

An  
Bord  
Pleanála

## Inspector's Report

### ABP-315476-23

---

<b>Development</b>	Proposed 110kV substation to feed into the existing Drumline-Ennis 110kV overhead line (OHL) circuit
<b>Location</b>	within the townland of Coolshamroge, Ennis, Co. Clare.
<b>Planning Authority</b>	Clare County Council
<b>Prospective Applicant</b>	Renewable Energy Systems (RES) Limited
<b>Type of Application</b>	Pre-application under section 182E of the Planning and Development Act 2000, as amended.
<b>Inspector</b>	Máire Daly

## **1.0 Introduction**

- 1.1. The prospective applicant requested pre-application consultation on 6<sup>th</sup> January 2023 under section 182E of the Planning & Development Act, 2000 (as amended). The request was submitted by Neo Environmental on behalf of the prospective applicant. Pre-application consultation took place between the Board and the prospective applicant on 03<sup>rd</sup> March 2023.
- 1.2. The primary purpose of the meeting was to outline the details of the proposal and to address the issue of whether or not the proposed development constitutes strategic infrastructure for the purposes of the Planning & Development Act, 2000 (as amended) 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 to outline the procedures involved in making any application.
- 1.3. The prospective applicant formally requested closure of the pre-application process by correspondence received by the Board on 23<sup>rd</sup> May 2023.
- 1.4. This Report provides an overview of the project, a summary of the meeting 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 (See Appendix 1).

## **2.0 Site Location and Description**

- 2.1. The subject site (c. 3.78 acres in area) is located within the townland of Coolshamroge, Co. Clare c. 7km southeast of the county town of Ennis and c. 4.2km east of Clarecastle.
- 2.2. The Substation is proposed to be located within the boundary of the Coolshamrock Solar Farm (Clare County Council PA Ref: 22586 granted permission on 14<sup>th</sup> April 2023). The subject site is comprised of three fields of relatively flat agricultural land with grazing and pasture activity evident. Adjacent land uses are also predominantly agricultural. Internal boundaries comprise hedgerows and tree lines typical to the area. The surrounding area is rural in character; comprising one-off dwellings with farmsteads and concentrations of single dwellings dispersed along the local road network. A large area of broadleaved woodland is located to the west of the site and

an area of cladium fen and alkaline fen were noted to the northwest, to the north of the established woodland. The existing Drumline-Ennis 110kV overhead line (OHL) circuit runs in a north-south direction and is located along the eastern edge of the site.

- 2.3. The site lies at an elevation between 26 to 29m AOD and access is provided via a private farm lane from the south. The access road and access point of the local road are the same as those serving the permitted Coolshamrock Solar Farm (Clare County Council Planning Ref. 22586).

### 3.0 Proposed Development

- 3.1. The prospective applicant intends to seek consent for a 110kV on-site 'Loop-In/Loop Out' substation. The substation is to facilitate three permitted solar farms in the area, the Manusmore Solar Farm (CCC Ref: 20562), Manusmore Solar Farm Extension (CCC Ref: 21915) and the recently consented Coolshamrock Solar Farm (CCC Ref: 22586).

- 3.2. The main components of the proposed 110kV substation would include:

- **Eirgrid HV Substation Compound**

- HV Electrical Equipment for 4 bays
- OHL Gantry
- Lightning Monopoles/Protection Masts
- Structural Steelwork
- Circuit Breakers, Current transformers (CT), Voltage Transformers (VT), Surge Arresters, and Disconnectors/Earth Switches
- Post Insulators

- **Customer Transformer Compound**

- 1 No.1 110/MV Power Transformer
- HV Electrical Equipment
- Lightning Protection Masts
- Structural Steel Works
- Current transformers (CT), Voltage Transformers (VT), Surge Arresters, and Disconnectors/Earth Switches
- Post Insulators

