

Inspector's Report Strategic Infrastructure pre application consultation 22.VC0098.

Development Location Planning Authority	New 110kV Air Insulated Switchgear (AIS) electricity substation, new 110kV underground cabling to connect a permitted windfarm at Upperchurch to the national grid, 2 no. interface masts with loop in line, alterations to existing site entrance and associated works including alterations to turbine delivery routes, internal wind farm cabling. Mountphillips, Newport, Co. Tipperary Tipperary County Council.
Prospective Applicant(s)	Eco Power Development Ltd.
Type of Request	Section 182E request for SID Pre- application consultation – whether project is or is not strategic infrastructure development.
Inspector	Mary Kennelly.

Inspector's Report

## 1.0 Introduction

1.1. Eco Power Developments propose to construct a 110kV electrical substation along with an associated underground cable connection to the national grid at Mountphilips to serve a permitted windfarm development at Upperchurch, Co. Tipperary. The windfarm was granted planning permission by the Board in August 2014 (PL22.243040), which was accompanied by an EIS and a Natura Impact Statement. The permitted windfarm consists of 22 no. turbines, 1 no. electrical substation and compound, site access roads and 2 no. meteorological masts. It is stated in the request from the prospective applicant that a Gate 3 Grid connection agreement has been granted by ESB Networks which requires that the physical connection be at a point along the Nenagh to Killonan 110kV line. This overhead line is located to the northwest of Newport village and passes through the townland of Mountphilips, County Tipperary.

### 2.0 Background

- 2.1. The request from the prospective applicant was first submitted to the Board in April 2016. Following a pre-application meeting, an Inspector's report was submitted to the Board for consideration in July 2016, in which the Inspector considered that the proposed development constituted Strategic Infrastructure Development in accordance with S182A(9). It was further considered that EIA was not required as the development proposed was not of a class set out in Schedule 5 but that a NIS would be required due to the presence of European sites along the cable route. (Inspector's Report attached). The Board considered that matter on 28<sup>th</sup> July 2016 when it was decided to defer consideration to a further Board meeting.
- 2.2. It should be noted that the proposed development was very similar to the current proposal except for the type and location of the proposed substation. It was previously proposed to construct a GIS substation which would have been to the west of the overhead line and to remove a lattice tower. It is now proposed to construct an AIS type substation which would be to the east of the OH line and it is no longer proposed to demolish any towers or posts. As the overall project was evolving during the pre-application process, other elements were introduced, such as

alterations to haul routes, delivery routes etc., and these matters are referred to below. The proposed cable route (originally c.30km) has also been refined.

- 2.3. An issue arose during the pre-application meetings regarding whether the proposed connection to the windfarm development would form part of the electricity transmission or distribution networks. The prospective applicant had expressed a view that the existing 110kV Nenagh-Killonan overhead line is part of the distribution network. Representatives of the Board met with representatives of the Commission for Energy Regulation on 26<sup>th</sup> September 2016 regarding the criteria for determining the distribution/transmission status of a local transmission network. A specific query relating to the Nenagh-Killonan line was subsequently put to the CER. A written response was received by the Board on 2/12/16, which is on the file.
- 2.4. The advice from CER is that the classification of 110kV assets as DSO or TSO (and hence the control of the assets) can change over the lifetime of the asset, but that it is generally the feeder arrangements (i.e. tail fed or multiple feeds) that determine whether a station (node) is DSO or TSO. Thus it is not the station itself that determines this matter, but the connection arrangement of the customer into the station as determined by the Systems Operator. In respect of Mountphilips, it is stated that if a new substation is constructed along this (overhead) line, and is looped in, this new station will be a TSO station as it will have two 110kV feeds, i.e. one from Killonan to Mountphilips and one from Mountphilips to Nenagh.
- 2.5. Following receipt of this advice, two further pre-application meetings were held with the prospective applicant, on the 19<sup>th</sup> December 2016 and on the 28<sup>th</sup> July 2017. During the course of these meetings further elements of the overall wind farm project were discussed including a possible dual ducting arrangement with another wind farm. However, this element was subsequently omitted. The prospective applicant is now seeking closure of the pre-application process.

## 3.0 Proposed Development

- 3.1. EcoPower Developments propose to:-
  - Substation Construct a new 110kV AIS substation (and compound) to facilitate the connection of the permitted Upperchurch Windfarm to the national grid. The site of the proposed substation is located at Mountphilips,

near Newport, Co. Tipperary, which is approx. 30km to the west of the permitted substation for the windfarm. Details of the proposed location of the new substation and compound, along with maps showing the geographical relationship with the permitted windfarm site, are provided with the request.

