

# Inspector's Report ABP-320154-24

**Development** 

Proposed 220kV Air Insulated

Switchgear (AIS) tail fed substation

with associated grid connection

comprising 220kV underground

cabling connecting to the existing

220kV Knockraha substation

**Location** located in the townlands of

Rathcobane, Dundullerick East,

Dundullerick West, Ballysallagh,

Glengaiff More, Ballynaglogh,

Ballyvatta, Ballybrannagh West,

Aghaduff, Pigeonhill, Ballynanelagh,

Kileena, Ballinbrittig and Ballynagaul,

County Cork.

**Prospective Applicant** 

Ballysallagh Solar Farm Limited

**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** 

02<sup>nd</sup> August 2024

Inspector

Máire Daly

#### 1.0 Introduction

- 1.1. The Board received a request on the 11<sup>th</sup> July 2024 from Ballysallagh Solar Farm Limited to enter into pre-application consultations under Section 182E of the Planning and Development Act 2000, as amended, in relation to a proposed 220kV substation and associated grid connection comprising 220kV underground cabling connecting to the existing 220kV Knockraha substation, with the site area located in the townlands of Rathcobane, Dundullerick East, Dundullerick West, Ballysallagh, Glengaiff More, Ballynaglogh, Ballyvatta, Ballybrannagh West, Aghaduff, Pigeonhill, Ballynanelagh, Kileena, Ballinbrittig and Ballynagaul, County Cork.
- 1.2. The Board's representatives met with the prospective applicant on the 20<sup>th</sup> August 2024. The meeting was held virtually. The prospective applicant formally requested closure of the pre-application consultation process in a letter received via email on the 10<sup>th</sup> September 2024.
- 1.3. The primary purpose of pre-application consultation is to address the issue of whether or not the proposed development constitutes strategic infrastructure for the purposes of the 2000 Act, as amended by the Planning and Development (Strategic Infrastructure) Act, 2006. This Report provides an overview of the proposed project, the relevant legislative provisions and precedents and an opinion as to whether or not the proposal falls within the scope of section 182A of the Act.
- 1.4. The Board should note that the proposed Ballysallagh Solar farm application was submitted to Cork County Council in August 2024 as a separate application seeking permission under section 34 of the Planning and Development Act 2000 (as amended) (CCC Planning ref. 245630).

## 2.0 Site Location and Description

2.1. The proposed 220kV substation will be located in the southern parcel of the proposed Ballysallagh Solar Farm in the rural area of North Cork c. 1km from Knockraha which is located north of the grid connection route. The closest large settlements to he proposed site are Watergrasshill to the northwest and Carrigtwohill to the south. The proposed substation is to be located on agricultural lands to the southwest of an existing farmyard.

2.2. The underground 220kV grid connection cable will connect the proposed substation into the existing Knockraha 220kV substation via the local road network. The grid connection route is approximately 10.2km in length. The route travels southwest from the proposed substation on the L7609 and L3604. At Pigeon Hill Junction the route continues travelling southwest on the L2966 before turning north on the L6990 and then east on the L6989 where it enters the existing Knockraha 220 kV substation. The proposed development passes through 15 townlands in total, these include Rathcobane, Dundullerick East, Dundullerick West, Ballysallagh, Glengariff More, Ballynaglogh, Ballyvatta, Ballynabrannagh West, Aghaduff, Pigeonhill, Ballynanelagh, Killeena, Ballinbrittig, Killeena and Ballynagaul.

## 3.0 Proposed Development

- 3.1. The proposed development consists of:
  - New 220kV Air Insulated Switchgear (AIS) tail fed substation; and
  - Associated grid connection comprising 220kV underground cabling connecting to the existing 220kV Knockraha substation.
- 3.2. The underground cabling from the proposed Ballysallagh solar farm is to connect into a 220 kV AIS tail fed substation which will comprise two separate compounds, an EirGrid compound and an Independent Power Producer (IPP) or customer owned compound. Both compounds contain control buildings, HV electrical equipment, transformers, other electrical infrastructure and associated infrastructure including palisade fences and concrete post and rail fences.
- 3.3. The purpose of the proposed development is to serve the proposed Ballysallagh Solar Farm which at the time of the writing of this report is the subject of a live planning application with Cork County Council.

## 4.0 Planning History

## 4.1. Associated Solar Farm Site

Live application – Decision Due Date 22/10/2024 - Cork County Council
 Planning Ref. 245630 – Permission is sought for a 10 Year planning
 permission for a solar farm with a total area of circa 179 hectares. The solar

farm will consist of solar panels on ground mounted frames, 25no. single storey electrical inverter/transformer stations, 3 no. single storey spare parts containers, 3 no. Ring Main Units, 7 no. weather stations, underground electrical ducting and cabling within the development site, private lands and within the L7691 and L7692 public roads to connect solar farm field parcels, security fencing, CCTV, access tracks, 7 no. stream/drain deck crossings, temporary construction compounds, landscaping and all associated ancillary development and drainage works. Construction and operational access will be 4 no. entrances from the R626, L7691 and L7692. The operational lifespan of the solar farm will be 40 years and planning permission is requested for this duration. A Natura Impact Statement (NIS) has been submitted to the planning authority with the application.

