Strategic Infrastructure Development.

An Bord Pleanála Ref: ABP-307360-20

6.6. The Board decided that the construction of a 110kV GIS substation, 4 no. transformer bays, associated compounds and site infrastructure on lands in the Grange Castle Business Park South to serve a data centre development is strategic infrastructure Development.

7.0 Prospective applicant's case

- 7.1. The prospective applicant's case is that the proposed development meets the relevant criteria and constitutes Strategic Infrastructure Development (SID) under Section 182A of the Planning and Development Act, 2000 (as amended).
- 7.2. The key elements of the prospective applicant's submission are summarised as follows:
 - Under the strategic infrastructure provisions of the Planning and Development Act, 2000 (as amended), electricity transmission development is referred to in Section 182A (1) is strategic infrastructure development.
 - The proposed substation and transmission line connection forms part of the electricity transmission infrastructure required to convey electricity to serve development in the vicinity of the proposed substation.
 - Proposed substation and associated transmission line have not been specified as being part of the distribution system by ESB Networks, nor have they been approved as such by the Commission for Regulation of Utilities. Proposed

- development is therefore consistent with the definition of 'transmission' as set out under Section 182A (9) of the Planning and Development Act, 2000 (as amended).
- Upon completion of the works, the proposed development will be handed over to EirGrid, whom in conjunction with ESB Networks will carry out final commissioning and energisation of the proposed 110kV substation and transmission line connection. Proposed development will form part of the transmission network, with the proposed substation representing a new node on the national grid.
- Board requested to grant the prospective applicant leave to proceed to lodge a Strategic Infrastructure Development application under Section 182A.
- 7.3. The prospective applicant's submission also contained a note on key environmental considerations prepared by consultant ecologists. Reference is made to the environmental setting and constraints outlined within the recently submitted EIAR and Appropriate Assessment for the ICT facility (Reg. Ref: 20/1088).
- 7.4. It is stated that there are no environmental constraints that would prohibit the development of the site for the proposed GIS substation. The proposed transmission lines will be largely underground and therefore the potential impacts are confined largely to the construction phase. Furthermore, there will be no likely impacts on any protected habitat based on the design criteria and distance of any hydrological or hydrogeological pathways. There are no European Sites at the mouth of the Avoca River and the closest SAC is c. 5km north of the river mouth. An Appropriate Assessment Screening Report carried out for the ICT facility concluded that there would be no likely significant effects on any European Sites arising from the development of the site.
- 7.5. The proposed development will be accompanied by an EIAR and Screening for Appropriate Assessment, together with an outline CEMP. The EIAR will address the chosen option for the grid connection.

8.0 **Pre-Application Consultations**

- 8.1. A pre-application consultation meeting was held online on 16th February 2022. Full details of the meeting and matters raised are contained in the Board's Record.
- 8.2. The prospective applicant gave an overview of the case that included details on site location and context; planning context; the proposed data storage facility (Reg. Ref: 20/1088); and details of the proposed development including route options under consideration for the transmission line connection. The following matters were discussed after the presentation:
 - Prospective applicant stated that the proposed development be for the purposes
 of electricity transmission as defined under Section 182A(9) of the Planning and
 Development Act, 2000 (as amended). It was also submitted that the substation
 would be part of the transmission system and will be transferred to EirGrid on
 completion of the project.
 - Board's representatives stated their preliminary opinion that the proposed development would constitute SID but it is ultimately a decision for the Board.
 - Prospective applicant confirmed that new EIAR and Screening for Appropriate
 Assessment will be carried out, which will consider the cumulative and incombination impacts of with the permitted ICT development.
 - Board's representatives advised that any future planning application documentation should clearly highlight the works that are being applied for, separate from the works permitted under the ICT development.
 - Prospective applicant intends to have the transmission line route selected at the time of lodging the planning application – Board's representatives noted that the route options through Arklow may be more disruptive than the proposal to connect to the Arklow to Bannoge 110kV overhead line.
 - Board's representatives advised the prospective applicant to consider the visual impact of the proposed substation from the railway line and proposed distributor road in the vicinity.
 - Prospective applicant was advised to have regard to the potential cultural heritage structure to the west of the site shown on historical mapping.

- Board's representatives noted the stream and hedgerow through the site and the
 prospective applicant stated that an assessment of the watercourse showed that
 there was limited potential impact.
- Board's representatives advised the applicant to clearly demonstrate the cumulative impacts of the proposal particularly during the construction phase and the potential for traffic impacts.

9.0 Legislative provisions

- 9.1. Section 182A(1) of the Planning and Development Act, 2000 (as amended) requires that where a person (referred to as the 'undertaker') intends to carry out development comprising or for the purposes of electricity transmission, the undertaker shall prepare an application for approval of the development to the Board.
- 9.2. 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.
- 9.3. 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."
- 9.4. 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.

