

Inspector's Report ABP-303289-18

Development

110kV Substation.

Location

Clonfad, Co. Westmeath

Prospective Applicant

JBM Solar Ireland Ltd.

Planning Authority

Westmeath County Council

Type of Application

Pre-Application Consultation under

s.182E of the Planning and

Development Act 2000, as amended

Date of Site Inspection

14th October 2019

Inspector

Niall Haverty

1.0 Pre-Application Consultation

- 1.1. The Board received a request on 18th December 2018 from Tom Phillips + Associates, Town Planning Consultants, on behalf of JBM Solar Ireland Ltd. to enter into pre-application consultation under Section 182E of the Planning and Development Act 2000, as amended, in relation to proposed development in the vicinity of Clonfad, Co. Westmeath.
- 1.2. The Board's representatives met with the prospective applicant and their agent on the 15th October 2019. Subsequently, the prospective applicant formally requested closure of the pre-application consultation process in a letter received on the 30th October 2019.

2.0 Site location

- 2.1. The site in question (c. 0.8 ha) is located c. 2.9km north east of Milltownpass village in Co. Westmeath. It comprises part of a larger application site extending to c. 259 ha, which is spread across two blocks of land in the townlands of Clonfad, Enniscoffey or Caran, Hightown or Ballyoughter, Lowtown or Balleighter, Pass of Kilbride and Rattin, and upon which Westmeath County Council has recently issued a notification of decision to grant planning permission for a utility scale solar energy generation development with a stated generating capacity of 100MW (see Section 4.0).
- 2.2. The information submitted with the request for pre-application consultation stated that the exact location of the substation was still being assessed, and 3 No. indicative locations within Block 1 were illustrated on the submitted Site Location and Site Layout Plan. At the subsequent meeting held with the prospective applicant, it was stated that a final site had been chosen, with the site illustrated in the presentation submitted to the Board. I note that this site is in the townland of Hightown or Balloughter, not Clonfad, as stated in the presentation.
- 2.3. An archaeological site (ringfort, site code WM027-065) is located immediately north east of the proposed substation site, while a stream is located immediately west of the site.

- 2.4. The village of Milltownpass is located immediately to the northwest of Block 2, while the town of Kinnegad is located c. 4km east of Block 1. Block 1 is traversed by a 110kV OHL and Block 2 by a 220kV OHL, while the M6 motorway runs c. 1km to the south of block 1.
- 2.5. The lands are in agricultural use with the terrain noted to be flat or gently undulating with hedgerows delineating field boundaries. In addition to agricultural lands, there are large tracts of bog land in the area and some areas of conifer plantation. The western boundary of Block 2 abuts the Milltown River, while a number of streams or watercourses pass through and bound areas of Block 1. There is a dispersed settlement pattern in the area, with areas of one-off ribbon development type housing along some public roads, as well as numerous farm dwellings and commercial uses.
- 2.6. The site is not located within or in the vicinity of a European Site. The closest site with a natural heritage designation is the Milltownpass Bog NHA, which is located c. 300m to the west of Block 1.

3.0 Proposed Development

- 3.1. The proposed development comprises the construction of a 110kV substation and associated electrical plant and connection to the adjacent Mullingar Kinnegad 110kV transmission line which traverses Block 1. It is proposed to connect to the grid by looping into this existing 110kV line at two set points from the proposed substation. This connection will entail modifications to the existing line, consisting of the removal of a section of the line and its replacement with 2 No. line cable interface masts and 2 No. underground cables.
- 3.2. The prospective applicant states that the substation and ancillary equipment will be built to Eirgrid/ESBN requirements and has submitted indicative details of an Eirgrid compound and control building and an IPP compound and building within an overall footprint of c. 0.8 ha. The substation infrastructure includes gantries, lightning masts, busbars, transformers, breakers and associated equipment, all enclosed by a c. 2.7m palisade fence. At the meeting held with the prospective applicant, it was stated that the substation was not intended to serve any other development, but that the compound includes an area for possible future expansion at the request of

Eirgrid. It was also stated that it would be built as a contested facility and transferred to Eirgrid upon completion.

4.0 Planning History

- 4.1. **Reg. Ref. 19/6168:** Notification of decision to grant permission issued by Westmeath County Council on 1st November 2019 on a site of 260 ha for a development which is described as follows:
 - "a 10 year permission for the construction of a Solar PV Energy Development comprising installation of Solar Photovoltaic (PV) panels on ground mounted frames/support structures within existing field boundaries; underground cabling and ducting including along the R446, the L1007 and the L5008; 40 No. inverter/transformer units; 1 No. customer control building; 1 No. communications and storage building; site perimeter (stock-proof) security fencing; CCTV security cameras; new construction site entrance and road crossing point on the L5008, upgraded access points and internal site access tracks; section of asphalt road widening along the L5008 north of the R446 to facilitate construction access; landscaping including screen planting; and all associated site development works. A number of temporary construction compounds will also be provided."

5.0 Applicant's Case

- 5.1. The prospective applicant's case can be summarised as follows:
 - The proposed development does not meet the criteria set out in section 37A(2) of the Acts to qualify as 'Strategic Infrastructure Development'.
 - The proposed development is, however, considered to be Strategic
 Infrastructure within the meaning of section 182A as the proposed 110kV
 substation infrastructure is considered to be 'electric plant' used for conveying
 electricity and facilitating the connection of renewable energy onto the
 national transmission network.
 - Eirgrid recently published their 'Enduring Connection Policy (ECP-1): 2018
 Batch', which contains the final list of applicants that will be processed in

- 2018. This document highlights that the applicant will connect to the transmission network via a 'Loop-in' arrangement to the Kinnegad Mullingar 110kV circuit.
- Previous determinations by the Board are noted (ABP Ref. PL26.VC0111 and PL17.300167).
- The proposed substation will be taken over by Eirgrid (the transmission system operator) and will become part of the transmission network.
- Having regard to the proposed method of connecting to the 110kV circuit by looping into the line at two set points, as highlighted in the Eirgrid report and from previous Board determinations, it is considered that the proposed development constitutes Strategic Development.