#### 4.2. Site opposite to Knockraha substation:

 ABP Ref. 314972 (Cork Co. Co. Ref. 224488) - Permission granted in November 2023 for a synchronous compensator (electricity grid stabilization) development within the townland of Killeena, near Knockraha, Co.Cork within a site area of approximately 0.8 hectares and all associated works.

### 4.3. Site adjacent (east of) to Knockraha Substation

Cork County Council Planning Ref. 234234 – Permission <u>refused</u> in January 2024 for 10 year planning permission to develop a low carbon inertia services (LCIA) grid support facility, which was to connect to the adjoining ESB Knockraha 220kV Electricity Substation. Reason for refusal – Archaeology - the proposed development materially contravenes and is in conflict with policy objectives HE 16-9 and 16-13 of the Cork County Development Plan (2022) and would be contrary to the proper planning and sustainable development of the area.

## 4.4. Other relevant planning history

ABP Ref. 316191 – <u>Alter decision</u> - Not a material Alteration (EIAR Case) approved in July 2023 for Section 146B amendment application for proposed alterations to the previously approved Celtic Interconnector Project, Knockraha, Co. Cork (ABP-310798-21).

 ABP Ref. 310798 – permission granted in May 2022 for permission for the Celtic Interconnector subject to 24 No. conditions. The permitted development includes for the provision of transformers to be located immediately east of the Knockraha substation.

#### 4.5. Undecided to-date Cases

- ABP Ref. 318258 <u>to be decided</u> Proposed alterations to the approved
   Celtic Interconnector Project at Knockraha, Co. Cork (ABP-310798-21).
- ABP Ref. 320532 <u>to be decided</u> Proposed 110kV electrical substation and associated 110kV infrastructure required to connect a solar farm to the existing Knockraha 220kV substation in the townlands of Knockraha East, Ballynanelagh and Kileena, County Cork.

#### 5.0 Precedent Cases

- 5.1. In terms of similar, recent precedent cases I refer the Board to the following:
  - ABP 317901-23 Co. Meath the Board determined that a 220kV loop in substation to connect to Eirgrid transmission network and underground grid connection to proposed solar farm is strategic development.
  - ABP 317173-23 Co. Cork the Board determined that a 110kV Air Insulated Switchgear (AIS) loop-in substation and associated grid connection is strategic development.
  - ABP 313090-22 Dublin 11 the Board determined that a 220kV GIS substation on lands at Kilshane Road, Kilshane, Finglas and underground 220kV transmission line connecting to the existing Cruiserath 220kV substation is strategic development.
  - ABP 315433-22 Co. Kildare the Board determined that a 220kV Air
    Insulated (AIS) tail fed substation with the associated grid connection
    comprising 220kV underground cabling to connect into the existing 400/220kV
    Dunnstown substation is strategic development.

 ABP 310033-21 – Co. Kildare - the Board determined that a 220kV substation and grid connection at existing Dunnstown 400kV substation is strategic development.

## 6.0 Prospective Applicant's Case

- 6.1. The prospective applicant's case can be summarised as follows:
  - Section 182A(9) states that 'transmission' shall be construed in accordance with Section 2(1) of the Electricity Regulation Act, 1999 and shall also be construed as meaning the transport of electricity by means of a 'high voltage line where the voltage would be 110kV or more'. The proposed development comprises a 'high voltage line where the voltage would be 110kV or more' and 'electric plant...which is used for conveying electricity from...one substation to another". As such, it is considered that the proposed development falls within the definition of 'transmission' as set out in section 182A(9) of the Planning Act.
  - There is no threshold under Section 182A(9) in respect of a substation. The substation will transport electricity at 220 kV to the existing 220 kV Knockraha substation via the proposed underground cable. It is considered that the substation therefore 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 addition, with reference to Section 2(1), it is also noted that the 220 kV substation is 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". As such, it is considered that the substation also falls within the definition of 'transmission' as set out in section 182A(9).

