



An
Bord
Pleanála

Inspector's Report ABP 310076-21

Development	110kV substation and electrical connection to the national grid.
Location	Clonymeath. Summerhill. Co Meath.
Prospective Applicant	Tom Bruton
Type of Application	Pre -application under section 182E of the Planning and Development Act 2000, as amended.
Date of Site Inspection	July 5 th , 2021
Inspector	Breda Gannon

1.0 Introduction

- 1.1. On April 28th, 2021, a request was received by An Bord Pleanála to enter into pre-application discussions with respect to the proposed development under section 182E of the Planning and Development Act, 2000, as amended.
- 1.2. The Board's representatives met with the prospective applicant on August 4th, 2021.
- 1.3. The prospective applicant requested closure of the pre-application consultation process in a letter dated October 19th, 2021.

2.0 Site location and description

- 2.1. The site is located in the townland of Cloneymeath, c 2km northeast of the village of Summerhill in Co. Meath. It is accessed by a narrow local road (L2210) which provides connectivity to the regional road network in the vicinity of the site. The roadway provides access to a number of residential properties and farm holdings in the area.
- 2.2. The site is located on the east side of the local road and is part of a larger landholding which will be developed to accommodate a solar farm (Reg Ref No 21/546). The lands are currently in agricultural use and consist of a number of fields defined by hedgerows. There is an area of commercial forestry to the south of the landholding. The Cloneymeath River runs immediately to the south and there is an unnamed river to the east.
- 2.3. The area consists of undulating rural countryside with a dispersed settlement pattern and ribbon development along the local road network. A section of the existing Mullingar-Corduff 110kV transmission line crosses the southern end of the site.

3.0 Proposed Development

- 3.1. The proposal is to construct a 110kV 'Air Insulated Switchgear' substation and IPP compound and associated loop-in infrastructure on the site to tie into the existing 110kV (Mullingar-Corduff) overhead transmission line to the south. The purpose of the substation is to serve a proposed solar farm development on adjacent lands, a separate application for which has been submitted to Meath Co.Council for

determination. The proposed infrastructure will allow the energy generated by the solar farm to be stepped up to a voltage of 110kV for direct distribution to the national grid.

- 3.2. In order to connect the substation to the transmission network, two new lattice towers (Overhead Cable Interface Towers), with a height of approximately 20m would be installed directly under the existing 110kV overhead line. The new towers would replace one or more existing timber 110kV pole sets, which would be removed. A new section of overhead line would be provided from the interface towers to loop in and out of the proposed substation.
- 3.3. The prospective applicants letter seeking closure of the pre-application consultation process identified the following design changes that would be required to the proposal:
- 4 no. new 110kV overhead cable interface towers (previously stated as 2 no.) would be installed to divert the 110 kV line to the proposed substation and supporting transmission infrastructure. Two of these Interface Towers would be instated directly underneath the Mullibgar-Corduff 110 kV line and the other towers would be required to support the length of new overhead line.
 - The towers would be steel lattice towers with a height of up to 15m (previously stated as being 20m in height) and will comprise conductors, associated hardware, security/anti-climbing guards and the facility to connect shield wires.
 - The proposed overhead line connections will require the decommissioning/removal of c 59m of existing 110 kV line (previously stated to be c 53m) and the installation of c 171.6m of new 110 kV line to facilitate the new loop-in/loop out arrangement (reduced from that preciously stated - 180m).
- 3.4. The prospective applicant confirmed that the proposed alterations do not materially alter the nature of the proposal or the findings of the planning and environmental assessments completed for the permitted solar farm under planning Ref Reg No 21/546. It is also confirmed that the revised design will continue to be compliant with the relevant commitments in the planning application submitted to Meath Co Council. The letter is supported by 3 no. drawings.

4.0 Planning History

- 4.1. Reg Ref No 21/ 546 – Meath Co Council issued a decision to grant permission for a solar photovoltaic (PV) array and battery energy storage system (export capacity of approximately (62MW) on September 29th 2021, subject to conditions. The proposed solar farm would comprise solar arrays on ground mounted steel frames over an area of 91.9ha and ancillary equipment.

5.0 Prospective applicants Submission to the Board

- The construction and operation of the proposed 110 kV substation and associated national grid connection via a new 110kV overhead line ‘loop in/loop’ out arrangement on the existing Mullingar-Corduff 110kV line, falls within section 182A (1) of the Planning and Development Act 2000 as amended, based upon the definition of electricity transmission as set out in section 182(A)(9).
- The Board has determined 110kV transmission infrastructure as falling within section 182A of the Act and a key consideration in these determinations was the nature of the ‘loop in/loop out’ grid connection arrangement where the substations become operational nodes on the existing transmission network and consequently strategic infrastructure (300398, 303412, 303194, 303289, 306018, 304629,301511).
- The proposed development is directly comparable to these determinations. The proposed loop in/loop out arrangement will result in power flow on the existing circuit being entirely diverted into the proposed substation and back out.