- Underground cable Provide a 110kV underground cable connection between the permitted Upperchurch WF substation and the proposed Mountphilips substation. The cable route is stated to be approx. 27.5km in length and would run predominantly through agricultural lands (17.5km) or commercial forestry (10.9) with approx. 1km along public roads. The cable route is dominated by blocks of commercial forestry and passes close to a number of small settlements, (Upperchurch, Kilcommon, Rear Cross, Toor and Newport). The closest third party residential property to the site of the substation is 462m. The proposed cable route crosses the Silvermines Mountains E-W through the uplands known as the Slievefelim Complex and includes the Silvermines Mountains SPA (004165). The proposed route also crosses a number of rivers. Two of the crossing points, Mulkear River and Aughvaria River, are within the Lower River Shannon cSAC (002165).
- Grid connection Connect the proposed substation to the Nenagh/Killonan 110kV overhead line by means of 2 no. underground cables. This requires the breaking of the overhead line and the erection of 2 no. lattice towers (end masts, 23m high). The proposed feeds from the substation would then be looped in to the end masts (one to each tower).
- Access road Construct a new access road to the proposed substation (800m long) from the public road together with alterations to the existing site entrance.
- Associated project works Carry out associated project works including new and realigned wind farm site access roads for transportation of turbines and internal cabling within the wind farm. It is also proposed to provide a new telecoms relay pole at Knockmaroe. It is proposed to carry out additional works to the temporary haul routes such as temporary groundworks, vegetation trimming and street furniture removal. The cable laying will

necessitate the felling of some forestry trees and it is proposed (as part of the felling licence) to replant forestry at Firoda Wood, Co. Kilkenny. However, it is uncertain whether all of these associated works will form part of the proposed development and some may be addressed by way of separate application. However, all of the associated works will be considered as part of the overall environmental impacts in the planning application.

## 4.0 **Applicant's case**

- 4.1. The prospective applicant's letter seeking closure of the process is seeking a SID determination on all five elements of the proposal, i.e. the 110kV substation, the 110kV underground cable, the new and realigned access roads, the internal wind farm cabling and the Knockmaroe telecoms relay pole. However, it was submitted that should the Board not be disposed to determine each individual element separately, a determination would be sought in respect of two scenarios, firstly, the substation and cable as one project, and secondly, all five elements as a single project.
- 4.2. The proposed substation and associated underground cable are considered to be strategic infrastructure development given that:
  - The proposed 110kV substation and its directly associated 110kV underground cabling constitutes Section 182A development as defined in the Planning and Development Act 2000, as amended, which generally requires that applications for approval of "electricity transmission" proposals to be made directly to the Board;
  - Reference is made to previous SID determination cases relating to 110kV substations and associated works which have been determined by the Board. The prospective applicant concluded that each case appears to have been decided on its merits, based on a range of factors including whether the proposal related to new elements of infrastructure or amendments to permitted elements. It was further noted that whilst S182A sets a threshold of 110kV for a high voltage electricity transmission line to be considered as a

SID, it was unclear as to whether this also applies to substations and their associated underground cabling.

- In terms of new electrical infrastructure, it is noted that the Board has
  previously determined that new substations with associated cabling to serve
  existing wind farms were determined to be SID. These decisions were in
  respect of VC0049 at Dulla, Co. Tipperary and VC0062 at Letter near
  Moycullen, Co. Galway. However, it was further noted that in respect of
  amendments to permitted wind farm development involving alterations to the
  permitted substation elements, the Board determined that these
  developments did not constitute SID. The cases referred to were VC0097
  (Donegal) and VC0074 (Barnadivane, Co. Cork).
- 4.3 The opinion of the CER given to the Board with regard to the proposed development forming part of the transmission network was acknowledged and agreed. It was noted that S2(1) of the Electricity Regulation Act 1999 provides definitions of both "transmission" and "distribution" wherein it is stated that distribution relates to the conveying of electricity to final customers. As such, the prospective applicant agrees that the proposed development would form part of the transmission network.
- 4.4 In the opinion of the prospective applicant, both an EIA and AA will be required for the proposed works, and it is stated that an Environmental Impact Assessment Report and a Natura Impact Statement are nearing completion. An "Environmental Scoping Document" was issued to consultees in June 2017 and environmental mitigation measures and construction methodology have been the subject of discussion and liaison with the NPWS and Inland Fisheries Ireland in respect of watercourse crossings and potential impacts on hen harrier. It is stated that an EIAR/EIS will be prepared which will include full assessment of the realigned wind farm access roads, internal wind farm cabling and telecoms relay pole as well as considering other projects within its cumulative assessment. Although there is an acknowledgement that these latter elements would not, in themselves, be likely to constitute SID, it is considered that it would be expedient to include them within a single planning application.

