



An
Bord
Pleanála

Inspector's Report ABP 302516-18

Development

110kV 4-Bay C-Type Electricity Substation and associated loop-in infrastructure to tie into existing 110Kv Transmission line.

Location

Tullamore, Listowel, Co. Kerry

Prospective Applicant

Terra Solar II Ltd.

Planning Authority

Kerry County Council

Inspector

Mary Kennelly

1.0 Pre-Application Consultation

- 1.1. The Board received a request on the 5th September 2018 from Terra Solar II Ltd. to enter pre-application consultations under Section 182E of the Planning and Development Act 2000, as amended, in relation to the proposed development at Tullamore, Listowel, Co. Kerry.
- 1.2. The Board's representatives met with the prospective applicant on the 9th August 2018.
- 1.3. The prospective applicant formally requested closure of the pre-application consultation process in an email received on the 12th February 2019.

2.0 Site location

The site of the proposed substation is located in the townland of Tullamore, approx. 4km to the north of Listowel in County Kerry. It is approx. 10.5km to the southwest of Tarbert in north-west Kerry. It forms part of a larger site of approx. 99.2 hectares on which planning permission for a solar farm was sought from Kerry County Council and was refused (Ref. 18/720). The developer has appealed the planning authority decision and a decision from the Board on is currently pending (302681-18).

The lands are in agricultural use with the terrain noted to be relatively flat with hedgerows delineating field boundaries. However, ground levels within the site of the proposed substation fall c. 7 metres from northwest to southeast. The River Galeley flows c. 450m to the south. The site is accessed via the R552 and the L-1009. The site is set back c.630m from the local road to the northwest with access via an agricultural field entrance. There is a cul-de-sac road c.200 metres to the south and a further local road, Knockroe Drive, c.700m further south. Views of the site are not possible from the local roads to the north, but views are available from the south across the river valley towards the site. One off housing is prevalent in the area. The landowner's farmhouse is located to the northwest with derelict farm buildings to the south of the site. An existing transmission line, the Kilpaddock - Tralee 110kV overhead line, crosses the site from southwest to northeast. This double 11kV line links the Tarbert 400kV substation with the Tralee 110kV substation.

The site is not within or in close proximity to a European Site. However, the River Galey discharges to the River Feale, which forms part of the Lower River Shannon SAC (002165). This European site is located approx. 5-6km to the north. The River Shannon and River Fergus Estuaries SPA is also located c.6km to the north.

3.0 Proposed Development

The proposed development comprises a 4 bay 110kV C-type substation which is to be looped into the existing Tarbert-Tralee 110kV overhead line. The proposed substation compound would include the 110kV substation and a customer 33kV substation. It is proposed to break the 110kV overhead line and to provide 2 no. End Lattice Steel line/cable interface towers (24m high). The existing overhead line would then be routed in and out of the proposed substation, and would then connect to the overhead End Mast by means of an overhead conductor supported on steel structures. Thus, there would be a small section of 110kV overhead line between the proposed substation and the new lattice towers.

The proposed substation would allow energy generated within the solar farm to be collected, stepped up to 110kV and delivered immediately to the National Grid via a loop-in connection. The solar farm would have a maximum export capacity of 50MW. The ownership of the OHL and the 110kV substation would be transferred to Eirgrid and the ownership of the 33kV substation would remain in the ownership of the solar farm. The substation is to be located in the south-western section of the site of the proposed solar farm, at a remove from any dwellings. The site would be accessed by means of a proposed 6m wide track. The existing levels on the site will necessitate cutting and filling to create a level site. A temporary construction compound will be required during the construction phase, which will be reinstated using the topsoil from the cut and fill.

4.0 Planning History

P.A. Ref. 18/720 - Permission refused by P.A. for solar farm on larger site of 99.2ha, including proposed substation site, and is currently under appeal to the Board (ABP.302681-18). This application proposed to provide 357,500 sq.m of solar panels with 25 no. transformer stations.

5.0 Applicant's Case

The proposed 110kV substation and cable are considered to be Strategic Infrastructure on the following grounds:

- The development of a 110kV substation and loop-in infrastructure comprises “electrical plant” and “transmission” under the Electricity Regulation Act 1999, and involves the development of high voltage electricity infrastructure. Accordingly, it comprises development for the purposes of transmission of electricity under Section 182A of the Act and therefore constitutes strategic infrastructure under Section 182 of the Act.
- Electricity travelling via the Tarbert to Tralee 110kV circuit will be routed through the proposed substation. This means that it will become a new substation node on the national transmission network, forming an integrated part of the network. The proposal is of such a scale and employs a methodology of grid connection that would mean it is of strategic importance to the electricity networks in the region and therefore the State. This would be supported by Eirgrid.
- The substation and 110kV cable are strategic infrastructure as defined within Section 37A(2) of the Planning and Development (Strategic Infrastructure) Act 2006.
- The proposed development is supported by the policy objectives of the National Planning Framework which promotes renewable energy use and generation at appropriate locations to meet national objectives towards achieving a low carbon economy by 2050. It would also be supported by policy objectives of the Regional Planning Guidelines for the South Western Region 2010-2022.
- Although the threshold for strategic energy production under Part 1 of the Seventh Schedule is 300MW, the strategic production capacity for renewable energy is of a lower threshold. Reference is made to wind energy, with a threshold of 25 turbines or a 50MW output. Thus, it is submitted that the proposed development would serve a solar farm with an output of 50MW and is therefore strategic development.

