

Inspector's Report ABP-309420-21

Development	110kV substation to feed into the existing Cashla 220/ 110 kV substation
Location	Townland of Grange East, Co. Galway
Planning Authority	Galway County Council
Type of Application	Pre-application consultation
Prospective Applicant	Renewable Energy System (RES) Ltd.
Date of Site Inspection	14 th April 2021
Inspector	Donal Donnelly

1.0 Introduction

- 1.1. The Board received a request on 10th February 2021 from prospective applicant, Renewable Energy Systems (RES) Ltd., to enter into pre-application consultations under Section 182E of the Planning and Development Act, 2000 (as amended) in relation to a proposed 110kV substation to feed into the existing Cashla 220/ 110 kV substation at Grange East, Co. Galway.
- 1.2. 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, a summary of the advice provided by the Board and the relevant legislative provisions.

2.0 Site Location and Description

- 2.1. The site of the proposed substation is within the townland of Grange East in mid Co. Galway approximately 6km east of Claregalway and 7.6km north-west of Athenry. The surrounding area includes relatively flat agricultural lands with sporadic housing along local roads.
- 2.2. The substation site comprises an existing agricultural field currently in use as pasture and bounded by dry stone walls. Access to the site is via an existing private laneway. There is an outdoor equestrian arena immediately to the south-east of the substation site.
- 2.3. The grid connection from the proposed substation will continue along the private laneway to the public road before turning south-east for a distance of approximately 2km to the R339. The route turns south-west along this road and extends for c.
 2.5km to the turn-off for the Casha 220/ 110kV station. The final section continues for a distance of approximately 1.25km along a local road.
- 2.4. The proposed substation will be situated towards the northern end of the 140.9 hectare Ballymoneen solar farm. Tracks serving the solar farm will continue along the north-eastern and south-eastern boundaries of the proposed substation.

3.0 Proposed development

- 3.1. The proposed development would comprise the provision of a 110kV substation to feed into the existing Cashla 220/110kV substation to provide a grid connection for a permitted solar farm. The substation would include the following:
 - 1. 2 no. control buildings works consisting of foundations, block work, roofing, low voltage electrical fit out, cladding and building finishing works.
 - 2. Transformer compound installation of transformer, cable chair and structural steelwork.
 - 3. Busbar compound structural steelwork and cable chair.
 - 4. Installation of substation electrical equipment upon completion of compound and substation.
 - 5. Palisade and concrete post and rail fencing erected around compound.
- 3.2. There is no existing infrastructure (110kV overhead line) in the vicinity that is suitable to "loop" into to facilitate a grid connection and therefore the electricity generated by the solar farm will be tail fed to the primary node at Cashla. Underground cabling will be used along the entire route of the cable connection over a distance of approximately 6.5km.

4.0 **Planning History**

Galway County Council Reg. Ref: 20/961

- 4.1. Permission granted on 22nd January 2021 for a period of 5 years for development at Ballymoneen and Grange East for the construction and completion of a Solar PV Energy and Battery Storage development with a total site area of circa 140.9 hectares to include the following:
 - Single storey electrical substation building, electrical transformer and inverter station modules,
 - Solar PV panels ground mounted on support structures,
 - Battery containers and associated infrastructure,

- Internal access tracks, security fencing, electrical cabling/ ducting, CCTV and other ancillary infrastructure, drainage, additional landscaping and habitat enhancement as required and associated site development works including works related to the access to the site.
- 4.2. The solar farm would be operational for 35 years. It is a condition that the permission shall not be construed as any form of consent or agreement to a connection to the national grid or to the routing or nature of any such connection.

5.0 Planning Precedent

5.1. The following precedent cases relate to tail fed connections that were determined by the Board not to be strategic infrastructure:

An Bord Pleanála Ref: VC0100

5.2. The Board decided in March 2017 that a 110kV electrical substation and underground connection to an existing EirGrid substation in Letter, Co. Galway is not strategic infrastructure development. EirGrid noted in this case that the proposed substation would not function as part of the national electricity grid. The proposed substation and connection to the EirGrid substation would therefore not be necessary to provide for connection to the grid and the proposed development would have had no back up function.

