

An
Bord
Pleanála

Inspector's Report ABP-317173-23

Development

Proposed 110kV Air Insulated Switchgear (AIS) loop-in substation with associated Interface Towers and underground cabling which will connect into the existing 110kV Whitegate – Cow's Cross overhead line.

Location

Rathcoursey East, Co. Cork.

Planning Authority

Cork County Council

Prospective Applicant

Rathcoursey Solar Farm Limited

Type of Application

Pre-Application consultation under Section 182E of the Planning and Development Act, 2000, as amended

Date of Site Inspection

6th July, 2023

Inspector

Robert Speer

1.0 Introduction

- 1.1. The Board received a request on 23rd May, 2023 from the prospective applicant, Rathcoursey Solar Farm Limited, to enter into pre-application consultations under Section 182E of the Planning and Development Act, 2000, as amended, in relation to the proposed development of a 110kV Air Insulated Switchgear (AIS) loop-in substation with associated Interface Towers and underground cabling which will connect into the existing 110kV Whitegate – Cow's Cross overhead line.
- 1.2. A single meeting was held remotely with the prospective applicant and its representatives on 18th July, 2023. Closure of the pre-application consultation was requested by letter dated 25th August, 2023.

2.0 Site Location and Description

- 2.1. The proposed development site is located in the rural townland of Rathcoursey East, Co. Cork, approximately 4.5km south of Midletown and 1.7km northwest of the village of Saleen, along the northern side of Local Road No. L7657 which extends westwards from the R630 Regional Road to the East Ferry pier crossing of the Ballynacorra River at Garranekinnefeake. The surrounding area is primarily agricultural and is characterised by a gently undulating rural landscape dominated by arable / cereal production with intermittent instances of individual farmsteads and one-off rural housing. The Cork Harbour Special Protection Area (Site Code: 004030) and the Great Island Channel Special Area of Conservation (Site Code: 001058) lie approximately 1.0km to the north with the Rostellan Lough, Aghada Shore and Poul nabibe Inlet Proposed Natural Heritage Area (Site Code: 001076) c. 1.4km to the south.
- 2.2. The site itself is irregularly shaped and forms part of a larger agricultural field while its southernmost extent is traversed by the existing 110kV Whitegate - Cow's Cross overhead line. The wider lands are accessed via an existing entrance arrangement from the adjacent public road with the field boundaries broadly defined by well-established hedgerow.

3.0 Proposed Development

- 3.1. The proposed development consists of the construction of a 110kV Air Insulated Switchgear (AIS) substation with associated 'loop-in / loop-out' underground 110kV cabling which will connect into the existing 110kV Whitegate – Cow's Cross overhead line via 2 No. new Interface Towers. The substation will consist of both Eirgrid and Independent Power Producer (IPP) Control Room buildings as well as High Voltage electrical equipment and associated infrastructure including a 110 / 33kV Transformer (TRAFO), Cable Sealing End (CSE), Surge Arrestor (SA), Earth Disconnect (DT), Circuit Breaker (CB), Diesel Generator, and Security Fencing. Indicative details of the proposed substation layout, grid connection and the interface towers are included in the submitted particulars.
- 3.2. The purpose of the substation and grid connection is to serve the proposed Rathcoursey Solar Farm (which is the subject of a separate planning application to Cork County Council). In this regard, and for the purposes of clarity, the subject development only refers to the 110kV substation and grid connection and not the solar farm or any other ancillary development which will form part of the wider project.
- 3.3. The operational lifetime of the proposed solar farm is assumed to be 40 No. years, however, should it be decommissioned, it is envisaged that the substation will remain *in situ* as a functioning and operational part of the electricity transmission network.