## 7.0 Pre-application Consultation Meeting Held

- 7.1. A virtual meeting was held with the prospective applicant on 20<sup>th</sup> August 2024 (record attached). The prospective applicant provided information about the proposed development's purpose to serve the proposed Ballysallagh Solar Farm, which they stated would be subject to a future planning application to Cork County Council. The site boundaries and preliminary design for the solar farm were being finalised and printed at the time of the meeting. The solar farm is expected to be spread over three land parcels and have an electrical output of 200 megawatts. The prospective applicant outlined supporting policy and details of preliminary environmental investigations which have informed the location and layout of the proposed development.
- 7.2. The prospective applicant outlined the view that the proposed development qualifies as a Strategic Infrastructure Development (SID) outlining that the proposed underground cable providing the grid connection from the solar farm substation to the existing 220 kV Knockraha substation is at a voltage of 220 kV. As such, it is considered that this underground cable falls within the definition of 'transmission' as set out in section 182A(9).
- 7.3. The Board representatives noted that the Celtic Interconnector was the main concern within the geographical area. The prospective applicant advised that they have had a number of consultations with EirGrid over six months, and the Celtic Interconnector has formed part of the agendas. The consultations have progressed well, and EirGrid is willing to indicate in writing that they have no objection to the development. If the proposed development is granted permission, the prospective applicant will consult with EirGrid to agree on construction methodologies to ensure that they are satisfied that there would not be any impact on the Interconnector.
- 7.4. The Boards representatives noted the recent Treascon Supreme Court judgement in terms of solar farms and advised the prospective applicant to consider the solar farm as part of the cumulative assessment.
- 7.5. The prospective applicant also stated that in the event that the Board confirms that the development is strategic infrastructure any future application will be supported by a comprehensive suite of documentation relevant to the scale of the proposed

development and also taking account of any in-combination or cumulative assessments required.

## 8.0 Legislative Provision

## 8.1. Planning and Development Act 2000 (as amended)

- 8.1.1. Section 182A(1) of the Planning and Development Act, 2000 (as amended) requires that where a person (referred to as the 'undertaker') intends to carryout development comprising or for the purposes of electricity transmission, the undertaker shall prepare an application for approval of the development under section 182B and shall apply to the Board for such approval accordingly.
- 8.1.1. 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."
- 8.1.2. Section 182E(1) provides that a prospective applicant who proposes to apply for approval under section 182B or 182D shall, before making the application, enter into consultations with the Board in relation to the proposed development.
  - 8.2. Electricity Regulation Act 1999 (as amended)
- 8.2.1. Section 2(1) of the Electricity Regulation Act 1999, as amended ('1999 Act'), sets out the following definitions:

#### '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, 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."

## '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 a consumer"

#### '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 switchgear and which is used for conveying electricity to final customers".

#### 9.0 Assessment

- 9.1. The proposal comprises a 220kV Air Insulated Switchgear (AIS) tail fed substation and associated grid connection comprising a 220kV underground cabling connecting to the existing 220kV Knockraha substation. As previously stated, the proposed development includes only the 220 kV substation and grid connection and not the solar farm or other ancillary development which form part of the wider project and which will require a separate permission under section 34 of the Planning Acts.
- 9.2. 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. No threshold is set in respect of a substation. The substation will transport electricity at 220 kV to the existing 220 kV Knockraha substation via the proposed underground cable. It is considered that the substation therefore 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 also noted that the 220 kV substation is 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". As such, it is considered that the substation also falls within the definition of 'transmission' as set out in section 182A(9). I consider that the proposed substation constitutes 'electrical plant' as defined under Section 8.0 above in that it is plant for connecting the future proposed Ballysallagh Solar Farm to the national grid.
- 9.3. The operational lifetime of the proposed solar farm is assumed to be 40 years. However, following the decommissioning of the solar farm, it is envisaged that the substation (and underground cable grid connection) will remain in situ as a valuable functioning and operational part of the electricity transmission network managed by EirGrid. The final grid connection option will be confirmed as the solar farm (including electrical design) progresses. The new substation and associated infrastructure will form part of the existing transmission system. 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 220kV substation and associated overground/underground cabling which is to be connected into the existing transmission system constitutes strategic infrastructure.
- 9.4. In conclusion, I consider that the proposed 220 kV Air Insulated Switchgear (AIS) tail fed substation with the associated grid connection comprising 220 kV underground cabling which will connect into the existing 220 kV Knockraha substation as described in the submissions and drawings submitted 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.

#### **Prescribed Bodies**

9.5. 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.

## 10.0 Recommendation

10.1. I recommend that Ballysallagh Solar Farm Limited be informed that the proposed development consisting of a 220kV Air Insulated Switchgear (AIS) tail fed substation with associated grid connection comprising 220kV underground cabling connecting to the existing 220kV Knockraha substation, as set out in the plans and particulars received by An Bord Pleanála on the 11th July 2024, 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.

Máire Daly

Senior Planning Inspector

13th September 2024

## 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, Local Government and Heritage
- Minister for Environment, Climate and Communications
- Cork County Council
- Transport Infrastructure Ireland
- An Taisce
- Heritage Council
- Commission for Regulation of Utilities, Water and Energy
- Fáilte Ireland
- Uisce Eireann
- An Chomhairle Ealaion

Further notifications should be made where deemed appropriate.