



An
Bord
Pleanála

Inspector's Report ABP-313613-22.

Development	Construction of a 110kV substation and grid connection along with associated infrastructure in respect of a permitted solar development.
Location	Ballinrea, Co. Cork.
Prospective Applicant	Ballinrea Solar Farm Ltd.
Planning Authority	Cork County Council.
Type of Application	Pre-Application consultation under Section 182E of the Planning and Development Act 2000, as amended.
Date of Site Inspection	18 th May 2023.
Inspector	Sarah Lynch

1.0 Introduction

- 1.1. The Board received a request on the 18th of May 2022 from MKO Consultants on behalf of Ørsted Onshore Ireland Midco Ltd to enter into pre-application consultations under Section 182E of the Planning and Development Act 2000, as amended, in relation to a proposed substation and grid connection and associated works at Ballinrea, Co. Cork.
- 1.2. It is important to note at the outset that the proposed development is associated with 2 no. permitted solar photovoltaic (PV) arrays at Ballinrea and Ballinvuskig Pl. Ref. 17/6784 and Pl. Ref. 19/5371. It is proposed to submit amended planning applications to Cork City Council and Cork County Council which will seek permission to amend the permitted Ballinrea solar layout having regard to the proposed 110kV substation and grid connection and to amend the Ballinvuskig array to remove the 38kV substation given the proposed upgraded substation at Ballinrea. The 2 no. solar developments will be connected via a 20kV or 33kV underground cable (c. 3.5km).
- 1.3. The Board's representative met with the prospective applicant and agent on the 27th July 2022. The meeting was held virtually. 4 no. grid connection route options were presented at this meeting, and it was agreed that a second meeting may be required given the number of options under consideration.
- 1.4. A second meeting was held on the 24th January 2023, in which two prospective grid connection routes were presented. The prospective applicant outlined the details of consultations carried out and specifically referred to those carried out with Cork County Council, in which a preference was expressed by the Council in relation to the avoidance of Carrigaline town by the grid connection route. This was incorporated into the design of both routes presented.
- 1.5. The prospective applicant requested closure of the pre-application process on the 21st April 2023.
- 1.6. In the interest of clarity, the Board should note that the applicant's name has changed to Ballinrea Solar Farm Ltd which is a subsidiary of Ørsted Onshore Ireland Midco Ltd. Confirmation of this name change was received by the Board at the meeting on the 24th January 2023.

2.0 Site Location and Description

- 2.1. The proposed 110kV substation will be located within the Ballinrea Solar site which is c. 3.5km north west of Carrigaline Co. Cork. The surrounding landscape is agricultural in nature and is currently utilised for tillage and improved grassland.
- 2.2. The site is accessed from the west via an existing entrance from the L2464. The site slopes from north to south. The site is bounded to the west by the R6424 with agricultural land bounding the site to the south and east.
- 2.3. The nearest development comprises one off housing along the R6424 with the closest house being c.400m from the proposed site.
- 2.4. Two options are under consideration for the proposed grid connection from the Solar farm to Raffeen substation which is c. 3.5km from the solar farm. Both options avoid Carrigaline town and move along road verges and agricultural lands.

3.0 Proposed Development

- 3.1. The proposed development consists of:
 - Proposed 110kV Substation at the permitted Ballinrea Solar Farm;
 - Tail fed underground grid connection to existing Raffeen 220kV Substation and,
 - Proposed new 110kV cable bay at the existing Raffeen 220kV Substation.
 - The proposed 110 kV substation will be designed in compliance with the most up to date requirements of EirGrid's functional specifications for 110 kV substations and the substation compound.
 - The proposed 110kV EirGrid substation compound will include an EirGrid control building and the electrical substation components necessary to transmit the electrical energy generated to the national grid. The final layout and design of the electrical equipment will be agreed with EirGrid as part of the detailed design process.
 - Adjacent to the EirGrid compound, there will be an IPP compound for the customer-side building and equipment, including an IPP control building, concrete plinth with 110 kV transformer and the electrical

substation components necessary to consolidate the electrical energy generated and export that electricity via the 110 kV substation to the national grid.

