



An  
Bord  
Pleanála

## Inspector's Report ABP-319470-24

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<b>Development</b>	Proposed 110kV substation and 110kV underground cable connecting the substation to the existing ESB 220kV Kellistown substation.
<b>Location</b>	Grangeford, Co. Carlow.
<b>Planning Authority</b>	Carlow County Council
<b>Prospective Applicant</b>	Prt Solar Ltd.
<b>Type of Application</b>	Pre-application consultation under Section 182E of the Planning and Development Act, 2000, as amended.
<b>Date of Site Inspection</b>	10 <sup>th</sup> August, 2024
<b>Inspector</b>	Robert Speer

## **1.0 Introduction**

- 1.1. The Board received a request on 5<sup>th</sup> April, 2024 from the prospective applicant, Prt Solar Ltd., 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 new 110kV substation and 110kV underground cable connecting the substation to the existing ESB 220kV Kellistown substation, at Grangeford, Co. Carlow.
- 1.2. A single meeting was held remotely with the prospective applicant and its representatives on 13<sup>th</sup> August, 2024. Closure of the pre-application consultation was requested by letter dated 2<sup>nd</sup> December, 2024.

## **2.0 Site Location and Description**

- 2.1. The site of the proposed substation is located in the rural townlands of Grangeford Old and Friarstown, Co. Carlow, approximately 8.7km east of Carlow town centre and c. 5km northwest of Tullow, along the northern side of the R725 Regional Road with access available via Local Road No. L6113. It has a stated site area of c. 1.7 hectares and is situated in the northernmost corner of a larger agricultural field. The route of the proposed underground cable (UGC) is shown on the plans and particulars submitted with the pre-application consultation request as extending eastwards from the proposed substation onto Local Road No. L6113 before continuing south along existing roads infrastructure as far as the Kellistown 220kV substation (*N.B.* This routing has been amended slightly in the request for closure with the accompanying particulars showing the UGC extending in a southerly direction through the permitted solar energy development along existing internal access tracks and exiting directly onto the R725 Regional Road).
- 2.2. The surrounding area is primarily agricultural and is characterised by a gently undulating rural landscape dominated by pasture and arable / cereal production with intermittent instances of individual farmsteads and one-off rural housing. The Slaney River Valley Special Area of Conservation (Site Code: 000781) lies approximately 2.8km to the east with the River Barrow and River Nore Special Area of Conservation (Site Code: 002162) c. 8.6km to the west. At its closest, the Ardristan

Fen Proposed Natural Heritage Area (Site Code: 000788) is located approximately 1.5km southeast of the route of the proposed UGC.

### **3.0 Proposed Development**

- 3.1. The proposed development consists of the construction of an extendable 110kV Air Insulated Switchgear (AIS) substation along with a 110kV underground cable which will connect the proposed substation to the existing ESB 220kV Kellistown substation. The substation will comprise an outdoor switchyard housing the high voltage equipment which will include a main step-up transformer, busbar, instrument transformers, outdoor (AIS) switchgear, cable chair, lightning protection mast, and ancillary equipment. The cabling is to be installed in a cable trench as per industry standards and will include ducting, fibre optic conductor, insulated earthing conductor where required, and link boxes at some jointing locations (although the ESB will be ultimately responsible for ensuring that the most appropriate connection option is selected). Both the substation and the underground cable will be owned and operated by the Independent Power Producer. Indicative details of the proposed substation layout etc. are included in the submitted particulars.
- 3.2. The purpose of the substation and underground cable is to connect the solar PV development permitted under PA Ref. No. 2360297 to the national grid (it is anticipated that the proposed substation will be developed in lieu of the 38kV substation already permitted under ABP Ref. No. ABP-309987-21). The substation will not be "tail-fed" and is designed to be adaptable to become a meshed node or collector hub for the connection of other users and for the extension and reinforcement of the transmission system. It is considered that the proposed arrangement will function as a spur "node" on the national grid while also forming the connection point for the solar PV development permitted under PA Ref. No. 2360297 (and other future renewable projects in the area) to the existing 220kV Kellistown substation.