An Bord Pleanála Ref: VC0103

- 5.3. The Board decided in May 2017, generally in accordance with the Inspector's reasoning, that a replacement 110kV electrical substation in the townland of Shelton Abbey, Co. Wicklow is not strategic infrastructure.
- 5.4. It was considered by the Inspector in this case, having regard to the nature and scale of the proposed development, to the stated purpose of the 2006 Act as set out in the long title, and to the general description and scale of strategic infrastructure development set out in Section 37(2) that the proposal does not fall within the scope of Section 182A of the Planning and Development Act, 2000 (as amended).

An Bord Pleanála Ref: ABP-301236-18

5.5. The Board decided in May 2018 that the provision of a battery energy storage system at Poolbeg, Dublin 2 is not strategic infrastructure.

An Bord Pleanála Ref: ABP-301420-18

5.6. The Board decided in November 2018 that a 110kV tail-fed substation and cable connecting a solar farm to the National Grid in Co. Laois is not strategic infrastructure.

6.0 **Prospective applicant's case**

- 6.1. The prospective applicant's case is that the proposed development should not be considered as strategic infrastructure for the following reasons:
 - Proposed development not listed in Schedule 7 of the Planning and Development Act, 2000 (as amended).
 - Proposed method of connection will be tail-fed and the development is not considered to be of strategic economic or social importance. This type of connection is not listed within Section 37A of the Planning and Development (Strategic Infrastructure) Act, 2006.
 - There is no existing infrastructure (110kV overhead line) in the vicinity that is suitable for this project to "loop" into or use the line to facilitate a connection.
 - Tail fed arrangement is required to connect the project back into the primary node at Cashla 220kV where the generated electricity is connected to the National Grid.
 - Proposed new substation is not envisaged to result in any impacts to the wider network.
 - Proposed development lies in one planning authority and there are no implications for any other planning authority.
 - Proposed development is intended to provide connection solely to the Ballymoneen Solar farm and is therefore not considered to be of strategic economic or social importance on a national or regional level and does not contribute substantially to the National Spatial Strategy.
 - Substation and cable proposed are not a critical link for other strategic development in the area. It contains a relatively small footprint and does not allow for possible expansion.

- Applicant has opted for underground cabling along the entire cable connection route, thereby minimising potential impacts.
- Applicant discussed possible connection points with EirGrid during meeting held on 15th August 2019. All equipment proposed is standard and meets EirGrid functioning requirements.

7.0 Legislative provisions

- 7.1. 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 to the Board.
- 7.2. Section 182A(9) of the Act 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.
- 7.3. Section 2(1) of the Electricity Regulation Act, 1999 defines transmission as follows:

"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, 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. Electric plant is defined as follows:

"any plant, apparatus or appliance used for, or for 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

- 8.1.1. The proposed development comprises a new 110kV substation and underground electricity cable for the purposes of connecting the Ballymoneen solar farm to the national grid at the Cashla 220/ 110kV station, Co. Galway. The Ballymoneen solar farm development was granted permission by Galway County Council on 22nd January 2021 and was not therefore a Strategic Infrastructure Development itself.
- 8.1.2. The prospective applicant, Renewable Energy Systems (RES) Ltd., seeks a determination from the Board as to whether the proposed 110kV substation and underground cable over a distance of approximately 6.5km from the proposed substation to the Cashla 110/ 220 kV station via a tail fed connection is or is not strategic infrastructure. The prospective applicant considers that it is not strategic infrastructure development.
- 8.1.3. From the outset, it should be noted that Section 2 of the Planning and Development Act, 2000 (as amended) provides interpretations except where the context requires otherwise. Strategic infrastructure development means *inter alia* (d) any proposed development referred to in Section 182A(1). Under this Section, an undertaker shall apply to the Board for approval of a development comprising or for the purposes of energy transmission. 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 *inter alia* the transport of electricity by means of a high voltage line where the voltage would be 110kV or more.
- 8.1.4. Transmission shall also be construed in accordance with Section 2(1) of the Electricity Regulation Act, 1999 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, 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." The Board refers to the Electricity Supply Board and the Commission refers to the Commission for Electricity Regulation. EirGrid took over the operation and development of the national grid in 2006.

