



An
Bord
Pleanála

Inspector's Report ABP-314505-22

Development	Proposed upgrade of the existing Belcamp 220kV electrical substation
Location	In the townlands of Belcamp and Clonshagh, Fingal, Co. Dublin
Planning Authority	Fingal County Council
Prospective Applicant	EirGrid plc.
Type of Application	Pre-Application Consultation under Section 182E of the Planning & Development Act 2000, as amended
Inspector	Niall Haverty

1.0 Introduction

- 1.1. The Board received a request on 31st August 2022 from EirGrid plc. to enter into a pre-application consultation under section 182E of the Planning and Development Act 2000, as amended ('the Act'), in relation to proposed upgrading of the existing Belcamp 220kV electrical substation.
- 1.2. A pre-application consultation meeting was held with the prospective applicant on 19th October 2022, and a letter was received on 27th October 2022 requesting closure of the consultation process.
- 1.3. This report provides an overview of the proposed development, relevant precedents and legislative provisions and recommends that the proposed development does not constitute strategic infrastructure.

2.0 Site Location and Description

- 2.1. The existing Belcamp 220kV substation is located in the townlands of Belcamp and Clonshagh in Fingal, Co. Dublin. The site is located on the northern side of the R139 Regional Road, which runs between the M50/M1 Interchange and Clarehall. The site is accessed from the R139.
- 2.2. The surrounding area is peri-urban in character, with agricultural lands to the west and north and amenity lands (sports pitches) to the east. To the south, on the opposite side of the R139, is the area of Dublin 17, including the suburb of Darndale.

3.0 Proposed Development

- 3.1. The proposed development relates to the upgrading of the existing Belcamp 220kV Electrical Substation, including the extension of the compound to the north.
- 3.2. **Initial Proposal**
 - 3.2.1. The proposed development, as described in the initial request, was described as follows:
 - 400kV Gas Insulated Switchgear (GIS) 8 Bay Building, west of the existing station compound, c. 1,400 sq m in area and c. 18m high;

- 220kV Gas Insulated Switchgear (GIS) 16 Bay Building, north of the existing station compound, c. 1,500 sq m in area and c. 16m high;
- +100 MVAR STATCOM transformer, including associated auxiliary transformer, reactors, outdoor colling bank control and valve building;
- Associated outdoor electrical equipment, including transformers in transformer bays located adjacent to the GIS Buildings;
- Lightning protection masts;
- Associated provision, removal and/or alteration of below ground cables and ducting in order to facilitate the development;
- Associated compound and hardstanding, internal access tracks, boundary treatment including perimeter fencing;
- All ancillary site development works including site preparation works, site clearance and levelling, hardstanding, internal access tracks and temporary construction compound, underground cabling and earth grid, surface water drainage network including a soakaway, fencing and gates, lighting poles and landscaping as required to facilitate the development.

3.2.2. It is indicated that the proposed development will be subject to detailed screening assessments for Appropriate Assessment (AA) and Environmental Impact Assessment (EIA). It is stated that EirGrid's preliminary view is that an NIS may be required but it is not expected that EIA will be required.

3.3. Revised Proposal

3.3.1. In their letter of 27th October 2022 requesting closure of the pre-application consultation process, the prospective applicant stated that, following the consultation meeting, they intend to omit all proposed 400kV infrastructure from the proposed development.

3.3.2. The letter sets out the following revised development description:

- 220kV Gas Insulated Switchgear (GIS) 16 Bay Building north of the existing station compound, c. 1,500 sq m in area and c. 16m high;

- +100 MVAR STATCOM transformer including associated auxiliary transformer, reactors, outdoor cooling bank control and valve building;
- Associated outdoor electrical equipment, including transformers in transformer bays located between the adjacent to the GIS Buildings;
- Lightning protection masts;
- Associated provision, removal and/or alteration of below ground cables and ducting in order to facilitate the development;
- Associated compound and hardstanding, internal access tracks, boundary treatment including perimeter fencing;
- All ancillary site development works including site preparation works, site clearance and levelling; hardstanding, internal access tracks and temporary construction compound; underground cabling and earthgrid, surface water drainage network including a soakaway; fencing and gates; lighting poles and landscaping as required to facilitate the development.

3.3.3. In addition to the omission of the 400kV element, the revised proposal includes repositioning of the proposed 220kV GIS extension and STATCOM within the same site boundary as originally proposed. A revised site layout plan was submitted indicating these revisions and the letter also states that the siting of the proposed infrastructure allows space for the future siting of any 400 kV and other infrastructure which will be separately proposed by EirGrid when required.

