



An  
Bord  
Pleanála

## Inspector's Report ABP-315659-23

### Development

Electricity grid substation compound, a medium voltage switchgear and control equipment building, a building housing indoor high voltage (HV) gas insulated switchgear (GIS) equipment, high voltage busbar connections, step-down power transformers, and underground cables connecting the proposal to the existing 110kV overhead lines.

### Location

Halverstown, Naas, Co. Kildare.

### Planning Authority

Kildare County Council

### Prospective Applicant

Herbata Ltd.

### Type of Application

Pre-application consultation under section 182E of the Planning & Development Act, 2000 (as amended)

### Date of Site Inspection

28<sup>th</sup> February 2023

### Inspector

Anthony Kelly

## 1.0 Site Location and Description

- 1.1. Herbata Ltd. requested pre-application consultation under the Planning & Development Act, 2000 (as amended), for the proposed development of an electricity grid substation compound. A pre-application consultation took place between the Board's representatives and the prospective applicant on 14<sup>th</sup> March 2023. The prospective applicant formally requested closure of the pre-application consultation process by written correspondence received by the Board on 2<sup>nd</sup> May 2023.
- 1.2. The primary purpose of the pre-application consultation was to address the issue of whether or not the proposed development constitutes strategic infrastructure for the purposes of the Planning & Development Act, 2000 (as amended), and to consider 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 procedures involved in making the application.
- 1.3. This report provides an overview of the proposed project, a summary of the meeting and the advice provided by the Board's representatives at that meeting, and legislative provisions. The report recommends that the Board determine that the proposed development does fall within the definition of development under s182 of the Act. It also recommends a list of prescribed bodies that should be forwarded copies of any application.

## 2.0 Proposed Development

- 2.1. The proposed development comprises an electricity grid substation compound, a medium voltage switchgear and control equipment building, a building housing indoor high voltage (HV) gas insulated switchgear (GIS) equipment, HV busbar connections, step-down power transformers, and underground cables connecting the proposed development to the existing 110kV overhead lines. The proposed substation would allow connectivity to a proposed data centre comprising six data centre buildings with an electrical capacity to support up to 30MW of IT equipment load in each building.
- 2.2. It consists of:
  - 110kV GIS building/grid substation approx. 1,350sqm and 15 metres in height

- undergrounding of a 110kV transmission line
- 1 no. 16 metres high dropdown tower
- connection of new 110kV underground cables into the new substation
- client control building
- internal road layout, boundary fences, underground services, and ancillary works.

2.3. There are two elements. The first element would be a new node on the electricity grid which would be handed over to and operated by EirGrid as the transmission system operator. The second element would comprise the transformation to a lower voltage to enable distribution to/from the proposed data centre.

2.4. The applicant states that the purpose of the proposed substation is as follows:

- To allow the generation provided for the data centre development to export power to the grid as and when required.
- To allow the battery storage provided for the data centre site to provide frequency stability to the grid as and when required.
- To allow the data centre site to draw power from the grid as and when required e.g. when repairs are being carried out to gas turbines.
- To allow EirGrid to use the spare circuit breakers provided to feed further capacity in the area.

### 3.0 Site Location and Description

3.1. The proposed site is located to the west of Naas in central Co. Kildare. The site is approximately 750 metres west of the M7 motorway.

3.2. The proposed site occupies the north western corner of a larger field with hedge and tree lined boundaries along its western and northern (roadside) sides. The field has an established vehicular access from the south side of the R409 road located between Halverstown crossroads approx. 300 metres to the west and Osberstown Industrial

Park approx. 500 metres to the north east. The primary land use in the immediate vicinity is agriculture. There are a number of overhead electricity lines in the vicinity.

3.3. The proposed site has a stated area of 2.94 hectares.

## 4.0 Planning History

4.1. The planning authority's website does not show any previous planning history on site.

4.2. The applicant's 'SID Application Pre-Application Consultation Planning Report', prepared by RPS and dated 20<sup>th</sup> January 2023, states that the proposed substation would allow connectivity to a proposed data centre which is to be subject of a separate planning application to Kildare Co. Co. The proposed data centre would comprise six two-storey data centre buildings, an administration building, car parking, landscaping etc.

## 5.0 Legislative Provisions

5.1. Under s182A(1) of the Planning & Development Act, 2000 (as amended) (inserted by s4 of the Planning & Development (Strategic Infrastructure) Act, 2006), where a person, thereafter referred to as the 'undertaker', intends to carry out development comprising or for the purposes of electricity transmission, the 'proposed development', the undertaker shall prepare, or cause to be prepared, an application for approval of the development under s182B and shall apply to the Board for such approval accordingly.

5.2. S182A(9) states that 'transmission' shall be construed in accordance with s2(1) of the Electricity Regulation Act 1999 'but, for the purposes of this section ... 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'.

- 5.3. S2(1) of the Electricity Regulation Act 1999 defines 'transmission', in relation to electricity, 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' (Commission – Commission for Energy Regulation, Board – Electricity Supply Board; ESB).
- 5.4. '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 switchgear and which is used for conveying electricity to final customers'.
- 5.5. 'Electric plant' is defined as '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 ...'
- 5.6. S182E sets out procedures in advance of seeking approval under s182B. Subsection (1) states that a prospective applicant who proposes to apply for approval under s182B 'shall, before making the application, enter into consultations with the Board in relation to the proposed development'.

