

Inspector's Report ABP-311032-21

Development	Proposed new tail fed 110kV substation in Fieldstown to connect to Finglas substation via 110kV underground cables	
Location	Townland of Fieldstown, Co. Dublin	
Prospective Applicant	Energia Solar Holdings Limited	
Planning Authority	Fingal County Council	
Type of Application	Pre-Application Consultation under s.182E of the Planning and Development Act 2000, as amended	
Date of Site Inspection	19 th November 2021	
Inspector	Niall Haverty	

1.0 Introduction

- 1.1. The Board received a request on 4th August 2021 from AECOM, acting on behalf of Energia Solar Holdings Limited ('the prospective applicant'), to enter into pre-application consultation under section 182E of the Planning and Development Act 2000, as amended ('the 2000 Act'), in relation to proposed development consisting of the construction of a new tail-fed 110kV substation in Fieldstown, Co. Dublin to connect to Finglas substation via 110kV underground cables.
- 1.2. Two consultation meetings were subsequently held between An Bord Pleanála and the prospective applicant on 22nd November 2021 and 31st May 2022, respectively. The prospective applicant formally requested closure of the pre-application consultation process in a letter dated 11th July 2022.
- 1.3. This Report provides an overview of the proposed development, a summary of the meetings and the advice provided by the Board, the legislative provisions, relevant precedents and recommends that the Board determine that the proposed development does fall within the scope of section 182A of the 2000 Act. A recommended list of Prescribed Bodies that should be forwarded copies of the application is included in Appendix A.

2.0 Site location

- 2.1. The proposed site, which has a stated area of c. 11.7 ha, is located in the townland of Fieldstown, Co. Dublin. The site is bounded by the R122 Regional Road to the west, agricultural field boundaries to the north and east and the Broadmeadow River and the R125 to the south. The nearest large towns are Ashbourne which is 4.5km to the west and Swords, which is c. 9.5km to the south east. Smaller settlements in the area include Oldtown, c 2.5km to the north, Ballyboughal, c. 4.5km to the east and Rolestown, c. 1km to the south east.
- 2.2. The site is currently in agricultural use, comprising a number of fields with hedgerow boundaries. Access to the site is provided from an existing farm gate on the R122 to the west. There is a considerable degree of dispersed one-off housing along the

regional and local roads in the area. The closest dwelling is stated to be c. 300m to the south east of the site.

2.3. The proposed substation would be connected via underground 110kV cables to the existing Finglas substation in the townland of Balseskin, c. 10km to the south. The Finglas substation is located immediately north west of Junction 5 of the M50 Motorway (i.e. the M50/N2 Junction). The cable route is not yet confirmed but is likely to follow the public road/verge.

3.0 Proposed Development

- 3.1. The proposed development is stated to comprise a 110kV Air Insulated Switchgear (AIS) tail-fed substation together with 110kV underground cable to connect to the existing Finglas substation. The substation development will have a total compound area of c. 12,800 sq. m.
- 3.2. It is stated that the underground cable connection to Finglas substation will be subject to a separate planning process if the Board determines that the proposed substation is non-SID. It is anticipated that the cables will be located in the public road insofar as possible, with the final cable routing being dependent on a connection agreement with EirGrid.
- 3.3. The description of the proposed development, as updated at the first meeting, includes:
 - HV AIS busbar/switchgear.
 - HV control room.
 - HV/MV 1 No. grid transformer.
 - MV switchgear/control room.
 - MV AIS busbar/switchgear.
 - Underground 110kV cable connecting to Finglas substation.
- 3.4. The purpose of the proposed development is to facilitate the connection of 2 No. permitted solar farms to the national grid. These are the Fieldstown Solar Farm (75MW MEC) and the Ballaghaweary Solar Farm (20MW MEC), which will be connected via 33kV underground cable to the proposed substation.

3.5. The request was accompanied by a report, cover letter and drawings prepared by AECOM.

4.0 Prospective Applicant's Case

- 4.1. The prospective applicant's case, as outlined in their initial request, can be summarised as follows:
 - Proposed development is a tail-fed substation. Power within the circuit will not be entirely diverted into the substation and back out again. Proposed development will not therefore form a node on the transmission network and does not fall within the scope of s.182A(9).
 - Proposed substation and associated grid connection does not constitute SID and the application should be made to Fingal County Council.
 - Table 6-1 of the prospective applicant's report lists similar precedent cases where the Board determined that the proposal did not constitute SID.
 - In other cases, where the Board determined that 110kV electrical infrastructure did fall within the definition of SID, this was typically in circumstances where a substation was proposed with a loop in/loop out connection to an existing transmission line, thus becoming a node on the transmission network.
 - In this case, the proposed substation will serve the solar farms and allow for a tail-fed connection to the existing Finglas substation.
 - EIA is not required for the transmission infrastructure, with reference to Schedule 5, Part 1, Paragraph 19 and Schedule 5, Part 2, Paragraph 3(b) of the Planning and Development Regulations.
 - As the transmission infrastructure is not considered to be 'private' SID as specified in the Seventh Schedule of the Planning Act, no EIA requirement is triggered.
 - The transmission infrastructure does not form part or is integral to an EIA development. The High Court has found that solar farms do not require EIA.