4.0 Relevant Planning History

- 4.1. *On Adjacent Sites:*
 - 4.1.1. PA Ref. No. 235270. On 15th August, 2023 a notification of a decision to refuse permission was issued by the Planning Authority refusing Rathcoursey Solar Farm Limited a 10-year planning permission for a solar farm with a total area of c. 126 hectares comprising of solar panels on ground mounted frames with a surface area of c. 532,000m², 21 no. single storey electrical inverter/transformer stations, 5 no. single storey energy storage modules, 3 no. single storey spare parts containers, 12 no. ring main units, 5 no. weather stations, underground electrical ducting and cabling within the development site, private lands and within the R630, L7657, L7658

and L7659 public roads to connect to solar farm field parcels, security fencing, CCTV, access tracks, 1 no. drain deck crossing, temporary construction compounds, landscaping and all associated ancillary development works. Construction and operational access will be via entrances from L7657, L7658 and L7659. The operational life span of the solar farm will be 40 years and planning permission is requested for its duration. A Natura Impact Statement (NIS) has been prepared and submitted to the planning authority with the application. All at Bawnard East, Bawnard West, Garranekinnefeake, Jamesbrook, Kilva, Rathcoursey East, Scartlea Lower, Scartlea Upper, Co. Cork.

- The subject site forms part of the Metropolitan Cork Green belt lands designated as Prominent and Strategic Greenbelt and High Value Landscape, adjacent to the Cork Harbour area which is identified as very high landscape value, sensitivity and of national importance. Furthermore, the site borders a designated scenic route (s 51 – Road from Ballynacorra via East Ferry to Whitegate and Roche's Point) which runs around the entire peninsula of which the land forms a part, also extending southwards towards the Cork Harbour area.

Having regard to the aforementioned designations it is considered that the introduction of an energy development and associated infrastructure of the scale proposed on elevated and visually prominent strategic Greenbelt lands, with a substantial spatial extent, representing a land loss of 126 hectares of agricultural land, would be contrary to policy objective RP 5-13 of the CCDP (2022) which seeks to "preserve the character of the Metropolitan Greenbelt" and objective GI 14-16 which aims to "protect those prominent open hilltops, valley sides and ridges that define the character of the Metropolitan Cork Greenbelt and those areas which form strategic, largely undeveloped gaps between the main Greenbelt settlements." Given the wider associated visual and landscape impacts it would also materially contravene policy objectives GI 14-9, & GI 14-10 relating to Landscape and GI 14-13 & GI 14-14 in respect of Scenic routes. Furthermore, it would set an undesirable precedent for similar large scale development proposals in the area.

It is therefore considered the proposed development would materially contravene the policies and objectives of the Cork County Development Plan

(2022) and would be contrary to the proper planning and sustainable development of the area.

(N.B. At the time of writing, it is my understanding that no appeal has been lodged with the Board as regards the aforementioned decision).

5.0 Precedent Cases

5.1. Referenced in the Pre-Application Consultation:

- 5.1.1. ABP Ref. No. ABP-304862-19. Was determined on 21st November, 2019 with the Board granting Eirgrid PLC approval for a 220kV Gas Insulated Switchgear substation, 2 No. 220kV underground circuits forming a loop-in/loop-out to the existing Maynooth-Woodland 220kV Overhead Line and 6 No. 220kV underground circuits and associated low voltage and communication underground cabling connecting with electricity transformers within the Intel Ireland Facility, and all associated works, in the townlands of Ravensdale, Kellystown, Blakestown (North Salt By) & Leixlip, Co. Kildare and Bogganstown, Co. Meath.
- 5.1.2. ABP Ref. No. ABP-310024-21. Was determined on 10th September, 2021 with the Board deciding that the proposed development of a 110kV substation and associated infrastructure at Coolboy, Ballymoney and Killiniskyduff, Arklow, Co. Wicklow, was strategic infrastructure development within the meaning of Section 182A of the Act.
- 5.1.3. ABP Ref. No. ABP-310846-21. Was determined on 24th November, 2021 with the Board deciding that the development of a 110kV substation to feed into the existing Athlone 220/110kV substation at Monksland, Co. Roscommon, including underground cable connection and all associated works, all at Tarduff West, Athlone, Co. Roscommon, was strategic infrastructure development within the meaning of Section 182A of the Act.
- 5.1.4. ABP Ref. No. ABP-311187-21. Was determined on 24th November, 2021 with the Board deciding that the development of a 110kV AIS single bay tail-fed substation and underground cable connection at Bendinstown, Gilbertstown, Kellistown West, Ballycurragh, Ardbearn, and Ballynunnery, Co. Carlow, was strategic infrastructure development within the meaning of Section 182A of the Act.

