



An
Bord
Pleanála

Inspector's Report

ABP-308439-20

Development

110kV GIS substation and two underground 110kV transmission lines from the proposed 110kV GIS substation to the existing Castlebaggot substation.

Location

The townland of Milltown to the west and north of R120, Peamount Road, Newcastle, Co. Dublin.

Planning Authority

South Dublin County Council

Prospective Applicant

Data Power and Hub Services Ltd.

Date of Pre-Application Consultation Meeting

13 November 2020

Date of Site Inspection

12 November 2020

Inspector

Una Crosse

1.0 Pre-Application Consultation

- 1.1. The Board received a request on 14th October 2020 from Marston Planning Consultancy on behalf of Data Power and Hub Services Ltd. to enter into pre-application consultations under Section 182E of the Planning and Development Act 2000, as amended, in relation to a proposed development in the townland of Milltown, Peamount Road, Newcastle, Co. Dublin.
- 1.2. The proposed development comprises the development of a GIS substation, two underground 110kV transmission lines from the proposed 110kV substation to the existing 220kV/110kV Castlebaggot substation. It should be noted that, at the pre-application consultation meeting held on 13 November 2020, revisions to the scheme provide connection to the existing substation at Kilmahud rather than the existing Castlebaggot substation.
- 1.3. This development comprises one element of a wider development of the overall site comprising a power generation facility which has been granted permission by SDCC, but remains subject to appeal, and a proposed data centre development comprising two halls, for which it is proposed to seek permission.
- 1.4. The Board's representatives met with the prospective applicant's agent on the 13th November 2020. Subsequently, the prospective applicant formally requested closure of the pre-application consultation process in a letter received on 30 November 2020.

2.0 Site Location and Context

- 2.1. The subject site is located to the north of the Peamount Road (R120) in the Newcastle area of County Dublin to the east of Peamount Hospital. While less developed than the Grangecastle Business Park to the east and north, there are sporadic commercial operations in the vicinity of the site including businesses related to transport/logistics and car sales. The subject site comprises one element of the overall development of these lands which extend to c.8.2 hectares. The area of the site of the substation is not specifically provided but is centrally located within the overall site. Currently, the wider site accommodates a number of residential

properties and outbuildings which address the Peamount Road. The site of the substation is located to the rear of these properties on flat agricultural land.

- 2.2. The site is not located within any European designated site or nationally designated conservation site. The most proximate designated sites are the Rye Valley/Cartron SAC (site code 001398) which is c.5.1km to the northwest and the Glenasmole Valley SAC (site code 001209) which is c.9.3km to the southeast.

3.0 Proposed Development

- 3.1. As outlined briefly above, the proposed substation development comprises one element of a wider development of the overall site which also includes a power generation facility (PGF) which has been granted permission by SDCC on 9 November 2020 (Ref. SD20A/0058) and a proposed data centre development comprising two halls (c.20,000 sq.m), for which it is proposed to seek permission before year end.
- 3.2. It is proposed that the substation will support the power demand for the proposed data centre development (c.20,000 sq.m) immediately to the southeast of the site. In addition, the proposed substation will export the power generated in the Power Generation facility recently permitted by SDCC located immediately to the northwest of the proposed substation. The power generating facility is proposed to be fuelled by gas. It is noted in the documentation related to the PGF that a fuel supply is available through the gas transmission network which runs in a north-south direction c.2km to the east of the site with a connection to this network proposed bringing a gas line to the site.
- 3.3. The development subject of this pre-application consultation comprises a 110kV Gas Insulated Switchgear (GIS) Substation within a 2-storey building within a compound with another compound on the other side of an internal road accommodating 3 transformer bays, client control building, 49kVa rural supply, associated compounds and site infrastructure. Two underground single circuit 110kV transmission lines are proposed from the proposed development to the 220/110kV Castlebaggot substation c.1.5km to the east. This connection was outlined as being indicative subject to confirmation from EirGrid.

