

Inspector's Report ABP-312984-22

Development	110kV electrical substation and grid connection.
Location	Profile Park, Dublin.
Prospective Applicant	Greener Ideas Limited
Planning Authority	South Dublin County Council
Type of Application	Pre-Application consultation under Section 182E of the Planning and Development Act 2000, as amended.
Date of Site Inspection	5 th May 2022
Inspector	Jimmy Green

1.0 **Overview**

- 1.1. On the 11^{th of} March 2022 the Board received a request to enter into pre-application consultations under section 182E of the Planning and Development Act 2000 (as amended) ("the Act") in relation to the proposed development of the Ballybane substation a proposed 110kV substation and cabling to facilitate the connection of a Gas Fired Peaker/Peaking Power Plant (South Dublin County Council PI. Ref. SD21A/0167) to the national grid at Profile Park, Dublin 22. The power plant application (which is accompanied by an Environmental Impact Assessment Report (EIAR) and an Appropriate Assessment Screening Report (AASR)) has since this pre-application consultation been lodged been granted planning permission by South Dublin County Council (30th August 2022).
- 1.2. A virtual meeting was held with the prospective applicant on 5th May 2022. A record of the meeting is attached to the file. The presentation made to the Board's representatives at the meeting is also attached to the file. Closure of the pre-application consultation was requested in correspondence dated 28th October 2022.

2.0 Site Location and Description

- 2.1. The site of the subject works is in an emerging industrial / enterprise district in Clondalkin, Dublin 22. Profile Park is a developing private business park, which has various consents in place for infrastructure, electrical works (substations and power generation) and data centre developments (discussed further below). While the access roads and some buildings have been provided the park remains largely undeveloped to-date. The access roads (including cycling and pedestrian facilitates segregated from the vehicular traffic) are in place albeit they show signs of wear and tear as well as subsequent sub-surface infrastructure scaring from previous construction activities. The hard landscaping and finishes in place indicate that the intent is that the business park will be finished to a relatively high quality when completed. The business park lies generally to the south of another major business park, Grange Castle and to the north of Casement Aerodrome.
- 2.2. The close out mapping provided is inconsistent with the originally submitted drawings in terms of the labelling of substations. Accordingly, to avoid confusion, I

wish to state the naming conventions I am using for all the relevant substations referenced in this recommendation:

- <u>Ballybane Substation</u> refers to the proposed substation subject to this S182A pre-application consultation and is referenced as either Ballybane or "subject substation" within this recommendation.
- <u>Barnakyle substation</u> refers to the existing substation to which the yellow (original) grid connection option connects as shown on the close out mapping received. The Barnakyle substation is approximately 210m (straight-line distance) west of the proposed Ballybane substation. The Barnakyle substation is variously referred to as "Ballybane SS" as well as "Aungierstown and Ballybane" in the close out mapping provided by the prospective applicant.
- Kilcarbery substation is currently under the consideration of An Bord Pleanála as a direct S182A application (ABP-312793-22) and immediately neighbours the proposed Ballybane substation to the west and south. The Kilcarbery substation is the destination of the proposed blue-line connection option as shown on the close-out drawings. This connection is the potentially preferred option should the Kilcarbery substation receive favourable consideration within the timeline of the subject project.
- <u>Castlebaggot substation</u> this is an existing 110/220kV substation that is located approximately 390m (direct) to the northwest of the subject Ballybane substation.
- 2.3. The site of the proposed Ballybane substation is located south of the central spine access road within Profile Park and immediately neighbours the recently consented peaking power plant site which lies to its east. It is further proposed to provide either (a) a 110kV cable from the subject substation to the existing Barnakyle substation (approximately 210m to the west), or (b) a 110kV connection to the currently proposed Kilcarbery substation. The close-out documentation received provides details of both connection options the Barnakyle connection (consistent with the original submission) shown in yellow and the Kilcarbery option shown in blue. At the pre-application meeting the applicant clarified that as the proposed Kilcarbery substation site is located directly beside (to the south and west) of the subject

Ballybane substation it would (if available) present a viable and potentially preferrable "over-the-fence" connection point.

