

Inspector's Report ABP-312700-22

Development 110 kV loop-in substation and

overhead lines to connect consented solar farms to electricity transmission

network.

Location The Sheehy's, Monaincha and Corville

Townlands, Roscrea. Co. Tipperary.

Planning Authority Tipperary Co. Council

Applicant(s) Soleire Renewable SPV Alpha 2 Ltd.

Type of Application Pre-application under section 182E of

the Planning and Development Act,

2000 as amended.

Date of Site Inspection April 28th, 2022

Inspector Breda Gannon.

1.0 Introduction

- 1.1. On February 10th, 2022, a request was received by An Bord Pleanala to enter into pre-applications 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 virtually on May 12th, 2022.
- 1.3. The prospective applicant formally requested closure of the pre -application consultation process in a letter dated May 19th, 2022.

2.0 Site Location and Description

- 2.1. The site is located c 4.5km south of Roscrea. Co. Tipperary and c160m north of the M7 motorway. It is bounded by the New Road (L-3255) and M7 motorway to the west and south and by Birchgrove Road and a series of private access tracks to the east and north. The proposed substation would be located in the townland of The Sheehy's and the proposed overhead lines are predominantly with the townlands of The Sheehy's and Monaincha with a short stretch at the connection point to the Eirgrid overhead line in the townland of Corville.
- 2.2. The proposed substation site is set within a plantation forest while the overhead lines and support structures are located to the north and northwest in an area of forestry and milled peat bog. The topography of the site is undulating with elevation levels ranging between 100mOD and 120mOD. Access to the site is off the local road to the west or from the track to the adjoining Monaincha Windfarm to the east.

3.0 **Proposed Development**

- 3.1. The prospective applicant proposal is to connect the following three consented solar farms to the transmission network.
 - The Sheehy's Solar Farm at 60 hectares/148 acres
 - Derrymore Solar Farm at 30 hectares/75 acres
 - Monaincha Solar Farm at 134 hectares/330 acres.

- 3.2. The main components of the development include:
 - 110kV Type C Loop-In Substation (excluding additional future expansion space required by Eirgrid (1.48 hectares/3.6 acres)
 - 3 no. 33 kV Underground Grid Connection Cables in three separate trenches from Monaincha Solar Farm to the proposed loop-in substation (1.53 km). The route is made up of existing track built for Monaincha Windfarm and a small section of public road close to Monaincha Solar Farm.
 - 2 no. 110kV Overhead Grid connection lines from the proposed loop-in substation to existing Eirgrid transmission lines (1.97km) along with 8 steel masts, 16 wood pole sets and 2 steel gantries. The overhead electricity cables will run north from the proposed substation through c 500m of Coillte commercial forestry and the remaining c 1.5km will run over cutaway bog to the existing transmission line (Ikerrin-Shannonbridge-Thurles 110kV). A temporary access track is required to run along the entire overhead cable route.
- 3.3. It was confirmed at the meeting held with the prospective applicant on May 11th 2022, that the underground cable connections would not included in a future SID application. This was on the basis that Tipperary Co. Council had confirmed that the 33 kV (3.3km) underground grid connections was exempted development
- 3.4. Ancillary development includes removal of Coillte commercial trees for the loop-in substation and the overhead lines, having a permanent 4m wide cleared zone underneath the overhead lines and for the remainder of the corridor to have replacement low growth native species as well as additional offset lands for replacement trees. A temporary construction access will be required for installation of the overhead lines and substation. The main and permanent access track would run from the eastern side of the proposed substation to connect into an existing track previously constructed for Monaincha Windfarm
- 3.5. The proposed 110kV substation will be constructed to loop-in to the existing Ikerrin-Shannonbridge-Thurles 110kV overhead line. Fencing will be installed around the substation compound.

4.0 **Planning History**

16/600917– A decision to grant permission for a solar farm on a 58-hectare site (The Sheehy's) was upheld by the Board on appeal (ABP PL 92.249060). The site is to the south east of the proposed substation and to the north of the M7.

19/601323 – Permission granted for a solar farm at Derrymore, Roscrea (Derrymore Solar Farm) to the south-east of the proposed substation site and south of the M7 motorway.

21/261 – Permission granted for a solar farm on a 142.7 hectare site at Monaincha. (Monaincha Solar Farm) to the east of the proposed substation site and to the north of the M7.

5.0 Prospective Applicants Submission to the Board

5.1. The prospective applicant is of the opinion that the proposed development constitutes Strategic Infrastructure Development as it falls under the provisions of section 182A of the Planning and Development Act 2000, as amended, specifically section 182A (9) as it relates to the transport of electricity by means of a high voltage line where the voltage would be 110kV or more.

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 customer.

7.0 Assessment

The proposed development comprises the construction of a 110kV substation to connect 3 no. consented solar farms to the existing Ikerrin-Shannonbridge-Thurles 110 kV transmission line that runs to the north of the site. The proposed substation

will be connected to the transmission lines by two circuits of overhead cables supported on wooden polesets and steel masts. The substation will facilitate electricity generated by the solar farms to be transported to the national grid.

Section 182A (9) of the Act sets a threshold of 110kV for a high voltage electricity line to be considered strategic infrastructure. No threshold is set in respect of a substation.

I consider that the proposed substation constitutes 'electrical plant' as defined above in that it is plant for 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 110kV line and the installation of a new line supported on steel masts. The new substation and associated infrastructure will enable the electricity generated by the solar farms to be stepped up to a voltage of 110kV 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 via the double circuit overhead lines. The new substation and associated infrastructure will therefore form part of the existing transmission system and will form a new node on the existing Ikerrin-Shannonbridge-Thurles 110kV circuit and therefore part of the transmission grid.

I note 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. Monaghan

- 304629, Harristown, Castlejordan and Clongall. Co. Meath
- 301511, Blancharstown, Co. Dublin.
- 310076, Summerhill. Co. Meath.

A key consideration arising from these determinations was that the nature of the 'loop-in/loop-out' grid connection arrangement which results in the proposed 110kV substation becoming an 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.
 - EIA Robust screening assessment including consideration of the criteria set out Schedule 7A where it is concluded that EIA is not required.
 - AA Proximity of European sites including River Nore SAC and potential use
 of the site by Hen Harrier, a Qualifying Interest of the Slieve Bloom Mountains
 SPA. Consultation with the DAU required.
 - Cultural heritage proximity of archaeological features. Consultation with the National Monuments Service required.
 - Peat stability Robust assessment required.

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 overhead grid connection in the townlands of The Sheeys, Monaincha and Corville, Roscrea. Co Tipperary as set out in the plans and particulars received by An Bord Pleanala on the 10th day of February, 2022, 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

24th May 2022

Prescribed Bodies

Appendix 1

The following is a schedule pf 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.
- Tipperary Co. Council
- Transport Infrastructure Ireland
- Failte Ireland
- An Taisce
- Heritage Council
- Inland Fisheries Ireland
- Commission of Regulation of Utilities, Water and Energy
- Health Service Executive
- Irish water