4.0 Prospective Applicant's Case

4.1. The prospective applicant's case, as outlined in their initial request for consultation, can be summarised as follows:

- The development is part of EirGrid's wider 'Powering Up Dublin' project, where it is planned to install up to 50km of cables across the city. Some cables will replace existing cables and some will be new. There will also be upgrades to electricity substations and new substations will be built to support Dublin's electricity network.

- The proposed development will help accommodate renewable generation expansion and growing demand in the North Dublin area.
- While of considerable benefit to the transmission network, from a planning perspective, this is essentially an extension and enhancement of existing substation infrastructure.
- The proposed development would not be of a form or appearance entirely incongruous to the established substation infrastructure.
- In a number of previous cases, the Board have determined that additional equipment which is an enhancement of established substation infrastructure did not fall within the scope of section 182A of the Act.
- Given the nature, scale and function of the proposed development and critically, its relationship to the existing substation, the proposed development does not comprise SID having regard to s.182A.
- Nor does it meet any other provisions for Strategic Infrastructure Development as set out in s. 37A(2) of the Act.

5.0 Relevant Precedents

5.1. The prospective applicant cites a number of previous cases where the Board determined that proposed developments did not comprise strategic infrastructure development under s.182A, including:

- **ABP-313964-22:** Redevelopment of the existing Maynooth 220 / 110 kV Electrical Substation, including the replacement of the existing 220/110kV AIS substation with a 220/110kV GIS substation. The proposed development includes: 220kV GIS 16 Bay Building; 110kV GIS 16 Bay Building; associated outdoor electrical equipment, including 4 no. transformers; diversion of all existing circuits from the existing AIS Station into the GIS stations; decommissioning of the existing AIS Station; installation of cable sealing ends and line/cable interface towers; lightning protection masts; associated compound, hardstanding, internal access tracks, perimeter fencing and all ancillary site development works.

- **ABP-303148-18:** Installation of series capacitors at three existing 400 kV substations, lightning monopoles, 400kv u/g or OH connection including circuit breaker equipment, extension to existing compound and palisade fencing and associated site and ancillary development including provision / replacement of equipment, laying or replacement of cables and diversion of existing cables, drainage, landscaping and access roads
- **ABP-301174-18:** Installation of new STATCOM devices at three existing electrical substation sites. The main components include transformer connecting to the transmission grid, reactors and capacitors, outdoor cooling banks/ assembly, control building and compound for the above.
- **ABP-300928-18:** Redevelopment of the existing 110 kV Kilbarry Electrical Substation comprising new gas insulated switchgear (GIS) electrical substation within the existing compound, transfer of 4 no. existing 110kV circuits from the existing AIS substation to the proposed GIS substation, demolition of existing unused control room.
- **VC0110:** Redevelopment of the existing 110 kV Galway Electrical Substation at Ballybrit, including new 110kV gas insulated switchgear (GIS) building within existing compound, new line/cable interface masts, alterations to existing site entrance and associated works, decommissioning of the existing AIS substation.
- **VC0109:** New reactor at the existing Knockanure 220 kV Electrical Substation, to the east of the existing substation buildings, extension to compound fence, connection to existing 220kV GIS building via underground cables and associated installation of control and protection systems.
- **VC0101:** Redevelopment of the existing 220 kV Inchicore Electrical Substation, including new GIS building to north of existing GIS building, new control room, associated works to accommodate transfer of switchgear equipment and existing cable relocation.
- **VC0070:** Installation of two new reactors at existing Poolbeg 220/110 kV Electrical Substation.

- **VC0061:** Redevelopment of the existing 110kV Ardnacrusha Electrical Substation, consisting of replacement of outdoor 110kV AIS equipment with indoor 110kV GIS equipment, transfer of circuits from existing AIS 110kV substation to the new GIS substation, and decommissioning of existing substation.
- **VC0055:** Redevelopment of the existing 400kV Moneypoint Substation, involving construction of new 400kV, 220kV and 110kV GIS buildings, transfer of circuits from the existing 400kV building to the new 400kV GIS building and from the existing 220kV and 110kV AIS equipment to the new 220kV and 110kV GIS buildings, decommissioning of existing GIS and AIS equipment.
- **VC0040:** Redevelopment of the existing 220kV Finglas Substation, including construction of an indoor 110kV station within boundary of the existing Finglas 220kV station, transfer of circuits and decommissioning of old substation.