- **Customer MV Compound**
  - 2 No. Capacitor Banks and associated Circuit Breaker
  - 1 No. Reactor Bank with associated Circuit Breaker
  - 1 No. Harmonic Filter
  - 1 No. Resistor
  - 1 No. Pre-insertion Resistor (PIR)
  - 1 No. Auxiliary Transformer
- **2 No. New Overhead Line Towers**
  - There are new towers outside the substation which will be required to tie into existing Drumline – Ennis 110 kV circuit.
  - This existing overhead line will be interrupted and 2 new towers erected which will create 2 new OHL circuits.
  - Double trench underground cables from the new towers to Eirgrid HV Substation Compound
- **2 No. Control Buildings**
  - Foundation Works
  - Block Work
  - Roofing
  - Low Voltage Electrical Fit Out
  - Medium Voltage Switchgear
  - Cladding
  - Building Finishing Works
- **Palisade and Concrete Post & Rail Fencing**

3.3. Once the Substation has been energized, it will be handed over to EirGrid and it will be under their ownership. All equipment proposed is standard and meets EirGrid functional specifications.

## 4.0 Planning History

### 4.1. On site:

- Clare County Council Ref: 22586 - Permission granted in April 2023 for a period of 10 years to construct and complete a Solar PV Energy development

with a total site area of 27.34 hectares, to include inverter station modules, solar PV panels ground mounted on support structures, internal access tracks, security fencing, electrical cabling and ducting, CCTV and other ancillary infrastructure, drainage, additional landscaping and habitat enhancement as required and associated site development works including works relating to the access to the site. The solar farm is to be operational for 35 years. A Natura Impact Statement was prepared in respect to the application for planning permission.

#### 4.2. Other related developments in the area:

- CCC Ref: 20562 - Permission granted in November 2020 for a 5 year period for a Solar PV Energy development with a total site area of 99.2 hectares, to include a single storey electrical substation building, electrical transformer and inverter station modules, solar PV panels ground mounted on support structures, internal access tracks, security fencing, electrical cabling and ducting, CCTV and other ancillary infrastructure, drainage, additional landscaping and habitat enhancement as required and associated site development works including works relating to the access to the site. The Solar farm will be operational for 35 years. A Natura Impact Statement was prepared in respect of this planning application.
- CCC Ref: 21915 - Permission granted in November 2021 (extension to previously permitted solar farm under CCC Ref: 20562) for 5 year period to construct and complete a Solar PV Energy development with a total site area of 16.08 hectares, to include inverter station modules, solar PV panels ground mounted on support structures, internal access tracks, watercourse crossing, security fencing, electrical cabling and ducting, CCTV and other ancillary infrastructure, drainage, additional landscaping and habitat enhancement as required and associated site development works including works relating to the access to the site. The solar farm would be operational for 35 years. A Natura Impact Statement was prepared in respect of this planning application.

## 5.0 Legislative Provision

- 5.1. 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)*"
- 5.2. S182A(1) of the Act provides that, 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.
- 5.3. S182A(9) states that '*.....transmission*' shall be construed in accordance with section 2(1) of the Electricity Regulation Act 1999 'but, for the purposes of this section ... 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*.
- 5.4. Section 2(1) of the Electricity Regulation Act 1999 defines 'transmission', in relation to electricity, 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*' (Commission – Commission for Energy Regulation, Board – Electricity Supply Board; ESB).
- 5.5. '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 switchgear and which is used for conveying electricity to final customers*'.