- 3.4. At the pre-application consultation meeting on 13 November 2020, the prospective applicant outlined that rather than connect to Castlebaggot substation, EirGrid have confirmed Kilmahud substation as their preferred connection option for the export of power and the connection point of at least one of the 110kV transmission lines. If the second 110kV transmission line does not connect at the Kilmahud substation it will connect to another new substation to come online in 2021;
- 3.5. It is proposed that when the development works are complete the 110kV Substation and underground transmission lines will be handed over to EirGrid who will be responsible for operation with the substation and transmission lines forming part of the ESBN Infrastructure.
- 3.6. It is proposed that the application will be accompanied by an EIAR and noted that the proposal will cumulatively assess, as part of the EIAR, the development submitted with Ref. SD20A/0058. It is also proposed to submit a Screening Report for AA.

4.0 Local Planning Policy

4.1. South Dublin County Development Plan 2016-2022

- 4.1.1. The subject site is zoned Objective EE which provides for enterprise and employment related uses. A residential property located to the southeast of the site on a property adjoining the public road is a protected structure described in the Development Plan as a detached four-bay two storey farmhouse is a protected structure (RPS Ref 155). The boundary of the Department of Defence Inner Zone Limit is located along the south-eastern boundary of the site.

5.0 Planning History

- 5.1. **Subject Site - Ref. SD20A/0158**– Notification of Decision to Grant Permission was issued by SDCC on 9 November 2020 for the demolition of existing an dwelling (Little Acre) and outbuildings on site (not proposed to demolish part single/part two storey property (Bulmer) and an agricultural building to the east of the overall site) and the construction of a gas powered Power Plant with a compound of 14,475sq.m containing 2 Power Units each with 1 25m height stack (2 overall), transformers, air

intakes and electrical modules; two storey administration and workshop building (427sq.m) and LV switchgear building (140sq.m) (567sq.m in total) plus an AGI connection, gas compressor, water tank, water treatment, firewater tank and pumps, fuel skids, fuel tank and 1 emergency diesel generator; the proposal also includes a battery energy storage system compound of 3,300sq.m containing 15 battery containers and 15 inverters that will be linked to the Power Plant. Access to the development is proposed from a new vehicular entrance from Peamount Road that will provide access to the Power Plant at the rear of the site; all ancillary site development works, including attenuation pond and dry swales to connect to existing infrastructural services and network as well as fencing, signage, services road entrance gate, 8 car parking spaces and landscaping. It is proposed to apply for an EPA-Industrial Emissions Directive (IED) license to facilitate the operation of the proposed development for a period of 10 years on a site of 8.2. The last day for receipt of an appeal on this Notification of Decision to Grant Permission is 7 December 2020.

6.0 Applicant's Case

6.1. Documentation Received with Pre-Application Request

6.1.1. The applicant's case in respect of whether or not the proposed development constitutes strategic infrastructure is set out in a report which accompanied the pre-application consultation request. The main points of the case put forward are summarised below:

- Outlines the scope of development, planning history (outlined above) and definitions of transmission (below);
- Proposed to lodge one application for substation and transmission lines;
- Notes Boards guidelines on SID electricity transmission state that certain private sector developments may constitute transmission under S182A where proposals will ultimately form a node on or part of the transmission network including substations and related connection infrastructure.

- Considered proposal meets relevant criteria under S. 182A & 182B as includes provision of 110kV substation and 2 underground single circuit transmission lines and asset owner will be ESNB, forming part of transmission network.
- Reference made to 220/110kV substation granted permission at Grange Castle South Business Park under ABP Ref. 06.VA0019.
- Noted that connection point to Castlebaggot (Figure 1) is indicative and subject to confirmation from EirGrid but that the proposed connection point into the grid should not impinge on the Board's ability to make a determination in the case.
- Transmission lines proposed have not been specified as being part of the distribution system by ESB networks nor have they been approved as such by the CRU with proposal therefore consistent with definition of transmission set out in s.2(1) of the Electricity Regulation Act 1999. Transmission lines each have a voltage of 110kV and are consistent with definition of transmission set out in Section 182A(9) of the Act and therefore constitute strategic infrastructure.
- Upon completion proposal will be handed over to EirGrid and once energised will be part of the ESNB infrastructure.
- Proposal meets relevant criteria and constitutes SID.

