



An
Bord
Pleanála

Inspector's Report ABP-310033-21

Development	Development of 220kV substation and grid connection at existing Dunnstown 400kV substation.
Location	Dunnstown, Co. Kildare
Planning Authority	Kildare County Council
Prospective Applicant	Strategic Power Projects Ltd.
Inspector	Karla Mc Bride
Date of site inspection:	25 th June 2021

1.0 Introduction

- 1.1. Strategic Power Projects Ltd. requested Pre-Application Consultations under Section 182A of the Planning and Development Act, 2000, as amended, for the proposed development of a 220kV substation. Pre-Application Consultations took place between An Bord Pleanála (the Board) and the prospective applicant on 31st August 2021 and 23rd November 2021 (see appended signed Records).
- 1.2. The primary purpose of the meetings was 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, and to consider matters relating to the proper planning and sustainable development of the area or the environment which may have a bearing on the Board's decision, and procedures involved in making the application.
- 1.3. This Report provides an overview of the project, a summary of the meetings and the advice provided by the Board, the legislative provisions, and it recommends a list of Prescribed Bodies that should be forwarded copies of the application.

2.0 Site Location

- 2.1. The site is located within a rural area at Dunnstown c.6km to the S of Naas in County Kildare. It is located to the E of the M7 and R412 and on the NW side of the L6044 local road. There are several dwelling houses and agricultural buildings in the surrounding area, and the Dunnstown 400kV substation is located to the immediate W of the site with access off the R412. The lands are in agricultural use, the site boundaries are defined by trees and hedges and the lands are flat. The site is located c.3km to the N of the River Liffey and c.7km W of the Poulaphouca Reservoir SPA. The lands are not covered by any sensitive landscape designations although there may be features of archaeological and cultural heritage interest in the vicinity.

3.0 Proposed development

The proposed development would comprise a new 220kV substation on a c.2.4ha site with an underground cable connection to the existing 400kV Dunnstown substation to the W by means of a "tail fed" arrangement.

The 220kV “H-Type” substation would include:

- Outdoor switchyard with 220kV Air Insulated Switchgear
- 220kV step-up transformer with banded area.
- Grid transformer ancillary equipment & NER.
- Control & Eirgrid buildings
- Underground cable connection to Dunnstown 400kV substation.
- New site access off the local road.
- Security fencing & lighting.

The prospective applicant indicated that the substation would be connected to a proposed battery energy storage facility on the adjacent lands to the SE, and that it would enable other renewable energy projects in the vicinity to connect to the national grid, including a proposed solar farm to the far NE.

4.0 Prospective applicants’ case

- 4.1. Strategic Power Projects Ltd. is proposing to construct a 220kV substation which would be connected to the existing and adjacent 400kV substation at Dunnstown to the immediate W of the site via a “tail fed” arrangement and an underground cable to the site boundary. It is envisaged that the proposed substation would be a transmission node on the national grid.
- 4.2. Strategic Power Projects Ltd. proposes to develop a battery storage facility (c.212MW) on the adjacent lands to the SE which would be connected to the proposed substation via underground cables. This proposal is currently under consideration by the Board following a First Party appeal against the decision of Kildare County Council to refuse planning permission (ABP-310841-21). Strategic Power Projects Ltd. also proposes to develop a solar farm (c.120-130MW) on lands to the far NE of the subject site along the L2023, which will be the subject of a separate planning application to Kildare County Council at some stage in the future.

4.3. The key elements of the Applicant's submission in support of the case being designated as strategic infrastructure are summarised as follows:

- Given the size and electricity generation potential of the proposed 220kV substation and its characteristics, the proposed development meets the relevant criteria of the P&D Act 2000, as amended and constitutes strategic infrastructure.
- The substation will become a transmission node on the national grid and interact between the existing Dunnstown substation and the proposed battery storage system, and it would also facilitate future renewable energy projects in the area.

4.4. It was concluded that the proposed development should be deemed a SID.

5.0 Pre-Application Consultations

5.1. Two Consultation meetings were held in the Board offices on 31st August 2021 and 23rd November 2021.

5.2. During the **first meeting** the prospective applicant described the site and surroundings, outlined the main elements of the proposed development and provided an update on the status of the project and related battery storage facility and solar farm projects. The policy context for the project was explained, the major constraints and options considered were identified, and the consultations undertaken to date were outlined. The Board representatives identified several areas of concern (incl. potential impacts on: - hydrology, flood risk & drainage; residential amenity; ecology, including the relationship with the Poulaphouca Reservoir SPA & bird flight paths; haul routes & the possible widening of roads or junctions; the need for sub-threshold EIA Screening, AA Screening/NIS, and community engagement). The Board representatives queried the current planning status of the adjacent battery storage facility and proposed solar farm to the NE. The prospective applicant queried whether or not the solar farm substation and grid connection should form part of the current pre-application consultations for the proposed 220kV substation.