5.2. In addition to the cases referenced by the prospective applicant, I note the following recent case:

- **ABP-314111-22:** Upgrading of the existing Woodland 400 / 220kV Electrical Substation, including installation of additional outdoor AIS electrical apparatus, including an approx. 4ha extension to the existing compound. This includes: extension to both sides of the existing 400kV busbar; additional apparatus and works to two existing busbars to create sectionalising bays; relocation of existing transformer connections; extension to existing control building; renewal, alteration and / or removal of associated 400 / 200kV apparatus and equipment as required; ancillary site development works.

6.0 Legislative Provisions

6.1. Planning and Development Act 2000, as Amended

6.1.1. Section 2(1) of the Planning and Development Act 2000, as amended, defines 'strategic infrastructure' as including, *inter alia*:

"any proposed development referred to in section 182A(1)"

6.1.2. Under subsection 182A(1) of the Act, where a person (the '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 the development under section 182B and shall apply to the Board for such approval accordingly.

6.1.3. Subsection 182A(9) 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."

6.1.4. Section 182E(1) provides that a prospective applicant who proposes to apply for approval under section 182B or 182D shall, before making the application, enter into consultations with the Board in relation to the proposed development.

6.2. Electricity Regulation Act 1999, as Amended

6.2.1. Section 2(1) of the Electricity Regulation Act 1999, as amended, sets out the following definitions:

- **'Transmission':**

"...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':**

“.....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”

- **‘Distribution’:**

“...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 switchgear and which is used for conveying electricity to final customers”.

7.0 Assessment

7.1. As noted above, the definition of ‘strategic infrastructure’ includes development comprising or for the purposes of electricity transmission, with ‘transmission’ defined as either:

- The transport of electricity by means of a high voltage line of 110 kV or more, or an interconnector.
- The transport of electricity by means of a transmission system (a system of high voltage lines and electric plant 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, including interconnectors but excluding distribution system lines).

7.2. Based on this statutory definition and the information contained in the prospective applicant’s request, I am satisfied that the existing Belcamp 220kV electrical substation can be regarded as part of the electricity transmission system for the purposes of the 2000 Act.

7.3. The details provided with the request are somewhat limited, not including detailed drawings or plans in respect of the proposed development, other than a draft Site Plan. However, the written description in the accompanying cover letter and the

subsequent presentation and discussion at the consultation meeting (refer to record of meeting) is considered to have adequately described the nature, scope and purpose of the proposed development. Having regard to the description and the nature of the proposed works which relate to the redevelopment and upgrading of an existing substation, I consider that there is adequate information available to the Board to make a determination on this request.

- 7.4. The proposed development is described as the upgrade of the existing Belcamp substation, including the provision of a new Gas Insulated Switchgear (GIS) building, a STATCOM transformer and associated electrical and ancillary equipment and works. The existing substation is a strategic site on the transmission system in the Dublin area, however the proposed development would not give rise to any fundamental change in the function, operation or purpose of the existing substation infrastructure at this location, nor would there be any material deviation to the routes of established electrical circuits. While the existing compound will be extended to the north and west, it is not considered that any significant visual or landscape impacts will arise given the site location and characteristics and the distances from sensitive receptors.
- 7.5. As outlined above, the Board has previously determined a considerable number of requests for pre-application consultation in relation to proposed improvement / refurbishment / upgrade works to existing electrical infrastructure. In particular, I note the recent cases ABP-314111-22 and ABP-313964-22, which related to similar forms of development. In the case of ABP-313964-22 this included new 110kV and 220kV GIS substation buildings and transformers. I also note case ABP-301174-18 which related to the installation of STATCOM devices at existing substations. The Board concluded in these, and other similar cases, that the development did not fall within the scope of section 182A of the 2000 Act, as amended, and consequently that planning applications should be made in the first instance to the local planning authority.
- 7.6. Having regard to the nature and scale of the proposed development, the fact that it relates to the upgrade of an existing substation and transmission infrastructure, and noting previous determinations by the Board in respect of similar requests for pre-application consultation, I conclude that the proposed development would not fall

within the scope of section 182A of the Planning and Development Act 2000, as amended, necessitating the making of an application directly to the Board

8.0 Recommendation

- 8.1. I recommend that the prospective applicant, EirGrid plc., be informed that the proposed development, consisting of the upgrading of the existing Belcamp 220kV electrical substation, in the townlands of Belcamp and Clonshagh, Fingal, Co. Dublin, as set out in the plans and particulars received by An Bord Pleanála on the 31st August 2022 and subsequently amended by the revised plans and particulars received on the 27th October 2022, does not fall within the scope of section 182A of the Planning and Development Act 2000, as amended, and that the planning application should be made to Fingal County Council in the first instance.



Niall Haverty
Senior Planning Inspector

18th November 2022