

Inspector's Report ABP-315998-23

Development

Refurbishment of a section of the existing:

 Maynooth - Turlough Hill 220 kV circuit between Tower 119 in the townland of Hollywood Lower, Co. Wicklow, and Turlough Hill 220kV Substation in the townland of Brockagh and Sevenchurches or Camaderry Co. Wicklow (Structure 119 to Station).

Dunstown -Turlough Hill 220 kV Circuit
 (between a Line Cable Interface Mast (LCIM) in
 the townland of Brockagh, Co. Wicklow, and
 Turlough Hill 220kV Substation in the townland
 of Brockagh and Sevenchurches or Camaderry
 Co. Wicklow (Structure 175 to Station).

Location

Townlands between Hollywood Lower and Brockagh and Sevenchurches or Camaderry Co. Wicklow

Planning Authority

Wicklow Co. Co.

Prospective Applicant

Eirgrid Plc

Type of Application

SID Pre-Application Consultation request under S.182E of the planning and Development Act

2000, as amended

Inspector

Conor McGrath

1.0 Introduction

The Board received a request on 06/03/2023 from Eirgrid Plc to enter into a preapplication consultation under section 182E of the Planning and Development Act 2000, as amended, in relation to development consisting of refurbishment works to two high voltage electricity circuits, Maynooth – Turlough Hill 200kV and Dunstown – Turlough Hill 220kV. This report provides an overview of the proposed development, relevant precedents and legislative provisions and recommends that the proposed development would not constitute strategic infrastructure development. It was considered that a pre-application consultation meeting was not necessary in this case.

2.0 Site Location and Description

Turlough Hill Power Station is a 292MW pumped storage power station located at the Wicklow Gap, in Co. Wicklow, owned and operated by the Electricity Supply Board (ESB). Two high voltage 220kV lines runs west from the power station substation, initially via underground cable (UGC) and subsequently by overhead line (OHL), via Hollywood, Co. Wicklow, to substations at Dunstown, and at Maynooth, Co. Kildare.

3.0 **Proposed Development**

The proposed development relates to refurbishment works to the two high voltage electricity circuits, Maynooth – Turlough Hill 200kV and Dunstown – Turlough Hill 220kV. These circuits run as two parallel underground fluid-filled cables (FFC's) for 1.8km from the 220kV substation in Turlough Hill to a line interface mast at Brockagh, Co. Wicklow, after which point they as run west parallel overhead lines.

The Maynooth – Turlough Hill circuit is described as essential for system security in the eastern region. A Line Condition Assessment (LCA) and Line Project Assessment Report (LPAR) identified a requirement for refurbishment of the OHL element of this existing circuit which is nearly 50 years old, in order to maintain the life of the asset and its continued operation. The refurbishment works relate to a section of the line from Tower 119 at Hollywood, approx. 15km west of Turlough Hill, to the line interface mast at Brockagh.

In addition, it is EirGrid policy to remove and replace Fluid Filled Cable's (FFC) across the overall electricity transmission system. The refurbishment of the existing OHL provides an opportunity to complete these replacement works along the 1.8km cable route on this circuit concurrently and reduce outage times on this line.

The Maynooth – Turlough Hill Line Cable Interface Mast Compound is also utilised by the existing Dunstown-Turlough Hill 220 kV Circuit, where the OHL (which runs parallel to the Maynooth – Turlough Hill 220 kV circuit) also changes to UGC. It is proposed to also replace this existing FFC on this circuit, given proximity to the other line and sensitivity of the landscape.

The proposed works are described as comprising:

- Maynooth Turlough Hill 220kV OHL refurbishment from Tower 119 which includes the painting of towers, replacement of insulators and hardware, foundation works on several towers, replace vibration dampers and miscellaneous works, including replacement of shackles, clamps, arcing horns and danger notices.
- Replacement of the existing underground Fluid Filled Cables (FFC) from the
 LCIM to the Turlough Hill 220 kV Station including the installation of double circuit
 XLPE cable (or equivalent) for both the new Maynooth Turlough Hill 220 kV
 Circuit and the Dunstown Turlough Hill 220 KV Circuit. The works include
 draining and capping of the existing 220kV Fluid Filled Cables of both 220kV
 circuits, decommissioning of all FFC accessories including tanks, pipes, joints,
 pillars and cabinets, and replacement of cable sealing ends at the LCIM and
 Turlough Hill Substation for both circuits.
- The routing of the replacement underground cable is currently under consideration having regard to the sensitive nature of the landscape. However, it is expected to run largely parallel to the existing circuit.
- The replacement of apparatus in the existing Turlough Hill 220kV Station, including circuit breaker, voltage transformers disconnects surge arrestors, and PLC teleprotection.

 Ancillary works including the replacement of chain link fence with palisade fence;
 making good surface, install MEWP access, walkways and crushed stone at the LCIM Compound.

4.0 Nature of the Request

The Board is requested to advise as to whether or not the proposed development constitutes Strategic Infrastructure Development in accordance with the provisions of section 182A of the Planning and Development Act 2000, as amended or whether an application for permission should be made to the local authorities for the respective areas in accordance with the provisions of s.34 of the Planning and Development Act, 2000, as amended.

