



An
Bord
Pleanála

Inspector's Report

ABP-319879-24

Development

Proposed construction of a 220kV Gas Insulated Switchgear Substation, 8 Transformer Bays & Site Infrastructure, undergrounding of existing 220kV transmission lines, and 2.no underground 220kV transmission lines to connect to the existing Dunstown 200kV/400kV substation

Location

Located on lands at Jigginstown, Co Kildare

Planning Authority

Kildare County Council

Planning Authority Reg. Ref.

Not applicable

Applicant(s)

Microsoft Ireland Operations Ltd

Type of Application

Pre-application consultation under S.182E of the 2000 Act.

Planning Authority Decision

Not applicable

Date of Site Inspection

25th July 2024

Inspector

David Ryan

1.0 Introduction and Background

- 1.1. A pre-application consultation meeting was held in respect of a proposed development which involves the development of a substation and transmission lines to serve proposed data centres at Jigginstown, Co. Kildare. In the meeting (22/8/24) the applicant proposed a 220kV Gas Insulated Switchgear Substation, the undergrounding of existing 220kV overhead transmission lines extending across the site, and 2 no. underground 220kV transmission lines from the proposed substation to connect into the existing Dunstown 200kV/400kV substation 5.3km to the south, to support power demand and back up power generation plant for 3 no. proposed data centres. An application including for 3 no. data centres will be made to Kildare County Council in late 2024.
- 1.2. The primary purpose of the consultation is to ascertain whether or not the proposed development constitutes strategic infrastructure for the purposes of the Planning and Development Act 2000, as amended. In its letter requesting closure of the pre-application consultation process, dated 3rd October 2024, the applicant has requested a determination on whether the project is considered to constitute strategic infrastructure development and that an application under S.182A would be appropriate.

2.0 Site Location and Description

- 2.1. The proposed 220kV substation is located to the west of a proposed data centre campus site, to the west of Naas and east of the M7. The proposed substation is located in agricultural lands served by a farm access lane to the northeast. Existing 220kV overhead lines and pylons run north-south at the proposed substation site. The Grand Canal is located to the west adjacent the site. It is outlined the proposed data centre development will be accessed from the Naas Southern Ring Road (R744). The indicative grid connection routes set out which will connect the proposed substation to the existing Dunstown 200kV/400kV substation to the south, are located within third party lands and public roads. A number of archaeological monuments are located in the general vicinity of these indicative routes.

3.0 Proposed Development

- 3.1. The proposed development relates to the provision of a 220kV Gas Insulated Switchgear (GIS) Substation, 8 no. transformer bays, and site infrastructure; the undergrounding and diversion of the existing 220kV overhead transmission lines extending across the substation site so that they pass around the periphery of the main data centre campus site and to the west and south of the proposed substation compound; and 2 no. underground single circuit 220kV transmission lines from the proposed substation to connect into the existing Dunstown 200kV/400kV substation 5.3km to the south. The proposal is to support power demand and back up power generation plant for 3 no. proposed data centres. The proposed substation also forms a potential future node on the network and transmission system as it will have the potential to facilitate the energising of other developments on completion.
- 3.2. In relation to the indicative grid connection routes, these will be subject to landowner consents.

4.0 Planning History

- 4.1. There is no relevant planning history. An application including for data centre development at this site location has not been received, as outlined in a planning search on the Kildare County Council website.

5.0 Precedent Decisions

- 5.1. I note the similarities between this project and other examples put before the Board where it has been determined as to whether or not they constitute SID. Precedent cases that are relevant to the current application before the Board are set out in the Table below.

ABP Ref.	Development Description	Decision Date	ABP Decision
313680	Development of 100kV substation and grid connection	2023	Is SID
313352	110kV substation and grid connection cabling	2022	Is SID

313001	110kV substation and underground grid connection.	2022	Is SID
312860	Proposed development of 110kV electrical substation and its grid connection options to the existing transmission network	2022	Is SID
312700	Proposed 110kV loop-in substation, overhead lines to connect to transmission network and underground grid connection to consented solar farm	2022	Is SID
312532	Proposed development of a 110kV on-site 'Loop-In/Loop Out' substation.	2022	Is SID
312249	Development of a 110kV substation and provision of electrical connection to the national grid	2022	Is SID
311904	Proposed new tail-fed 110kV substation and associated works.	2022	Is SID
311778	Provision of a 110kV GIS substation and associated development	2022	Is SID
311403	Proposed development of 110kV infrastructure	2022	Is SID
311204	Proposed 110kV substation	2022	Is SID
311176	Proposed construction of two new 110kV substations and 110kV underground cable connecting both substations	2022	Is SID
311403	Proposed development of 110kV infrastructure	2022	Is SID
311032	Proposed new tail fed 110kV substation and 110kV underground cables	2022	Is SID
312226	Construction of a 110kV substation and underground grid connection.	2022	Is SID

6.0 Pre-application Consultation Meeting

- 6.1. A meeting took place on the 22nd August 2024. The consultation proposed a 220kV substation and the undergrounding and diversion of the existing 220kV overhead transmission lines at the substation location, and 2 no. underground 220kV transmission lines from the proposed substation to connect into the existing

Dunstown 200kV/400kV substation 5.3km to the south. The purpose of the meeting was to discuss the proposed development and legislative requirements under Section 182A of the P&D Act 2000, as amended.