2.4. To the south of the Barnakyle substation connection point there is a data centre operated by Google, and to its northwest lies the Castlebaggot substation. The site of the proposed development is remote from any existing residential development

3.0 **Proposed Development**

- 3.1. The details of the proposed development are described in the documentation presented by Tobin Consulting Engineers on behalf of the Prospective Applicant; Greener Ideas Ltd c/o Bord Gais Energy, Warrington Place, Dublin 2.
- 3.2. The proposed development is described as follows:
 - 110kV AIS substation (Ballybane), including:
 - EirGrid/ESBN Control Room building,
 - Associated 20kV underground cabling,
 - 110/20kV transformer and associated equipment Lightning masts, house transformer, circuit breaker, current/voltage transformer, surge arrestor, house transformer, internal cabling, and associated works.
 - The connection to the national grid will be either via 110kV underground cabling to the Barnakyle 110kV substation comprising 3 no. power ducts and 2 no. telecoms ducts, the distance of this cabling has been stated as approximately 309m in length or by a more direct, shorter (and potentially preferred) 110kV connection/link to the neighbouring Kilcarbery substation, an application for which is currently under the direct consideration of the Board. On completion, ESBN and EirGrid will be the owner and operator of the 110kV grid connection infrastructure, while the applicant will operate and maintain the IPP (Independent Power Producers) compound.
- 3.3. The drawings submitted with the closure documentations include a layout showing the proposed substation in the context of the newly permitted gas-fired peaking power plant that has been granted permission to the east of the site.

4.0 Planning History

SD21A/0167 Relates to an application for the construction of a gas fired power plant with an electrical output of up to 125MW and all associated works including 6 gas engines, Electrical Annex building, Workshop, Tank Farm building, radiator coolers, oil storage tanks, electrical transformers, and all associated works. It is intended that the subject Ballybane substation will connect this permitted power station (which immediately neighbours the subject site to the east) to the national grid. This application was accompanied by an Environmental Impact Assessment Report and screening for Appropriate Assessment and has been recently (August 2022) granted permission by South Dublin County Council (SDCC) subject to 17 conditions relating to inter alia – finishes, roads, waste heat, drainage, archaeology, signage, archaeology, ecology, department of defence, Inland Fisheries, and noise.

ABP-312793-22: Application for a 110kV Gas Insulated Switchgear compound and 110kV transmission lines along with associated and ancillary works on a site directly neighbouring the subject substation to the south and west. This application is under the direct consideration of An Bord Pleanála and at date of writing no decision has yet issued.

VA06S.VA0019: Relates to the provision of a West Dublin 220/110kV substation and associated works in the Grange Castle area. The associated works include the provision of four 220kV underground cables connecting the two interface compound sites with the new substation and the provision of one 110kV underground cable connecting the permitted substation to the existing 110kV Corkagh substation. This development was permitted by the Board in 2016 and has been developed. This consent relates to the Castlebaggot substation located approximately 390m northwest of the subject substation.

SD21A/0241 Relates to a recently granted application for demolition of a dwelling and construction of a data centre development comprising 2 no. two-storey data centres with of gross area of 40,589m², including 33 emergency generators and a gas-powered generation plant containing 10 gas generators on a site to the north of the subject development. Permission was granted by SDCC for this development (which is located to the north of the subject site – on the opposite side of the

business park spine road) in May 2022. An appeal was lodged in relation to the decision but subsequently withdrawn.

5.0 Planning Policy

5.1. Climate Action Plan

5.1.1. As part of its functions the Board must, in so far as practicable, perform its functions in a manner that is consistent with the most recent approved climate action plan, most recent approved national long term climate action strategy, national adaptation framework, sectoral plans, furtherance of the national climate objective and the objective of mitigating greenhouse gas emissions and adapting to the effects of climate change in the State¹. The Climate Action Plan supports the increased penetration of renewable energy onto the national grid and general decarbonisation of the economy.

5.2. National Planning Framework

5.2.1. The National Planning Framework (NPF) is the Governments high-level strategic plan for shaping the future growth and development of Ireland to 2040. It is centred on ten National Strategic Outcomes (NSOs) which include NSO 5 – A strong Economy supported by enterprise, innovation, and skills, as well as NSO 8 – Transition to a Low Carbon and Climate Resilient Society. NSO 5 requirements include the coordination of growth and investment in world class infrastructure, while NSO 8 requirements include the provision of new energy systems and transmission grids to support a more distributed renewables-focused generation.