6.2. Pre-Application Consultation Meeting

6.2.1. At the consultation meeting held on 13th November 2020, the applicant provided a presentation to the Boards representatives which summarised the applicant's case as outlined above. It also stated the following:

- Application to be accompanied by an EIAR that will cumulatively assess all elements of this application with that applied for under the power generation facility and the future data centre application.
- EirGrid have confirmed Kilmahud substation as their preferred connection option for the export of power and the connection point of at least one of the 110kV transmission lines (route options to same shown in presentation).
- If the second 110kV transmission line does not connect at the Kilmahud substation or another new substation to come online in 2021;

- Application sought for a Maximum Export Capacity (MEC) licence from EirGrid to allow export of power from the proposed PGF facility through the proposed substation to the National Grid (at Kilmahud).
- Application sought for a Maximum Import Capacity (MIC) licence from EirGrid to allow the Data centre (future planning application) to connect to the Grid.
- Combined export or import of power will be determined by the PGF power generation and the DC load at any one time. Substation has potential to form a node on the network enabling both the export of power from the PGF and has spare capacity to facilitate future connections outside the site.
- As same circuits will be used for both the import and export of power only requirement for two 110kV circuits (c.1.25km long).

6.3. Further Information Received

- 6.3.1. In response to a request at the pre-application meeting from the Board's representative the prospective applicant submitted details as to the relationship of the proposed substation development to the power generation facility. The information received on 20 November 2020 comprises the response to the entire further information request from SDCC in respect of the PGF. Therefore, it does not directly respond to the question put at the meeting but the following elements of the response are considered useful to understand the relationship between the PGF and proposed substation. It should be noted there is no relationship between the permitted PGF and the proposed data centre development, but both would use the substation for export/import of power respectively. The response, as it relates to the proposed substation, with an overview of the purpose of the proposed PGF, is summarised as follows:

The rationale for a peaking power plant is outlined which relates primarily to the intermittent nature of renewable generation in Ireland, which if unsupported would result in times of insufficient power on the grid to meet demand necessitating back up power from energy storage facilities. Most climate sensitive way to do this is by developing fast responding peaking power plants that use least amount of non-renewable energy possible with this strategy actively supported by EirGrid. Many existing peaking plants due to close in coming years, mainly fuelled by peat, coal or

heavy fuel and emit more greenhouse gas per unit of electricity produced than gas fired power plants. Noted that there is clear evidence of identified need both within the local and National Grid for back-up power in the Grange Castle area. It is noted that the electrical demand is significant and likely to grow as Grange Castle Business Park expands and alongside this local industry, there is a large number of electrical substation which facilitate large consumers grid connections and also facilitate generator connections. This provides a plentiful supply of connection options to the grid located at points of significant demand.

7.0 Legal Provisions

7.1. Under section 182A(1) of the Planning and Development 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.

7.2. Subsection 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.

7.3. 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”.

- 7.4. “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.”
- 7.5. “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”.

8.0 Assessment

8.1. Strategic Infrastructure

- 8.1.1. The applicant entered into pre-application consultations for the purposes of seeking a determination from the Board on whether the proposed development of a 110kV GIS substation at Peamount Road and underground transmission line, originally to the existing Castlebaggot substation but now to the existing Kilmahud substation is or is not strategic development. The development proposes a GIS substation with a loop-in/loop-out connection to the Grid at the existing Kilmahud substation via two underground single circuit 110kV transmission lines and would comprise a node on the transmission network which the prospective applicant considers is strategic infrastructure.
- 8.1.2. Section 182A(9) of the Act sets a threshold of 110kV in order for a high voltage electricity transmission line to be considered strategic infrastructure. While no threshold is set in respect of a substation, the Board will note previous decisions it has made on strategic infrastructure pre- application consultation requests in relation to electricity transmission infrastructure under Section 182E. These include ABP-307074-20 where the Board recently determined that the provision of a new 110kV substation and associated underground cabling (110kV) which comprises a loop-in/loop-out connection to the existing Castlebaggot substation, and which is located

to the south of the proposed development site on the opposite side of the internal access road, would act as a node on the transmission network and constitutes Strategic Infrastructure. The Board have also determined ABP-307360-20 where the provision of a new 110kV substation (referred to as Clutterland), underground single circuit 110kV transmission line from the proposed 110kV GIS substation to the existing 220kV/110kV Castlebaggot substation to the immediate south of the site would act as a node on the transmission network and constitutes Strategic Infrastructure.