6.0 Strategic Infrastructure -Legal Provisions

- 6.1. Under section 182A (1) of the 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.

- 6.2. Subsection 9 states that in this section '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.

The following definitions, as set out in section 2(1) of the Electricity Regulation Act, 1999, as amended, are noted:

'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, 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':

"...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':

"...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 the consumer.

7.0 Assessment

- 7.1. The proposed development comprises the construction of a 110kV substation with 4 No. Overhead Cable Interface Towers to connect to the existing 110kV Mullingar-Corduff transmission line located approximately 90m to the southwest of the proposed substation. The substation is required to facilitate the connection of the proposed solar farm to the national grid.
- 7.2. Section 182A (9) of the Act sets a threshold of 110kV in order for a high voltage electricity line to be considered strategic infrastructure. No threshold is set in respect of a substation.
- 7.3. I consider that the proposed substation constitutes 'electrical plant' as defined above in that it is plant for the conveying of electricity from a generating station to a substation and/or facilitating connection to the national grid from an existing overhead line.

The proposed overhead line grid connection will require the decommissioning/removal of a short section of the existing 110 kV line and the installation of c 171m of new 110kV line supported on steel lattice towers. The new substation and associated infrastructure will enable the electricity generated by a proposed solar farm to be stepped up to a voltage of 110 kV for direct transmission to the national grid. The electric power of the overall existing circuit will be entirely diverted into the substation and back out again. The new substation and associated infrastructure will therefore form part of the existing transmission system and will form a new node on the existing Mullingar-Corduff kV circuit and therefore part of the transmission grid.

The prospective applicant notes the similarity between this case and other proposals put before the Board for pre-application consultation under section 182E of the Planning and Development Act, 2000, as amended. In these cases, the Board determined that the provision of a new 110kV substation and associated

overground/underground cabling which is to be looped into the existing transmission system constitutes strategic infrastructure. The cases are as follows:

- 300389, Ballydermot. Co. Kildare.
- 303412, Leixlip, Co. Kildare.
- 303194, Knockardugar. Co. Laois.
- 303289, Clonfad, Co. Westmeath,
- 306018, Newbliss. Co. Momaghan
- 304629, Harristown, Castlejordan and Clongall. Co. Meath
- 301511, Blancharstown, Co. Dublin.

As noted by the prospective applicant, a key consideration arising from these precious determinations was that the nature of the 'loop-in/loop-out grid connection arrangement which results in the proposed 110kV substations becoming operational 'node' on the existing transmission network and consequently strategic infrastructure. I accept that the proposed development is similar to the abovementioned cases and I am of the opinion that the proposed development will form a node on the transmission network and will constitute Strategic Infrastructure.

8.0 Planning and environmental considerations

8.1. The following matters were discussed during the pre-application meeting:

- Appropriate Assessment - Proximity of Clonmeath River and potential hydrological connectivity with the River Boyne and River Blackwater SAC.
- Flooding – risk associated with adjacent river.
- Landscape /Visual Impact – commercial forestry shown in the photomontages would not be removed to facilitate the proposed development. May be felled at some date in the future.
- Cultural heritage - proximity of archaeological structures.
- Residential amenity – cluster of dwellings close to proposed access and potential impacts during the construction stage.

9.0 Conclusion

- 9.1. I consider that the proposed development as described in the submission and drawings constitutes strategic infrastructure coming within the scope of section 182A of the Planning and Development Act, 2000, as amended, necessitating an application directly to the Board.

10.0 Recommendation

- 10.1. I recommend that the prospective applicant be informed that the proposed development consisting of a 110 kV substation and grid connection in the townland of Clonymeth, Summerhill. Co Meath, as set out in the plans and particulars received by An Bord Pleanála on the 28th day of April, 2021, as amended by those received on October 20th, 2021 falls within the scope of section 182A of the Planning and Development Act 200, as amended, and that an application should be made directly to the Board.

Breda Gannon
Senior Planning Inspector
29th October 2021.

Appendix 1

The following is a schedule of prescribed bodies considered relevant in this instance for the purpose of section 182(A) (b)(4) of the Act.

- Minister of Housing, Local Government and Heritage.
- Minister for Environment, Climate and Communications.
- Meath Co. Council
- Transport Infrastructure Ireland
- Fáilte Ireland
- An Taisce
- Heritage Council
- Inland Fisheries Ireland
- Commission of Regulation of Utilities, Water and Energy
- Health Service Executive
- Irish water