## 5.0 Legal Provisions

5.1. 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.

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.

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

- (b) A meter used for ascertaining the quality of electricity supplied to any premises, or
- (c) An electrical appliance under the control of a consumer."

#### 6.0 Assessment

- 6.1. The Board will note previous decisions it has made on SI pre application consultation requests in relation to electricity transmission infrastructure under S.182E (including those cases referred to by the prospective applicants). Some of these cases related to the provision of new or additional substations with associated plant/cabling, (such as VC0049 and VC0062), and others involved amendments, additions and expansion of electricity substation infrastructure and overhead lines or underground cable routes, (such as VC0074, VC0097, VC0104, VC0110 and VC0112).
- 6.2. In the former cases, (VC0049 at Dulla and VC0062 at Letter), the Board determined that the provision of a new 110kV substation and associated overhead lines or underground cabling (110kv), which were to act as a node constituted Strategic Infrastructure. These determinations were made on the basis that the proposed development constituted electric plant for the conveying of electricity from a generating station to a substation and/or facilitating connection into the National Transmission Grid from a permitted/existing 110kV overhead line.
- 6.3. It should be noted that

**VC0074** related to the relocation of a permitted substation at Barnadivane, Co. Cork, (associated with a permitted wind farm), some 500m to the southwest and to the facilitation of connection to the transmission network rather than constituting transmission infrastructure in its own right. The decision was that it did not constitute Strategic Infrastructure.

**VC0097** related to a proposed substation and 33km length of underground cabling at Drumnalough and Lenlea Wind Farm, involving the replacement of two previously permitted substations, permitted as part of two wind farm developments, some 500m to the southwest. The decision was that it did not constitute Strategic Infrastructure.

**VC0104** related to the amalgamation of two previously permitted 110kV substations and the associated laying of underground cables at Carrigdangan, Co. Cork. The decision was that it did not constitute Strategic Infrastructure.

**VC0105** related to a revised substation design for a substation permitted as part of a wind farm at Cloosh, Co. Galway. The decision was that it did not constitute Strategic Infrastructure.

**VC0110** related to the provision of a new Gas Insulated Switchgear substation within the existing substation compound at Ballybrit, Co. Galway. The decision was that it did not constitute Strategic Infrastructure.

**VC0112** related to underground cabling connecting 2 no. existing substations to each other and then to the Transmission Network at Knocknamona Co. Waterford. The decision was that it did not constitute Strategic Infrastructure.

- 6.4. In the cases outlined at 6.3 above, the Board has exercised some discretion due to a lack of clarity in the interpretation of s.182A and its requirements in regard to such proposed developments, in that it has used the broad definition of the SI Act, "developments of strategic importance to the State", and the criteria contained in s.37(A)(2) to determine such matters. In these instances, the Board took into account material considerations such as, whether the proposed substation was within the site boundary for the permitted wind farm; whether a substation had previously been permitted to serve the wind farm; and whether the later proposal related to matters such as replacement of the substation. Thus a need, precedent and decision for the presence of a substation within the site had already been established.
- 6.5. A review of the cases referred to above revealed that, in such instances, the Inspectorate reports had generally noted that any detailed and specific planning issues arising from the proposed changes in respect of the proper planning and sustainable development of the area, and any associated environmental implications, could have been addressed in a subsequent application to the local authority for the area. It had further been submitted that this would obviate the need to reconsider whether the revised substation would be of strategic importance to the state requiring an application directly to the Board. Thus the Board, having regard to

the particular circumstances of each case, including the extant permission for a substation with the site boundary, to the scale and nature of the particular 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 37A(2), came to the conclusion that certain developments comprising extensions, alterations, refurbishment or replacement of existing or permitted 110kV infrastructure would not constitute SID.