10.0 Assessment

10.1. Strategic Infrastructure

- 10.2. The proposed development comprises a new 110kV GIS substation and associated development including a GIS building, MV control building and four transformer bays, all within a compound with 2.6m high security fencing. The proposed development will also include a 110kV transmission line connection to serve the substation. Four grid connection options are included for connecting the proposed substation to existing/ permitted electricity transmission infrastructure in the area.
- 10.2.1. The purpose of the proposal is to support the power demand of a permitted ICT facility at the site and to serve the power needs for future development. Unlike substations for windfarm or solar farm developments which allow for electricity generated by these facilities to be fed into the national grid, the proposed development will effectively be taking from, and not adding to, network capacity.
- 10.2.2. Under Section 182A of the Planning and Development Act, 2000 (as amended), 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.
- 10.2.3. Section 2(1) of the Electricity Act defines the transmission system as wholly or mainly high voltage lines and electrical plant for conveying electricity. I consider that the proposed substation constitutes 'electrical plant' as "any plant, apparatus or

- appliance used for, or for purposes connected with, the generation, transmission, distribution or supply of electricity...".
- 10.2.4. There is no threshold under Section 182A (9) of the Planning and Development Act, 2000 (as amended) in respect of a substation. However, the proposal will include an associated 110kV transmission line connection to serve the proposed substation and the final route option for this transmission line will be selected in advance of any application to the Board under Section 182A. Once energised, the proposed 110kV substation and transmission line will form part of the ESBN infrastructure, which EirGrid will be responsible for operating.
- 10.2.5. There are four potential grid connection options. All but one of the route options involves connection to either the existing Arklow 220kV substation or the permitted Polahoney 110kV substation (ABP-309252-21). The other route option would involve a loop-in loop-out connection at the existing Arklow-Banoge 110kV overhead line.
- 10.2.6. Regardless of the chosen option, all will include the provision of 110kV transmission lines between the proposed substation and the existing/ permitted transmission infrastructure, which will essentially see power in the transmission lines being conveyed with a voltage of 110kV. This, in my opinion, constitutes Strategic Infrastructure Development. It should be noted that the applicant has stated that the proposed development is designed to support the power demands of development on lands adjoining the proposed 110kV substation.
- 10.2.7. 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 the provision of a 110kV substation and associated 110kV cabling acting as a node on the transmission system constitutes Strategic Infrastructure Development. Recently, the Board reviewed cases with respect to Section 182A (9), and the definition of transmission under Section 2(1) of the Electricity Regulation Act, 1999. The Board considered that new 110kV infrastructure comprising electric plant and high voltage lines for transmission must be considered SID notwithstanding whether or not these connections are looped-in or tail-fed.

10.3. Planning and Environmental Considerations

- 10.3.1. The subject site is zoned 'E Special Employment' in the Arklow and Environs Local Area Plan 2018-2024 where the objective is "to provide for a large, single, undivided employment development." The zoning objective seeks "to facilitate the development of a particular type of employment provision, that is, to provide for large, single, undivided employment development, such as 'direct foreign investment' businesses and would be likely to appeal to multinationals or significant IT (such a data centres) / green technology / pharmaceutical industries."
- 10.3.2. The following matters are relevant in terms of planning and environmental considerations:
 - Cumulative impact of construction works, including the traffic impacts associated with the chosen grid connection route option.
 - Impact of the proposed substation on the visual amenities of the area,
 particular from the railway and proposed distributor road.
 - Cultural heritage and potential impact on archaeology.
 - Appropriate Assessment and impact on local ecology and water environment.

10.4. Prescribed Bodies

10.4.1. In view of the scale, nature and location 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.

11.0 Conclusion

11.1. 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, necessitating an application to be made directly to the Board.

12.0 Recommendation

12.1.1. I recommend that Crag Wicklow Limited be informed that the proposed development consisting of a 110kV GIS substation and associated development on a site to the north of the existing Kish Business Park, Arklow, Co. Wicklow as set out in the plans and particulars received by An Bord Pleanála on the 27th October 2021, falls within the scope of section 182A of the Planning and Development Act 2000, as amended, and that a planning application should be made directly to the Board.

Donal Donnelly
Senior Planning Inspector

24th June 2022

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.

- Minister of Housing, Local Government and Heritage
- Minister for Environment, Climate and Communications
- Wicklow County Council
- Irish Water
- Irish Rail
- Transport Infrastructure Ireland
- Failte Ireland
- An Tasice
- Heritage Council
- Commission of Regulation of Utilities, Water and Energy
- Health Service Executive
- Irish Aviation Authority
- Health & Safety Authority

Further notifications should also be made where deemed appropriate.