## **4.0 Relevant Planning History**

### **4.1. On Site:**

- 4.1.1. PA Ref. No. 16325. Was granted on 4<sup>th</sup> December, 2017 permitting Nolan PV Ltd. permission for the development of a solar PV panel array consisting of up to 48,800m<sup>2</sup> of solar panels on ground mounted steel frames, electricity control room, power inverter unit, underground cable ducts, CCTV and lighting, security fence, and all associated works at Friarstown, Tullow, Co. Carlow.
- 4.1.2. PA Ref. No. 21/23 / ABP Ref. No. ABP-309987-21. Was granted on appeal on 26<sup>th</sup> October, 2021 permitting Summit Solar Limited a 10-year permission for the construction of a solar photovoltaic development comprising photovoltaic panels laid out in arrays over a total development site area of c. 65.6 hectares, construction of a 38kV substation (circa 114.4 metres square by 4.75 metres tall), a transformer unit (circa 18 square metres by four metres tall) and associated bund (circa 55 square metres), along with ancillary development including 24 No. power hubs (circa 15.25 square metres by 2.4 metres) which incorporate an inverter and a transformer, 1 No. single storey communications building (11.1 square metres by 2.5 metres), 1 No. single storey client side sub-station building (15.25 square metres by 2.9 metres), 1 No. single storey equipment storage building (7.5 square metres by 2.7 metres), 10 No. CCTV cameras mounted on four metre high poles, perimeter security fencing, site access, site egress and all ancillary works. Permission currently exists for a photovoltaic development on part of the site (planning register reference number 16325). All at Grangeford Old and Friarstown, Co. Carlow.
- 4.1.3. PA Ref. No. 2360297. Was granted on 24<sup>th</sup> September, 2024 permitting Prt Solar Limited a 10-year permission for the construction of (i) a Solar PV development comprising photovoltaic panels laid out in arrays over a total development site area of c. 91.2ha, (ii) the construction of a 38kV substation building ((6.1m (h) x 20.9m (l) and 7.3m (w)) and associated compound area, a transformer unit (c. 6m x c. 3.6m) and associated bund, (iii) 352 No. Battery Energy Storage System units comprising 22 modules (ca. 21.9m x ca.5.2m) each with 16 No. cabinet units within each module and (iv) all ancillary development including 15 No. transformer integrated units (c. 10.5m x c. 2.7m), 12 No. inverter units (c. 6.0m x c. 2.4m), 7 No. CCTV cameras mounted on 4m high poles, a 3m high acoustic barrier, with berm and fencing,

perimeter security fencing, site access, site egress and all ancillary works and services. The development will have a 40-year operational lifetime. Permission currently exists for a PV development on c. 65.6ha of the site (Planning Permission Ref No. 21/23). All at Grangeford Old and Friarstown, Co. Carlow.

## **5.0 Precedent Cases**

- 5.1.1. There are multiple incidences of the Board having made determinations as to whether similar-type projects constitute Strategic Infrastructure Development. Relevant precedent decisions include the following:
- 5.1.2. ABP Ref. No. ABP-319042-24. Was determined on 25<sup>th</sup> October, 2024 with the Board deciding that the proposed development of 110kV substation and underground 110kV transmission line from the connection point at Brideswell to the proposed substation at Moyvannan, Co. Roscommon, was strategic infrastructure development within the meaning of Section 182A of the Act.
- 5.1.3. ABP Ref. No. ABP-319391-24. Was determined on 25<sup>th</sup> October, 2024 with the Board deciding that the proposed development of a 110kV 'loop in – loop out' electricity substation and approximately 8.5km of underground electricity line, at Shankill and Ballygorteen, Co. Kilkenny, and Lacken, Baunreagh and Annagar, Co. Carlow, was strategic infrastructure development within the meaning of Section 182A of the Act.