- The proposed development does not constitute SID, with reference to the long title and general description of the 2006 Act and the provisions of section 37A(2).
- The Board is asked to serve a notice that the proposed development does not constitute SID and that a planning application should be made to Fingal County Council.

5.0 Planning History

5.1. Reg. Ref. 211436: Ballaghaweary Solar Farm

5.1.1. Permission granted by Meath County Council in January 2022 for a solar PV energy development on lands at Ballaghaweary and Greenogue, Killsallaghan, Co. Meath, with a total site area of 34.4 ha to include solar panels mounted on steel support structures, associated cabling and ducting, 7 No. MV power stations, 1 No. client substation, 1 No. temporary construction compound, access tracks, hardstanding area, boundary security fencing and security gates, CCTV, landscaping and ancillary works.

5.2. Reg. Ref. F21A/0042: Fieldstown Solar Farm

5.2.1. Permission granted by Fingal County Council in September 2021 for a solar PV energy development on lands at Whitestown and Fieldstown, Killsallaghan, Co. Dublin, with a total site area of c. 105 ha, to include solar panels mounted on steel supports, associated cabling and ducting, 1 No. client substation, 33 No. MV power stations, 8 No. battery storage containers, 1 No. temporary construction compound, access tracks, boundary security fencing and security gates, CCTV, landscaping and ancillary site works.

6.0 Relevant Precedents

6.1. Table 6-1 of the prospective applicant's report sets out a list of what they consider to be relevant SID cases. The following table outlines the most recent and relevant precedents for the proposed construction of new 110kV substations.

ABP Ref.	Development Description	Decision Date	ABP Decision
312860	Proposed development of 110kV electrical substation and its grid connection options to the existing transmission network	2022	Is SID
312249	Development of a 110kV substation and provision of electrical connection to the national grid	2022	Is SID
311204	Proposed 110kV substation to feed into the existing Aughinish - Kilpaddoge 110kV overhead line (OHL)	2022	Is SID
311176	Proposed construction of two new 110kV substations and 110kV underground cable connecting both substations	2022	Is SID
311403	Proposed development of 110kV infrastructure	2022	Is SID
310846	110kV substation to feed into the existing Athlone 220/110 kV substation at Monksland, Co. Roscommon, including underground cable connection and all associated works	2021	Is SID
310076	110kV substation and provision of electrical connection to the national grid.	2021	Is SID
310026	Proposed development of a 110kV substation at Dennistown Solar Energy Development and a 110kV underground cable connecting it to Wexford substation	2021	Is SID

7.0 **Pre-Application Consultation Meetings**

- 7.1. Two consultation meetings were held between An Bord Pleanála and the prospective applicant on 22nd November 2021 and 31st May 2022, respectively. Full details of the meetings and matters discussed are contained in the Board's records for the meetings, but can be summarised as follows:
 - First Meeting:
 - <u>Definitions:</u> The definitions of 'transmission' contained in section 182A(9) of the Planning and Development Act 2000, as amended, and the Electricity Regulation Act 1999, as amended, were discussed.

- <u>SID Status</u>: The prospective applicant stated its opinion that the proposed development would not be for the purposes of transmission, would not be a new node on the network, would be dedicated for the associated proposed solar farms and that any issues on the spur/tail line would not affect the transmission network.
- <u>Nature Development Area</u>: The Board's representatives noted that the subject site is located in an area designated as a Nature Development Area, which includes objectives relating to biodiversity protection and enhancement, and advised that assessments should be cognisant of this.
- <u>Appropriate Assessment:</u> The Board's representatives noted the proximity of the site to the Broadmeadow River with drainage channels appearing to provide linkages to the Broadmeadow/Malahide Estuary SAC. The prospective applicant said that Stage 2 AA has been screened out and that water quality and biodiversity issues and mitigation measures would be addressed within its environmental assessment. The Board's representatives noted that mitigation should not be included for the purposes of AA screening and the prospective applicant's representatives agreed with this.
- <u>Fieldstown Bridge</u>: The prospective applicant said that the bridge, a protected structure, would not be adversely affected by the laying of the proposed cable and that it has had consultations with the roads section of the planning authority in relation to cable routes and roadworks. The Board noted the need for noise impacts and impacts on residential amenity to be considered with respect to the laying of the proposed cable.
- <u>Services:</u> The prospective applicant was advised to address services such as foul drainage and surface water management in its planning application.
- <u>Cumulative/in-combination Impacts:</u> The prospective applicant stated that the construction of the proposed substation would precede the proposed solar farm. The Board's representatives advised that the issues of incombination effects and potential cumulative impacts with other projects should be addressed in the planning application.