- 5.6. '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. This is defined as *'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'.*
- 5.7. 'Electric plant' is defined as *'...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 a consumer'*
- 5.8. Section 182E sets out procedures in advance of seeking approval under section 182B. Subsection (1) states that a prospective applicant who proposes to apply for approval under S182B *'shall, before making the application, enter into consultations with the Board in relation to the proposed development'.*

## 6.0 Prospective Applicant's Case

- 6.1. A loop in loop out grid connection was provided by Eirgrid on 31<sup>st</sup> October 2022 and the prospective applicant accepted this offer on 2<sup>nd</sup> March 2023. The new 110kV substation is to feed into the existing Drumline – Ennis 110kV circuit.
- 6.2. The proposed 110kV loop-in loop-out substation is to facilitate both solar farms under Clare County Council Planning Refs: 20562 and 22586 and the solar farm extension under CCC Ref. 21915.
- 6.3. The prospective applicant stated that Schedule 7 of the Planning and Development Act 2000 (updated 16 July 2021) lists various energy and transmission development types which require a Strategic Infrastructure Development (SID) application. The prospective applicant outlines the characteristics of the proposed infrastructure are as follows:
- The proposed method will be a loop in loop out connection and is defined as “a new 110kV substation to feed into the existing Drumline – Ennis 110kV circuit”. This type of connection is not listed within the Section 37A of the Planning & Development (Strategic Infrastructure) Act 2006.
  - The Substation lies within one local authority and there are no implications for any other planning authority.
  - The Substation does not lie within any designated areas.
  - The Substation is to facilitate the Manusmore Solar Farm (PA Ref: 20562) and the Manusmore Solar Farm Extension (PA Ref: 21915) and Coolshamrock Solar Farm (PA Ref: 22586) but once energised will be handed over to EirGrid and it will be under their ownership. Therefore, there is potential for future connections if they choose to utilise the substation in the future.
  - The substation and cable proposed are not a critical link for other strategic developments in the area.
  - All equipment proposed is standard and meets EirGrid functional specifications.



6.4. The prospective applicant states that based on initial environmental assessments, the scale and type of development and in line with the criteria outlined in Schedule 7 of the Planning and Development Act 2000 (updated 16 July 2021), it is anticipated that the proposed infrastructure will not constitute EIA Development. The Board should note that the prospective applicant appears to have concentrated here on the EIA process rather than the SID process.

## 7.0 Pre-application Consultation

7.1. One pre-application meeting was held with the prospective applicant on the 3<sup>rd</sup> March 2023. Minutes are attached to the file. A presentation was made to the Board's representatives at the meeting, which is also attached to the file.

7.2. The meeting's Chair outlined the general procedures in relation to the pre-application consultation process. The prospective applicant outlined the background to the project and provided a description of the proposed development. The prospective applicant highlighted the location of the existing overhead line and the new towers which would facilitate the connection into this existing line. It was noted that the connection would be via underground cables from the new towers into the substation. The prospective applicant is of the opinion that the proposed infrastructure will not constitute EIA development.

7.3. Some matters discussed after the presentation included:

- The prospective applicant confirmed that a Natura Impact Statement would be submitted as part of the planning application.
- Given the archaeological heritage of the area and the presence of monuments in the vicinity of the site, the Board's representatives said a robust archaeological impact assessment would be required for the site.
- The Board's representatives reminded the prospective applicant to be cognisant of existing residential dwellings in the area and to allow appropriate separation distances. Possible screening around the site should also be considered.

- The Board's representatives said based on the information provided, it is unlikely that the proposed development would require an EIA as it is not a class of development under the EIA Directive.
- The prospective applicant has stated that surveys relating to ecology, archaeology, noise and transport have been carried out and further surveys are anticipated prior to submission.
- The prospective applicant said supporting documentation would include a Landscape and Visual Impact Assessment, Archaeological Assessment, Ecological Appraisal, Natura Impact Statement, Construction Traffic Management Plan, Planning Statement, among others.