5.3. Eastern and Midland Regional Spatial and Economic Strategy

 5.3.1. The Eastern and Midland Regional Spatial and Economic Strategy 2019 – 2031 (RSES) acknowledges that the Eastern Region is a major load centre on the Irish transmission system and states that:

¹ Section 15(1) of the Climate Action and Low Carbon Development Act 2015 (as amended) refers.

"Developing the grid in the Region will enable the transmission system to safely accommodate more diverse power flows from renewable generation and also to facilitate future growth in electricity demand. These developments will strengthen the grid for all electricity users, and in doing so will improve the security and quality of supply. This is particularly important if the Region is to attract high technology industries that depend on a reliable, high quality, electricity supply."

5.3.2. Accordingly, the RSES provides support for the development of a safe, secure, and reliable supply of electricity as well as new transmission infrastructure projects to service the existing and future needs of the region. Policy RPO 10.20 is relevant in this regard which states:

"RPO 10.20: Support and facilitate the development of enhanced electricity and gas supplies, and associated networks, to serve the existing and future needs of the Region and facilitate new transmission infrastructure projects that might be brought forward in the lifetime of this Strategy. This includes the delivery of the necessary integration of transmission network requirements to facilitate linkages of renewable energy proposals to the electricity and gas transmission grid in a sustainable and timely manner subject to appropriate environmental assessment and the planning process."

5.4. County Development Plan

- 5.4.1. The site of the proposed development is within the functional area of South Dublin County Council and accordingly the provisions of the South Dublin County Development Plan 2022-2028 (CDP) (effective from August 2022) is the pertinent plan. Under the provisions of this plan the site of the proposed development has a zoning objective of "EE to provide for enterprise and employment related uses".
- 5.4.2. Policy IE6: of the CDP relates to Electricity Infrastructure and states it is policy to "Protect the existing electricity infrastructure and support the development of a safe, secure and reliable supply of electricity and the development of enhanced electricity networks as well as new transmission infrastructure projects subject to the relevant environmental assessments."

6.0 **Prospective Applicant's Submission**

The applicant considers that the subject development would constitute Strategic Infrastructure for the purposes of electricity transmission, pursuant to Section 182A of the Planning and Development Act, 2000 as amended. The main points raised in this regard in their submission can be summarised as follows:

- The proposed development constitutes 110kV electrical infrastructure.
- The proposed development will form part of the transmission system which will be operated by Eirgrid.

7.0 Relevant Legislation

Section 182A (1) of the Planning and Development Act 2000 (as amended) ("the Act") provides that: "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 'transmission' in relation to electricity, as being "...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."

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.
- (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. The proposed development comprises a 110 kV substation and two potential associated underground electrical 110kV cabling options for connecting to either the existing Barnakyle substation or the currently proposed Kilcarbery substation and all associated works.
- 8.2. I consider that the proposed 110kV substation can be accurately described as electric plant as defined in relevant legislation. The proposed development includes high voltage connection lines of 110 kV.
- 8.3. I consider that the proposal meets the definition of electricity transmission under section 2(1) of the Electricity Regulation Act 1999. As such it would fall under section 182A of the PDA and would be deemed to be strategic infrastructure development.
- 8.4. I conclude that the proposed development as described in the submitted documentation constitutes strategic infrastructure within the scope of section 182A of

the Planning and Development Act 2000, as amended, necessitating an application direct to the Board.