- <u>Hedgerows:</u> The prospective applicant stated that assessment of the need to remove hedgerows are on-going and that proposals to reinstate hedgerows would form part of the planning application.
- <u>Sightlines:</u> The Board's representatives noted that sightlines, especially to the north, appeared to be substandard and advised that this be addressed in the planning application.
- <u>Consultation</u>: The prospective applicant said that consultations have taken place with the local authority and ESB. The Board noted this and recommended that consultations should take place with Inland Fisheries Ireland given the proximity to the Broadmeadow River.

• Second Meeting:

- In advance of the second meeting, the prospective applicant sent a letter to the Board, dated 18th May 2022. The issues raised in the letter include:
 - Prospective applicant met EirGrid following the first meeting. They state in their attached correspondence that due to the proposed substation being tail-fed it will not be a Meshed Transmission Station and as such will not form a node on the meshed transmission system.
 - Proposed development does not fall within the definition of transmission.
 - It is queried how the transfer of the proposed development to EirGrid and the potential future use of the substation is relevant to the SID determination. The proposed development is solely to connect a solar farm to the transmission network and any future development at the substation would require its own consenting process by EirGrid.
 - For the Board to apply a different interpretation of the relevant sections of the Act from that previously applied to 110kV tail-fed substation when provided with guidance from EirGrid would not be an equitable and balanced determination in the interests of the common good and proper planning and sustainable development.

- The prospective applicant outlined the issues raised in their abovementioned letter and re-stated its opinion that the proposed development would not constitute SID within the scope of s.182A(9) of the Act.
- <u>Distribution System</u>: The prospective applicant stated that a section of the proposed 110kV cable and the existing Finglas substation is within the Dublin distribution network and would not, in its opinion, be for the purposes of transmission in the overall network.

The Board's representatives noted the definition of transmission set out in s.182A(9) of the Planning Act, which is broader than the definition contained in the Electricity Regulation Act and noted that the Board of recent has deemed new 110kV substations and grid connections to be SID notwithstanding their tail-fed nature. With regard to the prospective applicant's point about the Dublin distribution network, the Board's representatives said that they would need to give further consideration to this matter.

• <u>Other issues:</u> The prospective applicant stated that it had no new projectspecific planning and environmental issues to raise.

7.2. Letter Requesting Closure of Pre-Application Consultation

- 7.2.1. In their letter of 11th July 2022 requesting closure of the pre-application consultation process, the prospective applicant reiterated their position regarding the status of the proposed development (i.e. that it is not SID). I note, in particular, the following points made in their letter:
 - The proposed Development does not constitute a Transmission System Asset. The proposed tail-fed substation shall connect via 110kV underground cable to only the existing Finglas substation which is part of the Dublin 110kV Distribution System. The 110kV Network in Dublin is excluded from the definition of Transmission System set out in section 2(1) of the Electricity Regulations Act 1999 as the [Electricity Supply] Board, with the approval of the Commission, have specified it as part of the Distribution System.

Therefore, section 182A(1) of the Planning Acts does not apply since it relates to development 'comprising' or 'for the purposes of' electricity transmission.

- Per the Infrastructure Agreement between EirGrid and ESB, dated 16/03/06, the prospective applicant's intended point of connection is specified further as the Distribution System under Section 4.1.2.(b).(iv): "...The radial or sectionalised 110kV system located in the Greater Dublin area and other parts of the country which serves to supply electrical energy to distribution points in radial circuits will constitute distribution assets rather than transmission assets".
- The Board's reference to recent determinations for new 110kV substations and grid connections that have been determined as SID notwithstanding their tail-fed nature is noted. However, these connect to substations identified as part of the Transmission Network and identified on the Transmission System map produced by EirGrid.

8.0 Legislative Provisions

8.1. Planning and Development Act 2000, as Amended

8.1.1. Section 2(1) of the Act defines 'strategic infrastructure' as including, *inter alia*:

"any proposed development referred to in section 182A(1)"

- 8.1.2. Under subsection 182A(1) of the Act, where a person (the 'undertaker') intends to carry out development comprising or for the purposes of electricity transmission, 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.
- 8.1.3. 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."

8.2. Electricity Regulation Act 1999, as Amended

8.2.1. The following definitions, as set out in section 2(1) of the Electricity Regulation Act, 1999, as amended ('the 1999 Act'), are noted:

• '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 Board¹ 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"
- 'Electric Line':

Section 2(1) of the 1999 Act, as amended, states that 'electric line' has the meaning assigned to it by section 4(1) of the ESB (Electronic Communications Networks) Act 2014. The definition set out in s. 4(1) of the 2014 Act is as follows:

¹ For clarity, references to the 'Board' in this instance relate to the Electricity Supply Board.