- 5.3. In a **letter** received by the Board on 1st October 2021, the prospective applicant sought to extend the scope of the pre-application consultations to include the following additional elements related to the proposed solar farm:
- A 110kV substation at the solar farm to the NE.
 - An underground 110kV grid connection from the 110kV solar farm substation to the proposed 220kV substation at Dunnstown.
- 5.4. During the **second meeting** the prospective applicant confirmed that it now intends to include the proposed solar farm 110kV substation and grid connection in the pre-application consultations, as they would facilitate third party connections to the national grid and thereby constitute strategic infrastructure. The prospective applicant confirmed that a solar farm planning application to the County Council was pending, and it outlined the status of environment surveys and public consultations.
- 5.5. In a further **letter** received by the Board and dated 13th December 2021, the prospective applicant sought to revert to the original SID consultation request that was submitted on the 23rd April 2021 so as to exclude the additional elements itemised in section 5.3 above in relation to the proposed solar farm substation and grid connection. The prospective applicant stated that a number of key stakeholders had confirmed that the priority at this time, in the light of current pressures on the national grid, is the urgent provision of battery storage. The prospective applicant now wishes to progress with a SID application to allow for the earliest possible connection of the proposed battery storage facility to the 400kV substation, and to request pre-consultations in relation to the solar farm grid connection at a future date.
- 5.6. The Board's advice to the prospective applicant during the pre-application consultation meetings is summarised below:
- (a) Consult with the NPWS in relation to potential impacts on the Poulaphouca Reservoir SPA and any further afield European sites that may have a mobile connection to the site; consult with the IFI in relation to potential impacts on the River Liffey and nearby watercourses; and assess potential impacts on residential amenity, cultural heritage, the landscape, drainage patterns and flood risk, and the local road network (incl. junctions).

- (b) A comprehensive and detailed Environmental Report should be prepared which has particular regard to the impact of the proposed development on ecology and biodiversity, residential amenity, cultural and built heritage, drainage, water quality, flood risk and traffic management.
- (c) A comprehensive and detailed AA Screening/NIS should be prepared having regard to the presence of European sites in the surrounding area.
- (d) Due consideration should be given to in-combination effects on the environment with other existing and proposed developments in the wider area, including the proposed battery storage facility and solar farm.
- (e) Public consultation should be as extensive as possible and consultations should take place with Kildare County Council, Prescribed Bodies and the local community.

6.0 Legislative provisions

- 6.1. Under **section 182A (1)** of the 2000 Act (inserted by section 4 of the 2006 Act) 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.
- 6.2. **Subsection 9** states that in this section '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.

6.3. In **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

7.0 Assessment

- 7.1. The proposed development comprises a new 220kV substation and underground connection to the site boundary with the existing 400kV Dunnstown Substation.
- 7.2. The proposed substation would be linked to a proposed battery storage facility to the immediate SE and other renewable energy projects in the vicinity, including a proposed solar farm to the NE. It is envisaged that electricity generated by the renewable energy projects (incl. the solar farm) would be fed into the national grid via the proposed substation, and that excess energy would be stored in the proposed battery storage facility.
- 7.3. I am satisfied that the proposed 220kV substation constitutes electric plant as defined in section 6.0 above in that it is plant for the purposes connected with the generation of electricity.
- 7.4. 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.
- 7.5. The "H-Type" layout of the substation connection involves a "tail-fed" connection to an existing 400kV substation, and the proposed substation would comprise a new transmission node along the existing circuit. The new substation and associated underground cable to the site boundary will form part of the existing transmission grid when in operation. I am satisfied that the proposed substation, in forming a node on the transmission network, constitutes Strategic Infrastructure.
- 7.6. In terms of matters which might influence the decision of the Board I note that there is potential for indirect effects, interactions and cumulative impacts which would be relevant to consideration in an Environmental Report and under AA Screening and/or NIS reports. A Screening report for sub-threshold EIA should also be considered.
- 7.7. In conclusion, I consider that the proposed substation development and grid connection as described in the submissions and drawings constitutes strategic infrastructure coming within the scope of section 182A of the Planning and Development Act 2000, as amended, necessitating an application direct to the Board.

8.0 Recommendation

- 8.1. I recommend that Strategic Power Projects Ltd. be informed that the proposed development consisting of a 220kV substation, cables and related ancillary infrastructure at Dunnstown, County Kildare as set out in the plans, particulars and correspondence received by An Bord Pleanála on the 23rd April 2021, 1st October 2021 and 13th December 2021, 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.

9.0 Prescribed Bodies

The following is a schedule of prescribed bodies considered relevant for the purposes of Section 37E (3) (c) of the Principal Act.

- i. Minister for Housing, Local Government and Heritage
- ii. Minister for Environment, Climate and Communications
- iii. Commission for Regulation of Utilities, Water and Energy
- iv. Inland Fisheries Ireland
- v. Transport Infrastructure Ireland
- vi. The Heritage Council
- vii. An Taisce
- viii. An Chomhairle Ealaíon
- ix. Fáilte Ireland
- x. Health & Safety Authority

Further notifications should also be made where deemed appropriate.

Karla Mc Bride

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Senior Planning Inspector

6th January 2022