- 8.1.3. These determinations and other similar determinations were made on the basis that the proposed development constituted electric plant for the conveying of electricity from a generating station to a substation and/or facilitating connection into the National Transmission grid from permitted/existing 110kV infrastructure. The proposed development comprises electric plant and the provision of transmission lines between the proposed substation and the existing substation. Therefore, the new substation and associated underground cables will form part of the existing transmission grid. It follows, therefore, that the substation and the underground cables, in forming such a node on the 110kV transmission network, constitutes Strategic Infrastructure.

8.2. Environmental Impact Assessment

- 8.2.1. Section 182A (2) of the Planning and Development Act, 2000 as amended states that *“in the case of development referred to in subsection (1) which belongs to a class of development identified for the purposes of section 176, the undertaker shall prepare, or cause to be prepared, an environmental impact assessment report or Natura impact statement or both that report and that statement, as the case may be, in respect of the development”*.
- 8.2.2. Annex I & Annex II to Directive 2011/92/EU as amended by 2014/52/EU and Part 1 & Part 2 of Schedule 5 (Planning and Development Regulations 2001, as amended) set out the classes of development for the purposes of EIA.
- Section 20 of Part 1 provides that a mandatory EIAR is required for the *‘Construction of overhead electrical power lines with a voltage of 220 kilovolts or more and a length of more than 15 kilometres’*.

- Section 3(b) of Part 2 provides that a mandatory EIAR is required for '*Industrial installations for carrying gas, steam and hot water with a potential heat output of 300 megawatts or more, or transmission of electrical energy by overhead cables not included in Part 1 of this Schedule, where the voltage would be 200 kilovolts or more*'.

8.2.3. The proposed development of a 110kV substation and underground cables would not come within the projects outlined within either Annex I or Annex II to Directive 2011/92/EU as amended by 2014/52/EU nor is it a class as set out in either Part 1 or Part 2 of Schedule 5 (Planning and Development Regulations 2001, as amended) and therefore a mandatory EIAR is not required.

8.2.4. While the proposal does not require mandatory EIA, as noted above, the prospective applicant have indicated their intention, at the pre-application meeting to include an EIAR with the application for the proposed substation. I would note that an EIAR was not submitted to South Dublin County Council in respect of the application for the power generation plant (Ref. SD20A/0058). The applicant proposes to cumulatively assess the impacts of the proposed substation development with the permitted power generation facility and proposed data centre development.

8.2.5. I would refer the Board to Article 102 of the Planning and Development Regulations 2001, as amended which states that "*where a planning application for sub-threshold development is accompanied by an EIAR, the application shall be dealt with as if the EIAR had been submitted in accordance with section 172(1) of the Act*". In this regard, given the prospective applicants proposal to submit an EIAR, it is recommended that Article 102 should be applied.

8.3. **Appropriate Assessment**

8.3.1. The site is not located within any European designated site or nationally designated conservation site. The most proximate designated sites are the Rye Valley/Carton SAC (site code 001398) which is c.5.1km to the northwest and the Glenasmole Valley SAC (site code 001209) which is c.9.3km to the southeast. There does not appear to be any pathway from the proposed development site to any of the most proximate Natura 2000 sites. The applicant has indicated that it is their intention to include an Appropriate Assessment Screening Assessment with the application.

8.4. Prescribed Bodies

- 8.4.1. 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.

9.0 Conclusion

- 9.1. 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 be made directly to the Board.

10.0 Recommendation

- 10.1. I recommend that Data Power and Hub Services Ltd. be informed that the proposed development consisting of a 110kV GIS substation and associated works at Milltown, Peamount Road, Newcastle, Co. Dublin as set out in the plans and particulars received by An Bord Pleanála on the 14th October 2020, 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.

Una Crosse

Senior Planning Inspector

December, 2020

Appendix One

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 Culture, Heritage and the Gaeltacht

Minister for Communications, Climate Action and Environment

Minister for Defence

South Dublin County Council

Transport Infrastructure Ireland

Irish Water

An Chomhairle Ealaíon

Failte Ireland

An Taisce

Heritage Council

Commission of Regulation of Utilities, Water and Energy

Health Service Executive