- Regard is had to recent Board decisions in relation to the 110kV Loop in-Loop out methodology. It is noted that the board has concluded that where a substation would form a node on the 110kV transmission network, it constitutes Strategic Infrastructure.

6.0 Eirgrid Correspondence

The request is accompanied by a letter from Eirgrid, (10/08/18), which has provided confirmation on the following matters:

- A grid connection agreement offer has been made to the prospective applicant.
- The method of connection as per the offer will be a new Drombeg 110kV 4-bay C-type station looped into the Kilpaddoge – Tralee 2 110kV circuit using overhead line.
- The proposed substation would comprise a new node along the existing circuit and would therefore form part of the national transmission network.

7.0 Legislative Provisions

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.

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.

In section 2(1) of the Electricity Regulation Act, 1999, “transmission” is defined 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.”

“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 switch gear and which is used for conveying electricity to final customers.”

“Electric plant” is defined as:

“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

8.0 Assessment

- 8.1.1. The proposed development comprises a new 110kV AIS substation and cable connection to the Kilpaddoge - Tralee 110kV overhead line which passes through the site on which the prospective applicant is seeking permission for a solar farm under appeal from the Board (302681-18). Electricity generated by the proposed solar farm would be fed into the substation and in addition, the proposed substation would act as a node in the transmission system. It is considered that the substation constitutes ‘electric 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/permitted overhead line. Section 182A (9) of the Act sets a threshold of 110kV in order for a high voltage electricity transmission line to be considered strategic infrastructure. No threshold is set in respect of a substation.

- 8.1.2. It is proposed to break the 110kV overhead line and to connect the line to an End Lattice Steel interface tower. The OHL would then be routed in and out of the proposed substation, and would connect to a second End Mast by means of an overhead conductor supported on steel structures. The sections of cable between the substation and the new lattice towers will be 110kV overhead lines, albeit short sections. The proposed substation would allow energy generated within the solar farm to be collected, stepped up to 110kV and delivered immediately to the National Grid via a loop-in connection. This means that the electric power of the overall existing circuit will be entirely diverted into the substation and back out again. In effect, the substation will form a new node along the existing circuit and as such, the new substation and associated cables will form part of the existing transmission network. This is supported by the submission from Eirgrid. In conclusion, it is considered that the substation, in forming such a node on the 110kV transmission network, constitutes Strategic Infrastructure.
- 8.1.3. The Board will note previous decisions it has made on strategic infrastructure pre-application consultation requests in relation to electricity transmission infrastructure under Section 182E. These include VC0098 at Mountphillips, Co. Tipperary, 300167 at Vasingstown and Harlockstown Dunboyne, Co Meath, and 301646 at Harristown, Castlejordan and Clongall Co. Meath. In these cases, the Board determined that the provision of a new 110kV substation which is to be looped into the existing transmission network constitutes Strategic Infrastructure. It is considered that the subject case is comparable.
- 8.1.4. EIA is not mandatory for development under S182 of the Planning and Development Act. A solar farm does not come within a class of development for which EIA is required. However, the proposed development includes a small section of 110kV overhead line between the proposed substation and the new lattice towers. This part of the development falls within Class 3(b), Part 2 of Schedule 5 of the Planning and Development Regulations, 2001 (as amended). Class 3(b) states
- Industrial installations for carrying gas, steam and hot water with a potential heat output of 300 megawatts or more, or transmission of electrical energy by overhead cables not included in Part 1 of this Schedule, where the voltage would be 200 kilovolts or more.

This part of the proposed development is therefore sub-threshold for the purposes of EIA. A Screening Determination may be required where the need for EIAR cannot be ruled out, following preliminary examination. The prospective applicant was advised that information intended to be submitted in accordance with Schedule 7A of the Regulations, should be referenced as such and the matter addressed in the application. It was further advised that the cumulative effects of the proposed development with the solar farm and other relevant existing or permitted development should be addressed for the purposes of screening.

9.0 Conclusion

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

10.0 Recommendation

I recommend that Terra Solar II Ltd. be informed that the proposed development consisting of a 110kV substation, cable end masts and overhead line in the townland of Tullamore, Listowel, Co. Kerry as set out in the plans and particulars received by An Bord Pleanála on the 5th day of September 2018 falls within the scope of section 182A of the Planning and Development Act 2000, as amended, and that a planning application should be made directly to the Board.

Mary Kennelly
Senior Planning Inspector

13th March, 2019

Appendix 1

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

Minister of Culture, Heritage and the Gaeltacht

Minister for Communications, Climate Action and Environment

Kerry County Council

Transport Infrastructure Ireland

An Chomhairle Ealaíon

Failte Ireland

An Taisce

Heritage Council

Commission for Regulation of Utilities, Water and Energy

Health Service Executive