8.5. I attach an Appendix of relevant prescribed bodies.

8.6. Future Application Considerations

- 8.7. Section 182E 2(b) of the Act states that in pre-planning consultations the Board may give advice to a prospective applicant regarding what considerations related to proper planning and sustainable development or the environment, may, in the opinion of the Board have a bearing on its decision in relation to the application. I refer to the points below in this regard:
 - It is proposed that the subject development will facilitate the connection of an approved gas-fired peaking power plant to the national grid, the primary purpose of which is stated as being to provide grid support, backup, and balance to support the provision of additional renewable energy developments onto the national grid. I note that the justification for the peaking power plant in the context of the national climate change objectives has been accepted by SDCC within its decision to grant permission (which included an Environmental Impact Assessment) for that development. Any future application for supporting infrastructure to facilitate the permitted power plant should also include justification in terms of the relevant Climate Action Plan and policy support for increased provision and support for renewables on the National Grid.
 - The CDP zones the site of the proposed development as "EE to provide for enterprise and employment related uses". Any future application should demonstrate its acceptability under this zoning provision.
 - The applicant has previously been advised in relation to the potential EIA requirements in relation to the proposed development and the relevant considerations in this regard. The record of the previous meeting (held on the 5th of May 2022) states the following in this regard:

"The Boards representatives noted that the project is not a 'type' for EIA purposes, however, as the proposed development is associated with a power plant that is subject to EIA the prospective applicant

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should address any concerns regarding potential project splitting. The Boards representatives advised that comprehensive details be provided in this regard in any future application."

The decision to grant permission in relation to the power plant has now issued from SDCC and the planning recommendation on that file states as follows regarding the grid connection:

"The applicant states that the proposed electrical connection considered in the EIAR is the underground 110 kV cable from the plant's main transformers to the existing Castlebaggot 220/110 kV substation which is operated by EirGrid or to a new proposed 110kV substation in Profile Park. Planning permission is not sought for these connections as part of the current application. Either Greener Ideas Limited or EirGrid will be responsible in the future for securing the necessary planning permission for these electrical connections. Similarly, in the event that Greener Ideas Limited and a data centre operator agree for a private power supply to be provided then this would also be subject to its own separate consenting process.

Given the above, should planning permission be granted, a condition is recommended seeking details of connection to the grid, prior to the commencement of development."

In relation to the potential *"new proposed 110kV substation"*, the planning recommendation states that the submitted EIAR acknowledges that *"No confirmed details of this potential new substation were available for consideration as part of this EIAR"*. I also note that the current pre-application consultations do not relate to a grid connection to the Castlebaggot substation which is referenced in the submitted EIAR as a connection point for the power plant. Furthermore, on review of the power plant decision that issued from SDCC it does not appear that any condition has been imposed seeking additional details of the grid connection. Given the lack of clarity in relation to the grid connection and what may or may not have been assessed in the submitted EIAR or the EIA carried out by SDCC for the power plant application to the grid consideration application will have to give careful consideration to

EIA matters in relation to the proposed development and the need to provide comprehensive details in this regard as set out in the previous minutes is reiterated.

- In relation to Appropriate Assessment (AA), while this is a matter for the prospective applicant to consider in detail as part of any future application, I note that screening was acceptable to SDCC for the recently granted neighbouring power plant application. On review of the reporting this was accepted due to that project connecting to public services and relevant separation distances to Natura 2000 sites (the closest designated site, Rye Water Valley/Carton SAC, lying in excess of 6km to the north west.
- I would advise that in any future application the prospective applicant should give careful consideration to drainage design, landscaping/external finishes, noise (including cumulative), archaeology/heritage, Construction and Environmental Management Plan, as well as any issues arising from proximity to Casement Aerodrome.

9.0 Recommendation

9.1. I recommend that the prospective applicant, Greener Ideas Ltd. c/o Bord Gais Energy, Warrington Place, Dublin 2 be notified that the proposed development consisting of a 110 kV substation and associated infrastructure including two potential grid connection options, in Profile Business Park, Clondalkin, Dublin 22 as described in the documents received by the Board on 11th March 2022 and as augmented by the updated layout received by the Board on the 28th October 2022 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.

Jimmy Green Senior Planning Inspector

10th November 2022

Appendix – list of prescribed bodies

The following list identifies the prescribed bodies which are considered relevant in this instance for the purposes of Section 182A(4)(b) of the Act.

- Minister of Housing, Local Government and Heritage,
- Minister of the Environment, Climate and Communications
- South Dublin County Council
- Transport Infrastructure Ireland
- Commission for Regulation of Utilities,
- Irish Water
- Irish Aviation Authority