

Inspector's Report ABP-315430-22.

Development

110kV electrical substation and its grid

connection options to the transmission network

at Maganey Solar Farm.

Location

Lands in Johnstown South, Knockroe, Crooket

and Newtown Allen, Co. Kildare.

Prospective Applicant

BNRG Ltd.

Planning Authority.

Kildare County Council.

Type of Application

Pre-Application consultation under section

182E of the Planning and Development Act

2000, as amended.

Date of Site Inspection

27 January 2023.

Inspector

Mairead Kenny.

1.0 Overview

The Board on 22 December 2022 received a request to enter into pre-application consultation under section 182E of the Planning and Development Act 2000 as amended in relation to the proposed 110kV electrical substation and grid connection options.

The proposed development is for the purpose of providing a substation and associated 110kV cabling to serve Maganey Solar Farm. The 50MW solar energy development will be subject of an application to Kildare County Council.

A virtual meeting was held with the prospective applicant on 10 March 2023.

Closure of the pre-application consultation was requested by letter dated 13 April.

2.0 Site Location, Description and Proposed Development

2.1. The site.

The subject site is in the heart of a rural area in south-east Kildare about 3km south-west of Castledermot and 4km from Carlow town. The county boundary is 1km from the southern part of the proposed solar energy facility. The existing environment including the site of the solar farm and substation developments comprises undulating farmland. Site boundaries are formed by hedgerows and tree lines and the agricultural use is dominated by tillage.

The site of the proposed solar energy facility is spread over almost 65 hectares of which over 40 hectares will be reserved for solar panels. The overall lands is split into two separate plots. The northern site covers 48.1 ha and the southern site and area of 16.5 ha. The proposed substation would be centrally positioned within the overall site close to the 110 kV Carlow to Portlaoise overhead line.

Junction 4 (Castledermot) of the M9 motorway is a few kilometers from the site. The overall development would be served by 4 no. site entrances from adjacent local roads.

The watercourses in the area include a stream along the boundary of the northern site which flows to the River Lerr. The River Lerr which is part of the River Barrow

and River Nore SAC is approximately 100 m (direct distance) south of the southernmost part of the southern site.

There are 2 recorded monuments and places (RMPs) adjacent the proposed substation and 13 sites within 500 m of the boundary. The closest protected structures or NIAH site is NIAH reference 11903909, a bridge over the River Lerr.

There is a low density of rural housing in the immediate environs of the site to the west of the planned substation.

The details of the proposed development are described in the documentation presented with the application and during the pre-application consultation meeting. The information is provided by Tobin Consulting Engineers on behalf of the prospective applicant BNRG.

2.2. Proposed development

The proposed development subject of this pre-application consultation is described as '110 kV electrical substation and its grid connection options to the existing transmission network at Maganey Solar Farm'.

The proposed development details are as follows:

- The substation is to be connected to 110 KV transmission overhead line by way of a loop in connection.
- To include control buildings, radio mast, lattice towers, modifications, and connection to existing on-site 110 kV transmission line, perimeter fencing and access gate and all ancillary services and works.
- The permission is to be effective for 10 years and operation lifetime of 40 years will be requested.
- The prospective applicant states that relevant consents from landowners have been obtained.
- The submitted drawings include an indicative layout for the substation.
- Underground cable in public road to provide the grid connection to the southern site. An indicative route is presented but this must be finalised.

The associated solar farm development includes a 100 MW BESS facility which would be located to the north of the substation, and which is not part of the subject development.

3.0 Planning History

At the time of the pre-application consultation meeting the applicant noted that consultation had taken place with Kildare County Council in relation to the solar farm development.

4.0 Prospective Applicant's Submission

The submission is that the proposed development would constitute SID having regard to the provisions of section 182 A(1) and subsection (9) of the Planning Acts and in the context of the definitions of transmission and electrical plant under the Electricity Regulation Act 1999.

The proposed development and the associated grid connection will form part of the transmission system operated by EirGrid.

The subject development is considered 'transmission' under the relevant definitions and must therefore be subject to a future application to An Bord Pleanála.

5.0 Relevant Legislation

Section 182A (1) of the 2000 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 development under section 182B and shall apply to the Board for such approval accordingly.

Subsection 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.

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.

6.0 Assessment

- 6.1.1. This assessment concerns whether the proposed substation is SID. Secondly, I list the relevant prescribed bodies to which any future application should be referred should it be determined that the application should be made in the first instance to the Board.
- 6.1.2. The proposed development comprises a 110 kV substation which would connect to the overhead transmission line which traverses the overall site by way of a loop in

- connection. The submitted layout shows space for expansion within the electrical facility which is to be part of Eirgrid's network. Options for the connection of the southern plot are also proposed as part of this application and one route identified in the public road to the west.
- 6.1.3. I agree with the position adopted with respect to the SID determination. The prospective applicant's agent notes that section 182A (9) of the Act sets a threshold of 110 kV for a high-voltage electricity transmission line to be considered strategic infrastructure and that no threshold is set in respect of a substation. As the proposed 110 kV substation will be connected to the 110kV overhead transmission line it follows that the substation constitutes SID, it is stated.
- 6.1.4. I am satisfied that the proposed 110kV substation is electric plant as defined in relevant legislation. The proposed development includes 110 kV lines. I consider that the proposal meets the definition of electricity transmission under section 2 (1) of the Electricity Regulation Act 1999. As such it would fall under section 182A of the PDA and would be deemed to be SID.
- 6.1.5. Therefore, on the substantive question I conclude that the proposed development as described in the submitted documentation constitutes strategic infrastructure within the scope of section 182A of the Planning and Development Act 2000, as amended, necessitating an application directly to the Board.
- 6.1.6. The subject site is adjoined to the east by two RMPs raising the possibility of direct and indirect impacts. The site is also proximate to and hydrologically connected with the River Barrow and River Nore SAC. In this respect I note that the separation distance stated by the prospective applicant at the pre-application meeting appears to be underestimated and is in the order of 100m, based on the NPWS map viewer. Similarly there appears to be an error in the information provided relating to the nearest NIAH structure, which is identified as being 1.8km away but is in fact within 200m of the southern boundary of the planned solar farm. Nothing material arises from these errors in terms of the consideration of this pre-application consultation.
- 6.1.7. Any future application would be accompanied by a NIS and other technical documents as outlined by Tobin consulting engineers.
- 6.1.8. I note that the optional grid connection to the southern side of the proposed solar farm passes through townlands which are not listed in the description of the

development. This omission would need to be rectified in any further application. However, I consider that there is sufficient information for the purposes of my assessment and the Board's decision on this case. I have not amended the description of the development to include the relevant townlands (Drumanoge and Lisbush).

6.1.9. I attach an Appendix of relevant prescribed bodies.

7.0 Recommendation

I recommend that the prospective applicant BNRG be notified that the proposed development consisting of 110kV electrical substation and its grid connection options to the transmission network at Maganey Solar Farm in the townlands of Johnstown South, Knockroe, Crooket and Newtown Allen, Co. Kildare as described in the documents received by the Board on 22 December 2022 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.

Mairead Kenny

Senior Planning Inspector

9 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 the Environment, Heritage and Local Government
- Minister for Communications, Marine and Natural Resources
- Kildare County Council
- Transport Infrastructure Ireland
- Commission for Regulation of Utilities, Water and Energy
- Irish Water
- The Heritage Council
- An Taisce
- An Chomhairle Ealaion
- Failte Ireland
- Inland Fisheries Ireland

Further notifications should be made where deemed appropriate.