- 8.1.5. There is no threshold under Section 182A(9) of the Planning and Development Act, 2000 (as amended) in respect of a substation. However, this Section explicitly refers to high voltage lines of 110kV or more. The proposed development comprises a new 110kV substation tailed back to the Cashla 220/ 110kV station via an underground cable. The proposal would therefore contain a high voltage line of 110kV. Notwithstanding this, EirGrid has provided advice to An Bord Pleanála on previous occasions that similar such "tail fed" developments would not function as part of the national grid despite the voltage of such being 110kV. Conversely, grid connections in proximity to transmission lines that essentially see power in the transmission line being diverted into the substation and back out again, thereby forming a node on the transmission system, have been determined by the Board in the past to constitute strategic infrastructure development.
- 8.1.6. The Board has also given consideration in previous cases as to whether or not the development in question is of strategic national importance. The long title of the 2006 Act provides for the making directly to An Bord Pleanála of applications for permission for "developments of strategic importance to the State". Section 37A(2) refers to 7th Schedule development but generally describes strategic infrastructure development as falling within one or more of the following:
 - (a) the development would be of strategic economic or social importance to the State or the region in which it would be situate,
 - (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 situate,
 - (c) the development would have a significant effect on the area of more than one planning authority.

- 8.1.7. Having regard to the precedent set by the Board within similar cases, I would agree that the current proposal would not be of strategic importance to the State or region, as it will serve only the Ballymoneen solar farm. As submitted by the prospective applicant, the proposal is not a critical link for other strategic developments in the area and is not of strategic economic or social importance to the State or Region.
- 8.1.8. The National Planning Framework recognises that new energy systems and transmission grids will be necessary to harness the potential of solar power. Furthermore, the Regional Spatial and Economic Strategy supports the reinforcement and strengthening of the electricity transmission and distribution networks. However, the proposed development is not of a scale or of such importance that would contribute substantially to the fulfilment of the objectives of the NPF and RSES. The proposal will also be located entirely within Co. Galway and will not therefore have a significant effect on more than on planning authority.
- 8.1.9. The Board will note previous decisions on pre-application consultation requests in relation to electricity transmission infrastructure under Section 182E where it was determined that tail fed connections to the national grid serving only a single development are not strategic infrastructure development. Several such cases are set out in Section 5 of this report. I consider that the current case is comparable.
- 8.1.10. Having regard to the nature and scale of the proposed development as described, to the stated purpose of the 2006 Act as set out in the long title, and to the general description and scale of strategic infrastructure development set out in section 37A(2), I conclude that the proposed development consisting of the proposed 110kV substation and underground electricity cable connecting the permitted Ballymoneen solar farm to the National Grid at the Cashla 110/ 220kV station, Co. Galway does not fall within the scope of section 182A of the Planning and Development Act 2000, as amended.

9.0 **Recommendation**

9.1.1. I recommend that Renewable Energy Systems (RES) Ltd. be informed that the proposed development consisting of a 110kV substation and cable route connecting the permitted Ballymoneen solar farm to the Cashla 110/ 220kV station in the townlands of Grange East and Cashla in Co. Galway, as set out in the plans and

particular received by An Bord Pleanala on the 10th February 2021, does not fall within the scope of section 182A of the Planning and Development Act 2000, as amended, and that a planning application should be made in the first instance to Galway County Council.

Donal Donnelly Senior Planning Inspector

18th May 2021