- 5.1.5. ABP Ref. No. ABP-311403-21. Was determined on 17th January, 2022 with the Board deciding that the proposed development of 110kV infrastructure, including a 110kV Air Insulated Switchgear (AIS) building, transformer, electrical equipment and associated compound, within the townland of Clonin, Rhode, Co. Offaly, was strategic infrastructure development within the meaning of Section 182A of the Act.
- 5.1.6. ABP Ref. No. ABP-310033-21. Was determined on 18th January, 2022 with the Board deciding that the proposed development of a 220kV substation and grid connection at the existing Dunnstown 400kV substation at Dunnstown, Co. Kildare, was strategic infrastructure development within the meaning of Section 182A of the Act.
- 5.1.7. ABP Ref. No. ABP-313676-22. Was determined on 1st November, 2022 with the Board deciding that the development of a substation and associated grid connection in the townlands of Tincurry, Crory and Ballylough near Ferns, Co. Wexford, was strategic infrastructure development within the meaning of Section 182A of the Act.
- 5.2. **Other Relevant Cases:**
- 5.2.1. ABP Ref. No. ABP-315128-22. Was determined on 19th May, 2023 with the Board deciding that the proposed development of a 110kV electrical substation and grid connection at Trascaun & Clondoolusk, Portarlinton, Co. Offaly and the provision of passing bays in the public road within the townlands of Clondoolusk, Trascaun, Bishopswood, Tinacrannagh and Droughill, Co. Offaly & Co. Laois, was strategic infrastructure development within the meaning of Section 182A of the Act.
- 5.2.2. ABP Ref. No. ABP-315383-22. Was determined on 19th May, 2023 with the Board deciding that the proposed development of a 110kV electrical substation and electrical cable connection and 2 No. cable end masts on lands at Castlegarden and Cloghscregg, Co. Kilkenny, was strategic infrastructure development within the meaning of Section 182A of the Act.
- 5.2.3. ABP Ref. No. ABP-313693-22. Was determined on 19th May, 2023 with the Board deciding that the proposed development of a 110kV substation with connection to the national grid via an existing 110kV overhead line and associated works at Chancellorstown, Co. Tipperary, was strategic infrastructure development within the meaning of Section 182A of the Act.

- 5.2.4. ABP Ref. No. ABP-313042-22. Was determined on 1st June, 2023 with the Board deciding that the proposed development of a 110kV substation and underground grid connection to the existing 110kv Athlone substation in the townland of Monkstown, Athlone, Co. Roscommon, was strategic infrastructure development within the meaning of Section 182A of the Act.
- 5.2.5. ABP Ref. No. ABP-315430-22. Was determined on 1st June, 2023 with the Board deciding that the proposed development of a 110kV substation and associated grid connection options to the existing transmission network at Maganey Solar Farm, Co. Kildare, was strategic infrastructure development within the meaning of Section 182A of the Act.
- 5.2.6. ABP Ref. No. ABP-313613-22. Was determined on 1st June, 2023 with the Board deciding that the proposed construction of a 110kV substation and grid connection along with associated infrastructure in respect of a permitted solar development at Ballinrea, Co. Cork, was strategic infrastructure development within the meaning of Section 182A of the Act.
- 5.2.7. ABP Ref. No. ABP-315476-23. Was determined on 6th June, 2023 with the Board deciding that the proposed development of a 110kV 'loop-in / loop-out' substation to feed into the existing Drumline-Ennis 110kV overhead line circuit with the townland of Coolshamroge, Ennis, Co. Clare, was strategic infrastructure development within the meaning of Section 182A of the Act.

6.0 Prospective Applicant's Case

- It is the opinion of prospective applicant that the proposed development is strategic infrastructure and, therefore, any application for statutory approval must be made to the Board under Section 182A of the Planning and Development Act, 2000, as amended.
- Given that the proposed underground cable providing the 'loop in / loop out' grid connection from the proposed substation to the existing 110kV Whitegate – Cow's Cross overhead line will be at a voltage of 110kV, it is considered to fall within the definition of '*transmission*' as set out in Section 182A(9) of the Act.