#### 6.6 Substation, grid connection and access road

- 6.6. In the Mountphilips case that is currently before the Board, a new AIS substation and ancillary works are being proposed which are remote from the permitted substation infrastructure on the wind farm site and are outside the site boundary for the windfarm. Thus a need, precedent or role for the presence of a substation in the Mountphilips location has not previously been established. The stated purpose for the proposed works including connection of significant amounts of wind energy generated in the region to the national grid and to serve the local area securely is considered of some strategic importance. The proposed substation would act as a node on the transmission system whereby the electricity generated by the wind farm would be fed into the substation at 110kV, the existing 110kV line would also feed into the substation and there would be a further feed back into the Killonan to Neneagh overhead line.
- 6.7. The previous Inspector's report regarding Mountphilips (VC0098) addressed this issue in Sections 7.4 and 7.5. The Inspector concluded that the proposal constitutes SID on the basis that it relates to the "transmission" of electricity by means of a high voltage line (110kV) and that the proposed substation, although not necessarily SID in itself, forms part of the overall grid connection (conveying electricity at 110kV). I do not propose to repeat the analysis provided in the previous Inspector's report but wish to state that I am generally in agreement with the conclusions reached, notwithstanding the fact that further information on certain matters has since come before the Board, as outlined above.

#### 6.9 Underground cabling

6.8. The proposed underground cable connecting the permitted windfarm to the proposed substation at Mountphilips could be considered to be exempted development under

Class 26, Schedule1, Part 2 of the P&D Regulations 2001, as amended. This Class provides an exemption for

"the carrying out by any undertaker authorised to provide an electricity service of development consisting of the laying underground of mains, pipes, cables or other apparatus for the purposes of the undertaking"

6.11 I note that "electricity undertaking" is defined in Section 2(1) of the Electricity Regulation Act, 1999 as

"any person engaged in generation, transmission, distribution or supply of electricity, including any holder of a licence or authorisation under this Act or any person who has been granted a permit under section 37 of the Principal Act".

Thus whilst it is unclear at present who would be the undertaker, the exemption would still apply. Notwithstanding this, however, there is no exemption where either Environmental Impact Assessment or Appropriate Assessment is required in accordance with Article 9(1)(a) of the P & D Regulations, 2001 as amended. As previously noted, the c.30km cable route runs through the following European sites:

Slievefelim to Silvermines Mountains SPA 004165

Lower River Shannon SAC 002165.

6.12 The issue of Appropriate Assessment would, therefore, arise in relation to this element of the proposed development, which would remove any exemption under Class 26 of the Regulations, and as such, planning permission would be required. Thus it is considered that in this instance, the proposed 110kV cable route, in conjunction with the proposed 110kV substation, constitute Strategic Infrastructure Development in accordance with S182A of the Act.

#### 6.13 Associated works

The remainder of the works, namely realignment of delivery routes and haul routes, internal cabling and a telecoms relay pole, could generally be considered to form revisions and/or refinements of the original wind farm proposal granted under PL22.243040. It is considered that these works should form a separate application to the planning authority for revisions to the original windfarm application.

#### 6.14 Environmental Impact Assessment

It should be noted at the outset that an EIS is not mandatory for proposed development under Section 182 of the Act. I note that this matter has been comprehensively addressed in the previous Inspector Report on VC0098, Section 7.3. The Inspector had concluded that the proposed development would not come within a class of development set out in Schedule 5 of the Planning and Development Regulations 2001, as amended. The prospective applicant had expressed a similar view in the initial letter of request, but had also sought advice on whether an EIS was required. Notwithstanding this, the prospective applicant has advised in the letter seeking closure of the process that an EIAR/EIS has been prepared which will include all elements of the project. It is further submitted that there is a formal process for scoping for an EIS. The applicant has been advised that an EIAR should have regard to the cumulative effects with the permitted wind farm.

#### 6.15 Conclusion

I consider that the proposed development as described in the submissions and drawings, constitute strategic infrastructure. I conclude that the proposed development consisting of a new 110kV Air insulated switchgear (AIS) substation, 110kV underground cable, interface masts, alterations to existing site entrance and associated works at Mountphilips, Co. Tipperary falls within the scope of section 182A of the Planning and Development Act 2000, as amended necessitating an application direct to the Board.

# 7 Recommendation

I recommend that EcoPower be informed that the proposed development consisting of a new 110kV air insulated switchgear (AIS) substation and site compound, 110kV underground cable, interface masts, alterations to existing site entrance and associated works at Mountphilips, Co. Tipperary as set out in the plans and particulars received by An Bord Pleanála on the 28<sup>th</sup> July 2017 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.

Mary Kennelly Senior Inspector

14<sup>th</sup> December 2017