- 6.2. The applicant contended that the construction of a 220kV substation, undergrounding and diversion of existing 220kV overhead transmission lines, and 2 no. underground 220kV transmission lines from the proposed substation connecting into the existing Dunstown 200kV/400kV substation falls within the scope of Section 182A(1) of the Act, based upon the definition of electricity transmission as set out in Subsection 9 of Section 182A.

7.0 Legislative Provisions

7.1. Planning and Development Act 2000, as amended

Section 2

Section 2(1) of the Act defines 'strategic infrastructure' as including, inter alia: "any proposed development referred to in section 182A(1)"

Section 182A

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.

Subsection 182A(9) states:

"... '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."*

7.2. Electricity Regulation Act 1999, as amended

'Transmission' is defined in section 2(1) of the Electricity Regulation Act, 1999, as amended, 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, 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 Board¹."

'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....'

8.0 **Assessment**

8.1. **Strategic Infrastructure Development**

- 8.1.1. The proposed development comprises a 220kV Gas Insulated Switchgear (GIS) substation, the undergrounding and diversion of existing 220kV overhead transmission lines, and 2 no. underground single circuit 220kV transmission lines from the proposed substation to connect into the existing Dunstown 200kV/400kV substation, to support power demand and back up power generation plant for 3 no. proposed data centres. The proposed substation will also form a potential future node on the network and transmission system.
- 8.1.2. The prospective applicant is seeking a determination from the Board as to whether the proposed development is or is not Strategic Infrastructure Development. The prospective applicant contends that it is Strategic Infrastructure Development on the basis that it involves the construction of high voltage lines for the purposes of

¹ The Electricity Supply Board

transmitting electricity where the voltage in the cables would be 110 kilovolts or more. In this case the voltage in the cables would be 220 kilovolts.

- 8.1.3. Under section 182A of the PDA 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'*.
- 8.1.4. Section 2(1) of the Electricity Regulation Act defines the transmission system as a system which consists wholly or mainly of high voltage lines and electrical plant 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. I consider that the proposed substation constitutes 'electric plant' as defined in relevant legislation.
- 8.1.5. The proposed substation and 2 no. underground single circuit 220kV transmission lines connecting into the Dunstown 200kV/400kV substation would enable the transport of electricity to support power demand, and form a potential future node on the network and transmission system. The development would be facilitated by the undergrounding and diversion of existing 220kV overhead transmission lines. On the basis of the information submitted and discussions held at the pre-application consultation meeting, it is considered that the proposed 220kV substation and 2 no. underground 220kV transmission lines which will connect into the existing Dunstown 200kV/400kV substation constitutes the 'transport of electricity by means of a transmission system' as defined in Section 2(1) of the ERA. The construction of a 220kV substation, connecting into an existing 200kV/400kV substation 5.3km away by means of 2 no. underground 220kV transmission lines meets the definition of transmission as set out in S182A(9) of the Act and Section 2(1) of the ERA. Under the P&DA 2000 the definition of electricity transmission for SID purposes is a high voltage line of 110kV or greater, as per S.182A(9). Accordingly, I consider the proposed 220kV infrastructure would fall under S182A (1) of the Act and would be deemed to be SID.

8.1.6. I conclude that the proposed development constitutes strategic infrastructure coming within the scope of s.182A of the P&DA 2000 (as amended), therefore necessitating an application to be made directly to the Board.

8.2. Prescribed Bodies

8.2.1. 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 Appendix A in respect of any future application for approval.

9.0 Recommendation

I recommend that Microsoft Ireland Operations Ltd be informed that the proposed development consisting of a 220kV substation, the undergrounding and diversion of the existing 220kV overhead transmission lines, and 2 no. underground 220kV transmission lines connecting into Dunstown 200kV/400kV substation to support power demand for proposed data centres, at Jigginstown, Co. Kildare as set out in the plans and particulars received by An Bord Pleanála, falls within the scope of section 182A of the Planning and Development Act, 2000 (as amended), and that any planning application should be made directly to the Board.

I confirm that this report represents my professional planning assessment, judgement and opinion on the matter assigned to me and that no person has influenced or sought to influence, directly or indirectly, the exercise of my professional judgement in an improper or inappropriate way.



David Ryan
Senior Planning Inspector

10th October 2024

Appendix A: Prescribed Bodies

The following is a list of prescribed bodies considered relevant by the Board:

- Minister for Housing, Local Government and Heritage
- Minister for the Environment, Climate and Communications
- Minister of Agriculture Food and the Marine
- Kildare County Council
- An Taisce
- Fáilte Ireland
- Heritage Council
- An Chomhairle Ealaíon
- Irish Water
- Commission for Regulation of Utilities
- Inland Fisheries Ireland
- Health Service Executive
- Office of Public Works
- ESB
- Eirgrid

Further notifications should also be made, where deemed appropriate.