- Although there is no threshold under Section 182A(9) in respect of a substation, the proposed substation will transport electricity at 110kV to the existing 110KV Whitegate – Cow’s Cross overhead line via the proposed underground cable. Therefore, it is considered that the proposed substation constitutes ‘*electric plant*’ in accordance with the definition set out in Section 2(1) of the Electricity Act which refers to ‘*any plant, apparatus or appliance used for, or for purposes connected with, the generation, transmission, distribution or supply of electricity . . .*’. In additional reference to Section 2(1), it is note that the 110kV substation forms part of a transmission system which ‘*consists, wholly or mainly, of high voltage lines and electric plant and which is used for conveying electricity from . . . one substation to another*’. Accordingly, it is considered that the substation falls within the definition of ‘*transmission*’ as set out in section 182A(9).
- The foregoing opinion is consistent with previous determinations issued by the Board with respect to similar Section 182A pre-application consultations, including ABP Ref. Nos. ABP-304862-19, ABP-313676-22, ABP-311187-21, ABP-311403-21, ABP-310846-21, ABP-310024-21 & ABP-310033-21.

7.0 Legislative Provisions

- 7.1. **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).
- 7.2. **Section 182A(1)** of the Act (inserted by section 4 of the 2006 Act) provides that 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 the development under section 182B and shall apply to the Board for such approval accordingly.
- 7.3. **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.

7.4. **Section 2(1) of the Electricity Regulation Act, 1999, as amended**, includes the following definitions:

7.4.1. **“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’.

7.4.2. **“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’.

7.4.3. **“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.
- 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’.

8.0 Assessment

- 8.1. This pre-application consultation concerns the proposed development of a 110kV Air Insulated Switchgear (AIS) substation with associated 'loop-in / loop-out' underground 110kV cabling which will connect into the existing 110kV Whitegate – Cow's Cross overhead line via 2 No. new Interface Towers. The purpose of the substation and the associated cabling works etc. is to connect a planned solar farm to the national grid.
- 8.2. Section 182A(9) of the Planning and Development Act, 2000, as amended, states that '*transmission*', in relation to electricity, is to be construed in accordance with Section 2(1) of the Electricity Regulation Act, 1999, which broadly defines the transmission system as consisting, wholly or mainly, of high voltage lines and electrical plant for conveying electricity), however, it is also to be construed as meaning the transport of electricity by means of a high voltage line where the voltage would be 110kV or more. In this regard, I am satisfied that the proposed substation comprises '*electric plant*' as defined by Section 2(1) of the Electricity Regulation Act, 1999, as it consists of plant used for the purposes of conveying electricity from a generating station to a substation and / or facilitating connection to the national grid via an existing overhead line. The new substation and associated infrastructure will enable electricity generated by the planned Rathcoursey Solar Farm to be stepped up to a voltage of 110kV for direct transmission to the national grid.
- 8.3. It is of further note that the proposed 'loop-in / loop-out' grid connection arrangement will result in electricity transmitted via the existing Whitegate – Cow's Cross overhead line being diverted into the proposed substation and back out again via the interface towers with the effect that the new 110kV substation will become an operational 'node' on the transmission network (as has been acknowledged by the prospective applicant in the event that the planned solar farm ever be decommissioned) i.e. the substation will remain *in situ* as a functioning and operational part of the wider electricity transmission network.
- 8.4. Parallels may also be drawn between the subject works and other proposals put before the Board for pre-application consultation under Section 182E of the Planning & Development Act, 2000, as amended, such as ABP Ref. No. ABP-315476-23 wherein it was determined that the provision of a new 110kV substation with an


associated 'loop-in / loop-out' connection to the existing Drumline-Ennis 110kV overhead line was strategic infrastructure development within the meaning of Section 182A of the Act.

- 8.5. Therefore, on the basis of the available information, it is my opinion that the proposed substation and the associated works fall within the scope of Section 182A of the Planning and Development Act, 2000, as amended, thereby necessitating that a planning application be made directly to the Board.

9.0 Recommendation

- 9.1. It is recommended that the prospective applicant, Rathcoursey Solar Farm Limited, be informed that the proposed development consisting of a 110kV Air Insulated Switchgear (AIS) loop-in substation with associated Interface Towers and underground cabling which will connect into the existing 110kV Whitegate – Cow's Cross overhead line, at Rathcoursey East, Co. Cork, as set out in the plans and particulars received by An Bord Pleanála on 23rd May, 2023, 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.

I confirm that this report represents my professional planning assessment, judgement and opinion on the matter assigned to me and that no person has influenced or sought to influence, directly or indirectly, the exercise of my professional judgement in an improper or inappropriate way.



Robert Speer
Planning Inspector

29th August, 2023