"...any line which is used solely or amongst other things for carrying electricity for any purpose and as including—

- (a) any support for any such line, that is to say, any structure, pole or other thing in, on, by or from which any such line may be supported, carried or suspended,
- (b) any apparatus connected to or associated with any such line for the purpose of carrying electricity or electronic communications services, whether such apparatus is owned by the Board or by any company referred to in section 2 or by a company which has been provided access or services referred to in section 3, or
- (c) any wire, cable, tube, pipe or similar thing (including its casing or coating) which is used for the purpose of carrying electricity or electronic communications services and which surrounds or supports or is surrounded or supported by, or is installed in close proximity to, or is supported, carried or suspended in association with, any such line."

9.0 Assessment

9.1. Strategic Infrastructure Development

- 9.1.1. The proposed development comprises a new 110kV AIS substation intended to facilitate the connection of two permitted solar farms to the National Grid via a tail-fed connection to the existing Finglas substation.
- 9.1.2. The prospective applicant is seeking a determination from the Board as to whether the proposed 110kV substation and cable connection to the Finglas substation is or is not Strategic Infrastructure Development. The prospective applicant contends that it is not Strategic Infrastructure Development for the reasons summarised in Sections 4 and 7 above.
- 9.1.3. Under section 182A of the 2000 Act, an undertaker shall apply to the Board for approval of a development comprising or for the purposes of electricity transmission. The prospective applicant contends that the proposed development is not "development comprising or for the purposes of electricity transmission" and that it therefore does not come within the scope of section 182A.

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- 9.1.4. In coming to this position, the prospective applicant notes the designation of certain 110kV infrastructure in the Dublin area as forming part of the distribution system rather than the transmission system. Section 2(1) of the 1999 Act defines transmission 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 <u>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</u>" [emphasis added].
- 9.1.5. I note, however, that the definition of 'transmission' contained in the 2000 Act is broader than that contained in the 1999 Act. Section 182A(9) of the 2000 Act states that 'transmission' shall be construed in accordance with section 2(1) of the 1999 Act but, for the purposes of the section, shall <u>also</u> be construed as meaning the transport of electricity by means of a high voltage line where the voltage would be 110 kV or more.
- 9.1.6. Since the planning definition of 'transmission' incorporates both the electricity regulation definition and the transport of electricity by means of a high voltage line, it is possible, therefore, for a proposed development to comprise 'transmission' under the provisions of the 2000 Act but not to comprise 'transmission' under the provisions of the 1999 Act. This is understandable give the different purposes and functions of the two Acts.
- 9.1.7. I consider, therefore, that the reference in section 182A of the 2000 Act to "development comprising or for the purposes of electricity transmission" relates to the broader planning definition of transmission.
- 9.1.8. I note the EirGrid correspondence provided by the prospective applicant which states that the proposed substation will not form a node on the meshed transmission system. Notwithstanding this, the proposed development does entail the transport of electricity by means of 110kV high voltage lines (underground cables in this instance).
- 9.1.9. I am therefore satisfied that the proposed 110kV AIS substation and 110kV cable connection to the existing Finglas substation is development comprising or for the

purposes of electricity transmission, having regard to the definition set out in section 182A(9) of the 2000 Act.

- 9.1.10. Furthermore, the Board will note its recent decisions on pre-application consultation requests in relation to electricity transmission infrastructure under Section 182E, as summarised in Section 6 above, where it has been generally determined that the provision of new 110kV substations and associated high voltage cabling constitutes Strategic Infrastructure Development.
- 9.1.11. I conclude that the proposed development falls within the scope of section 182A and therefore constitutes Strategic Infrastructure Development.

9.2. Prescribed Bodies

9.2.1. 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 Appendix A in respect of any future application for approval.

10.0 Recommendation

10.1. I recommend that Energia Solar Holdings Limited be informed that the proposed development consisting of a new tail fed 110kV substation in the townland of Fieldstown, Co. Dublin, to connect to Finglas substation via 110kV underground cables, as set out in the plans and particulars received by An Bord Pleanála on the 4th August 2021 and elaborated upon at the meetings of 22nd November 2021 and 31st May 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.

Niall Haverty Senior Planning Inspector

15th July 2022

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
- Fingal County Council
- Meath County Council
- Transport Infrastructure Ireland
- An Taisce
- Fáilte Ireland
- Heritage Council
- An Chomhairle Ealaíon
- Irish Water
- Commission for Regulation of Utilities
- Inland Fisheries Ireland

Further notifications should also be made, where deemed appropriate.