5.0 Case made by Prospective Applicant

- The works are described as part of a suite of refurbishments being progressed on the national grid to aid the integration of future renewable generation and alleviate constraints on the network.
- They are typical refurbishment works as part of the EirGrid and ESB's routine function to ensure the safe, secure and reliable transmission of electricity.
- It is also EirGrid's policy to replace all Fluid Filled Cables on the existing transmission network.
- Given the nature, scale and function of the proposed development on the transmission network and given that the project relates to an existing and longestablished circuit, and having regard to Section 37(A)(2) of the Planning and Development Act 2000, as amended, it is argued that the proposed development does not comprise Strategic Infrastructure Development.
- In forming this opinion, EirGrid refers to previous determinations of the Board in relation to similar uprating and refurbishment of transmission circuits, as set out below:

- VC0106: Refurbishment of the existing Cloon to Lanesboro 110 kV Overhead Line, 25/10/2017.
- VC0108: Uprate and Refurbishment of the existing Great Island Kilkenny 110 kV Overhead Line substation, 27/06/2018.
- 305276: Refurbishment works to the existing Great Island Kellis 220 kV Line, 23/10/2019.
- 309446: Uprating of the 110 kV circuit between Binbane 110 kV Substation and Cathaleen's Fall 110 kV Station, Co. Donegal, 14/06/2021.
- 310830: Uprate of the 110 kV circuit between Castlebar 110 kV Substation Co. Mayo and Cloon 110 kV Substation, Tuam, Co. Galway, 01/10/2021.
- 311253: Refurbishment of a 220 kV circuit between Cashla 220 kV Station and Flagford 220 kV Station, 01/10/2021.
- 311396: Uprate of the 110 kV circuit between Glenree 110 kV Substation and Moy 110 kV Substation Gorteen Co. Mayo, 11/11/2021.
- 312519: Various Uprating of five 110 kV circuits.

6.0 Relevant Planning Cases & History

The prospective applicants have identified a number of previous determinations in relation to refurbishment and uprating works to existing high voltage circuits, as described above. In addition, I note the following case:

ABP-313661-22: Proposed upgrading of the Prospect-Tarbert 220 kV Underground Cable comprising upgrading and replacement of the 2.6km FFC underground / submarine cable running across the estuary with an XPLE cable and associated substation works. This was determined not to come within the scope of S.182A.

7.0 Legislative Provisions

Section 2(1) of the Planning and Development Act 2000 (as amended), defines 'strategic infrastructure' as including, inter alia: (d) any proposed development referred to in section 182A(1).

Section 182A(1) of the Act provides that, 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 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."

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.

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."

8.0 Assessment

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).

Based on this definition and the information contained in the prospective applicant's request, I am satisfied that the existing 220kV circuits and substation at Turlough Hill form part of the electricity transmission system for the purposes of the 2000 Act.

The proposed development relates to upgrade works to two existing transmission circuits. Works to the Maynooth – Turlough Hill line comprise refurbishment of the overhead line and replacement of an existing underground cable. Works to the Dunstown – Turlough Hill circuit relate to replacement of an existing underground cable.

In respect of the upgrading and refurbishment works to the overhead line and other ancillary works including replacement of apparatus in the existing Turlough Hill 220kV Station, these are regarded as comprising typical upgrade works to maintain

infrastructure and improve efficiency of the transmission network. The works would be carried out without making any fundamental change to the function or appearance of the infrastructure and there would be no deviation to the route of the established circuit. No new circuit is proposed. The previous determinations of the Board in respect of developments of a similar nature, as set out above, are relevant in this regard.

In respect of the proposed replacement of existing underground cables, I note that fluid filled cable (FFC) circuits comprise an older technology. They are currently being replaced as part of a nationwide programme, which recognises the environmental challenges in operating and maintaining such FFC circuits, and in order to provide more efficient cable technology. I consider that these works can be regarded as typical upgrade and refurbishment works on a transmission network and this interpretation is consistent with previous determinations by the Board (ABP-313661).

Having regard to the nature and scale of development described in the documentation submitted to the Board and the rationale therefor, and to the previous determinations by the Board, I do not consider that the development as described would 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.

I note also the prospective applicant's statement that while the proposed development, could comprise exempted development with reference to section 4(1)(g) of the Act, AA screening has concluded that Stage II Appropriate Assessment is likely to be required. Planning permission would therefore be required for the proposed development.

9.0 Recommendation

I recommend that the prospective applicant, Eirgrid Plc, be informed that the proposed development, consisting of the proposed refurbishment of a section of the existing:

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 Dunstown-Turlough Hill 220 kV Circuit between a Line Cable Interface Mast (LCIM) in the townland of Brockagh, Co. Wicklow, and Turlough Hill 220kV Substation in the townland of Brockagh and Sevenchurches or Camaderry Co. Wicklow (Structure 175 to Station).

in the townlands of Brockagh and Sevenchurches or Camaderry Co. Wicklow, as set out in the plans and particulars received by An Bord Pleanála on the 06/03/2023, does not fall within the scope of section 182A of the Planning and Development Act 2000, as amended, and that a planning application should be made in the first instance to the relevant planning authority.

Conor McGrath Senior Planning Inspector 02/05/2023