## 6.0 Prospective Applicant's Submission

- 6.1. The prospective applicant submitted a consultation report with the pre-application consultation request. The reasons why it is considered that s182 of the Act is the appropriate consent route for the proposed electrical grid substation and breaking into and partially undergrounding the existing 110kV overhead lines are set out in section 3 of the submitted report. The proposed substation and loop-in infrastructure are consistent with the relevant definitions of electric plant and transmission, and it is accordingly considered to be development for the purpose of electricity transmission.

The proposed substation would become a new substation node on the national transmission network. The prospective applicant also considers that the long title of the Planning & Development (Strategic Infrastructure) Act, 2006, is relevant.

- 6.2. Page 10 of the submitted report states 'The on-site power generation capacity is in excess of that required for the operation of the data centre and provides an opportunity for the export of energy to the national grid if and when required'. A 'Pre-Planning Report' document, prepared by RPS and dated 12<sup>th</sup> October 2022, is attached as appendix A. It was prepared for a pre-planning meeting with Kildare Co. Co. for the proposed data centre development and it contains additional information.

## 7.0 Pre-Application Consultation

- 7.1. One online consultation meeting was held on 14<sup>th</sup> March 2023. Full detail of the meeting and matters raised are contained in the Board's Record.
- 7.2. The meeting's Chair outlined the general procedures in relation to the pre-application consultation process. The prospective applicant provided, inter alia, an overview of the site location, a description of the overall development of both the proposed data centre and electricity substation, the relevant legislation, and identified a number of other similar applications that it considers are precedents. It is the opinion of the prospective applicant that the proposed electrical substation development qualifies as strategic development.
- 7.3. Some matters discussed after the prospective applicant's presentation included:
- The gas pipeline to facilitate the proposed data centre development has to be brought onto the site.
  - The applicant stated that the import of electricity to the data centre development would only be occasional and would be planned. The prospective applicant would generally be exporting to the grid as an autoproducer, rather than importing electricity.
  - The electrical substation and provision of roads would be the first works carried out in the overall proposed development.

- There would be a requirement for SCADA communications within the substation, but there would not be any commercial telecommunications masts.
- The prospective applicant was advised to ensure a clear distinction between the separate applications and consent approval routes in documentation e.g. environmental impact assessment report (EIAR) and Natura impact statement (NIS), and it should be clear what is being sought from what planning authority.

## 8.0 Assessment

### 8.1. Strategic Infrastructure

- 8.1.1. The proposed development comprises the construction of a 110kV electrical substation on the national grid to connect to a proposed data centre development to allow both import and export of electricity. The prospective applicant is seeking a determination from the Board as to whether the proposed development is or is not strategic infrastructure.
- 8.1.2. Under s182A(1) of the Planning & 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. S182A(9) states that 'transmission' shall be construed in accordance with s2(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. S2(1) of the Electricity Regulation 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 defined. There is no threshold under s182A(9) of the Planning & Development Act, 2000 (as amended) in respect of a substation.
- 8.1.3. The proposed new substation and associated infrastructure would enable/facilitate both the import and export of electricity to and from the data centre development. The submitted pre-application consultation report states 'The proposed data centre will have its primary source of power generation on-site. Generation of electricity is proposed on site using highly efficient gas turbines for the majority of the generation, with top up from gas engines. Gas will be sourced from the Gas Networks Ireland

(GNI) gas network. Above ground installation (AGI) compounds will be located on the site to allow connection to GNI's infrastructure' (pg.7). Diesel is intended as a secondary source of fuel supply. Each building will also have a dedicated battery energy storage system (BESS). Page 10 of the report states 'The on-site power generation capacity is in excess of that required for the operation of the data centre and provides an opportunity for the export of energy to the national grid if and when required. The proposed development directly addresses electricity generation constraints'.

- 8.1.4. The proposed development involves a 110kV substation and the undergrounding of an existing 110kV transmission line. The prospective applicant considers that the proposed substation would become a new substation node on the national transmission network, forming an integrated part of the network. This element of the proposed development would be operated by EirGrid. The proposed GIS building is as per EirGrid standards. Excess power generation on-site can be exported to the grid. The electrical power of the existing 110kV line would therefore be entirely diverted into the proposed substation and back out again. The proposed new substation and associated infrastructure would form an integral part of the overhead line circuit and part of the transmission grid.
- 8.1.5. I note the similarity between this case and other proposals put before the Board for pre-application consultation under s182E of the Planning & Development Act, 2000 (as amended). In these cases the Board determined that the provision of a new 110kV substation and associated 110kV cabling which is looped into the existing transmission system constitutes strategic infrastructure e.g. ABP-310507-21 (Ennis, Co. Clare) and ABP-312532-22 (Kilcormac, Co. Offaly). I consider that the subject case is comparable, and therefore recommend that the undertaker submit any application for approval of the proposed development to the Board.

## 8.2. **Environmental Impact Assessment (EIA) & Appropriate Assessment (AA)**

- 8.2.1. S182A(2) of the Planning & Development Act, 2000 (as amended) states that 'In the case of development ... 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