## 8.0 Assessment

- 8.1. The proposal comprises a new 110kV on-site 'Loop-In/Loop Out' substation, which is to facilitate 2 no. approved solar farms and a solar farm extension on nearby sites with a combined area of c. 142.62 hectares. The prospective applicant is clear that the development subject of this pre-application consultation request relates only to the proposed 110kV substation and its associated infrastructure.
- 8.2. The submitted proposal includes for an EirGrid HV substation compound, customer transformer compound, customer MV compound, 2 number new overhead line towers, 2 number control buildings and palisade and concrete post and rail fencing (see Section 3.0 above for full development description). The proposed method will be a loop in loop out connection to feed into the existing Drumline — Ennis 110kV circuit.
- 8.3. 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. I consider that the proposed substation constitutes 'electrical plant' as defined under Section 5.0 above in that it is plant for conveying of electricity from a generating station to a substation and/or facilitating connection to the national grid from an existing overhead line. The new substation and associated infrastructure will enable the electricity generated by the solar farms to be stepped up to a voltage of 110kV for direct transmission to the national grid.

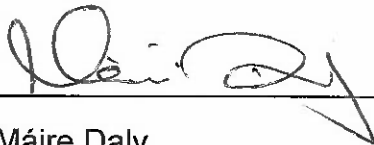
- 8.4. A key consideration in the current case is that of the nature of the 'loop-in/loop-out' grid connection arrangement which results in the proposed 110kV substation becoming an operational 'node' on the existing transmission network. I am therefore of the opinion that as the proposed development will form a node on the transmission network it would therefore constitute Strategic Infrastructure.
- 8.5. In terms of other matters I note that there is potential for indirect effects, interactions and cumulative impacts which would be relevant for consideration in any Planning and Environmental Report and under AA Screening and/or NIS reports.
- 8.6. Section 182A(2) of the Planning and Development Act, 2000 as amended states that *'in the case of development referred to in subsection (1) which belongs to a class of development identified for the purposes of section 176, the undertaker shall prepare, or cause to be prepared, an environmental impact assessment report or Natura impact statement or both that report and that statement, as the case may be, in respect of the development'*.
- 8.7. Annex I & Annex II to Directive 2011/92/EU as amended by 2014/52/EU and Part 1 and Part 2 of Schedule 5 (Planning and Development Regulations 2001, as amended) sets out the classes of development for the purposes of EIA. Section 20 of Part 1 provides that mandatory a EIAR is required for the *'Construction of overhead electrical power lines with a voltage of 220 kilovots or more and a length of more than 15 kilometers'*, Section 3 (b) of Part 2 provides that a mandatory EIAR is required for *'Industrial installations carrying gas, steam and hot water with a potential heat output of 300 megawatts or more, or transmission of electrical energy by overhead cables not included in Part 1 of this Schedule'*.
- 8.8. The proposed development of a 110kV substation to feed into the existing Drumline-Ennis 110kV overhead line (OHL) circuit would not come within the projects outlined within either Annex I or Annex II to Directive 2011/92/EU as amended by 2014/52/EU nor is it a class as set out in Part 1 or Part 2 of Schedule 5 (Planning and Development Regulations 2001, as amended). The proposed generating element of the proposed development, the solar farm is not of a class for the purposes of EIA.

#### Conclusion

8.9. In conclusion, I consider that the proposed 110kV on-site 'Loop-In/Loop Out' substation 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 directly to the Board.

## 9.0 Recommendation

9.1. I recommend that the prospective applicant Renewable Energy Systems (RES) Limited be notified that the proposed development consisting of a 110 kV substation and the associated grid connection works as described in the plans, particulars and correspondence documents received by the Board on the 06<sup>th</sup> January 2023 and 03<sup>rd</sup> March 2023 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.



---

Máire Daly

Senior Planning Inspector

30<sup>th</sup> May 2023

## **Appendix 1**

### **Prescribed Bodies**

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

- Minister of Housing, Local Government and Heritage
- Minister for Environment, Climate and Communications
- Clare County Council
- Transport Infrastructure Ireland
- Fáilte Ireland
- An Taisce
- The Heritage Council
- Irish Water
- Inland Fisheries Ireland
- Commission of Regulation of Utilities, Water and Energy
- Health and Safety Authority

Further notifications should also be made where deemed appropriate.