4.0 Planning History

- **PL. Ref 17/6784** - Ballinrea Solar Farm comprises circa 159,100 m² of solar arrays on ground mounted steel frames over an area of 47.3ha, 1 no. substation, 10 no. single storey inverter/transformer stations, battery storage module and associated equipment building, security fencing, satellite pole, CCTV and all associated ancillary development works.
- **PL. Ref 19/5371** - Ballinvuskig Solar Farm comprises circa 176,600 m² of solar arrays on ground mounted steel frames over an area of 47.3ha 1 no. 38 kV substation with loop in to exiting 38kV overhead line via 2 n. polesets, 12 no. single storey inverter/transformer stations, battery storage module and associated equipment building, security fencing, satellite pole, CCTV and all associated ancillary development works.

5.0 Prospective applicant's case

5.1. The prospective applicant's case can be summarised as follows:

- It is the prospective applicant's opinion that the proposed development would constitute Strategic Infrastructure Development as it consists of 110kV infrastructure.

6.0 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.

6.1. **Environmental Impact Assessment**

6.1. Section 4 of the Planning and Environmental Report submitted with the application relates to EIA screening. It contends that the proposed 110kV substation and associated development does not come under Schedule 5 of the Regulations and does not require an EIA. It states that for robustness a screening of the proposal is provided which demonstrates that there will be no significant impacts.

6.2. As noted by the applicant, the prescribed classes of development and thresholds that trigger a mandatory EIAR are set out in Schedule 5 of the Regulations. The only classes that I consider to be of potential relevance to the proposed development are as follows:

- **Schedule 5, Part 1, Class 19:** Construction of overhead electrical power lines with a voltage of 220 kilovolts or more and a length of more than 15 kilometers.
- **Schedule 5, Part 2, Class 3(b):** 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.

6.3. I note that an electrical substation is not a class of development contained in Parts 1 or 2 of Schedule 5 of the Regulations, and I further note that the proposed development does not entail the construction of any overhead power lines, regardless of voltage or length. The proposed connection to the existing Raffeen 220kV substation would be by way of an underground 110kV cable, and therefore would not come within either of the classes listed above (the class being overhead powerlines, and the threshold being the voltage/length).

6.4. As no element of the proposed development falls into a class of development contained in Schedule 5, Parts 1 or 2, I am satisfied that the proposed development does not therefore constitute sub-threshold development and neither a mandatory EIA, nor screening for EIA, is required.

7.0 **Assessment**

7.1. This pre-application consultation concerns the development a 110kV substation and transmission line and connection to the national grid. The transmission link will be provided via an underground cable from the permitted Solar Farms at Ballinrea and will travel c.3.5km to the existing 220kV substation at Raffeen Co. Cork.

7.2. 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. I note that no threshold is set in respect of a substation.

7.3. With regard to the electricity transmission line, I note that the prospective applicant has stated that the substation and connection point will become nodes on the national transmission grid, transmitting electricity in both directions. Having regard to the information submitted and that presented during the course of the pre-application meeting I consider that the proposed 110kV transmission cable will become an integral part of the national grid transmission infrastructure, the prospective applicant's correspondence is clear in this regard.

7.4. I conclude that the substation, in forming such a node and in comprising a high voltage line where the voltage would be 110 kilovolts or more, as per Section 182A(9) of the Planning and Development Act, as amended, constitutes Strategic Infrastructure.

7.5. **Prescribed Bodies**

7.6. 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 the attached Appendix in respect of any future application for approval.

8.0 **Recommendation**

8.1. I recommend that Ballinrea Solar Farm Ltd be informed that the proposed development consisting of a 110kV substation and underground 110kV transmission line between the permitted Solar Farm at Ballinrea and the existing substation at Raffeen, as set out in the plans and particulars received by An Bord Pleanála on the 18th May 2022, does fall 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.

8.2. I attach an Appendix listing relevant prescribed bodies.



Sarah Lynch
Senior Planning Inspector
18th May 2023

Appendix – list of prescribed bodies

The following list identifies the prescribed bodies which are considered relevant in this instance for the purposes of Section 182A(4)(b) of the Act.

- Minister for Housing, Planning and Local Government
- Minister for Environment Climate and Communications
- Cork County Council
- Transport Infrastructure Ireland
- An Taisce
- Heritage Council
- Commission for Regulation of Utilities, Water and Energy
- Failte Ireland