## **6.0 Prospective Applicant's Case**

- The proposed substation will become a node on the national grid in Co. Carlow and will also form the connection point for the permitted solar PV development (PA Ref. No. 2360297) and future renewable energy projects in the area.
- The project falls within the scope of Section 182A of the Planning and Development Act, 2000, as amended, and also meets the criteria of Section 37A(2) as a development which will contribute substantially to the fulfilment of any of the objectives in the National Planning Framework.

The relevant criteria of Section 372A(2) are as follows:

- a) The development would be of strategic economic or social importance to the State or the region in which it would be situated;
- b) The development would contribute substantially to the fulfilment of any of the objectives in the National Planning Framework or in any regional spatial and economic strategy in force in respect of the area or areas in which it would be situated;
- c) The development would have a significant effect on the area of more than one planning authority.

With respect to part (b) above, the proposed substation site will have the capacity to serve future renewable energy developments and would contribute substantially to the fulfilment of any of the objectives in the National Planning Framework or in any regional spatial and economic strategy in force in respect of the area or areas in which it would be situated.

- The permitted and proposed solar developments will not use the total capacity of the extendable substation (180MW). Hence, the proposal will offer a significant strategic benefit to the surrounding area for the development of future renewable energy projects.
- The proposed development is consistent with Ireland's international, European and national commitments as regards the reduction of greenhouse gas emissions and the provision of energy from renewable sources.
- Given the size and electricity generation potential of the proposed 110kV substation and 110kV UGC, it is considered that all elements of the project fall within the requirements of Planning and Development (Strategic Infrastructure) Act, 2006.

## 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. At the outset, and for the purposes of clarity, the Board is advised that although the prospective applicant originally lodged the request to enter into pre-application consultations pursuant to Section 37B of the Planning and Development Act, 2000, as amended, following consideration of correspondence received from the Board dated 24<sup>th</sup> April, 2024, the request was subsequently revised to have been made under the provisions of Section 182E of the Act. By extension, it should be noted that no reliance can be placed on the prospective applicant's reference to the criteria set out in Section 37A(2) of the Planning and Development Act, 2000 as these provisions do not apply to the formulation of an opinion under Section 182A of the Act.
- 8.2. This pre-application consultation concerns the proposed development of a new 110kV substation in the rural townlands of Grangeford Old and Friarstown, Co. Carlow, along with the laying of a 110kV underground cable connecting that substation to the existing ESB 220kV substation at Kellistown, Co. Carlow. The purpose of the proposed substation and underground cable is to connect the solar photovoltaic development already permitted under PA Ref. No. 2360297 to the national grid. In addition, the substation is intended to function as a new spur "node" for the connection of other users to the national grid and for the extension and reinforcement of the transmission system.
- 8.3. 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 110kV underground grid connection cable falls within the scope of Section 182A of the Planning and Development Act, 2000, as amended. Furthermore, given that the proposed 110kV 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) and as it is intended to function as an operational 'node' on the national transmission network, it is my opinion that the proposed substation similarly falls within the scope of Section 182A of the Act.

- 8.4. In addition to the foregoing, it is of note that parallels may be drawn between the subject works and other comparable proposals put before the Board for pre-application consultation under Section 182E of the Planning & Development Act, 2000, as amended, which were held to constitute 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 UGC 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, Prt Solar Ltd., be informed that the proposed development consisting of a 110kV substation and 110kV underground cable connecting the substation to existing ESB 220kV Kellistown substation, at Grangeford, Co. Carlow, as set out in the plans and particulars received by An Bord Pleanála on 5<sup>th</sup> April, 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.



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Robert Speer  
Senior Planning Inspector

3<sup>rd</sup> January, 2025

## **Appendix A: Prescribed Bodies**

The following is a list of prescribed bodies considered relevant by the Board:

- Minister for Housing, Local Government and Heritage
- Minister for the Environment, Climate and Communications
- Carlow County Council
- Transport Infrastructure Ireland
- An Taisce
- Fáilte Ireland
- The Heritage Council
- An Chomhairle Ealaíon
- Uisce Éireann (Irish Water)
- Commission for Regulation of Utilities
- EirGrid
- ESB
- Inland Fisheries Ireland

Further notifications should also be made, where deemed appropriate.