5.1.1. The prospective applicant also states that:

- The proposed solar farm to which the subject substation and associated works would be connected does not constitute Strategic Infrastructure and a s34 planning application will be assessed by Westmeath County Council.
- The proposed 110kV substation will be included in the planning application to the Planning Authority to ensure that the entire development is assessed for potential impacts in a cumulative and comprehensive manner.
- Unlike overhead lines which qualify as SID at greater than 110kV, no such threshold has been provided in respect of substations. The proposed development does not incorporate the installation of a new 110kV overhead transmission line and only includes a modification to the existing line which will be connected to the proposed 110kV substation via an underground cable.

6.0 Eirgrid Correspondence

- 6.1. The Board, in an email dated 6th February 2019, requested that the prospective applicant obtain clarification from Eirgrid in relation to the following matters:
 - Clarification as to whether the proposed development may form part of the national transmission network and any relationship that the proposed

development might have with the existing transmission network having regard to its indicated function.

- Has any connection agreement been applied for and/or agreed.
- 6.2. The prospective applicant submitted a response from Eirgrid to these matters on the 30th August 2019 (Eirgrid letter dated 11th September 2018), which can be summarised as follows:
 - The proposed development is not at a stage of design where it is possible to determine whether or not if it becomes operational the development would form part of the transmission network and the project will be subject to future assessment when additional details become known.
 - JBM Solar Ireland Ltd. has applied to Eirgrid for a grid connection agreement.
 - A grid connection agreement offer has not yet been made.

7.0 Legislative Provisions

- 7.1. Under subsection 182A(1) of the Planning and Development Act 2000, as amended, 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.
- 7.2. Subsection 182A(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.
- 7.3. The following definitions, as set out in section 2(1) of the Electricity Regulation Act, 1999, as amended, 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."

'Distribution':

"...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':

- "...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:

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

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

- (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."

8.0 Assessment

- 8.1. The proposed development comprises the construction of a new 110kV substation with associated development and a cable connection to the adjacent existing 110kV Mullingar Kinnegad transmission line. The proposed development is required to facilitate the connection of a proposed 100MW solar farm on a site of c. 260 ha to the national grid. As noted above, the proposed solar farm development was the subject of a recent planning application to Westmeath County Council, with a decision being made to grant permission on 1st November 2019 (Reg. Ref. 19/6168).
- 8.2. The proposed substation development includes an Eirgrid compound and control building and an IPP compound and building. The compounds include gantries, lightning masts, busbars, transformers, breakers and associated equipment enclosed by a palisade fence within an overall footprint of c. 0.8 ha.
- 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, however no voltage threshold is set in respect of a substation.
- 8.4. The letter provided by Eirgrid to the applicant was non-committal with regard to the status of the proposed development, and stated that it was not at a stage of design

- where it was possible for Eirgrid to determine whether or not it would form part of the transmission network.
- 8.5. Notwithstanding Eirgrid's position, I note that the existing Mullingar Kinnegad 110kV overhead power line, which it is proposed to connect to, is a transmission line. I also note that the indicative substation drawings submitted by the prospective applicant include separate Eirgrid and customer areas and that it was stated at the meeting held with the prospective applicant that the substation would be transferred to Eirgrid upon completion.
- 8.6. The proposed substation development entails a looped connection to the existing 110kV transmission line, which will entail the severing of the transmission line and the looping of all power within the circuit into the substation and back out again. Due to this connection arrangement, I consider that the proposed substation will, in effect, become a new node on the 110kV transmission line. It follows that the proposed substation development will therefore also form part of the transmission system as defined in the Electricity Regulation Act 1999, as amended, being electric plant and high voltage lines which is used for conveying electricity from a generating station to a substation and from one substation to another.
- 8.7. The Board will note previous decisions it has made on strategic infrastructure preapplication consultation requests in relation to electricity transmission infrastructure under Section 182E. In each of the following cases, the Board determined that the provision of a new 110kV substation which is to be looped into the existing/permitted transmission network constitutes Strategic Infrastructure:
 - ABP-303194-18: Knockardugar, Co. Laois.
 - ABP-302516-18: Listowel, Co. Kerry.
 - ABP-302247-18: Ballylaneen, Co. Waterford.
 - ABP-301646-18: Harristown, Co. Meath.
 - ABP-301601-18: Gillinstown, Co. Meath.
 - ABP-301206-18: Mothel and Curraghduff, Co. Waterford.
 - ABP-300167-17: Dunboyne, Co Meath.
 - VC0111: Rosspile Co. Wexford.

- VC0098: Mountphillips, Co. Tipperary.
- 8.8. I consider that the subject case is directly comparable to the abovementioned cases, and therefore it is my opinion that the proposed substation development will form a node on the 110kV transmission system and thus will constitute Strategic Infrastructure.

8.9. Planning and Environmental Considerations

- 8.9.1. The following is a brief summary of the key planning and environmental considerations that were discussed at the pre-application consultation meeting:
 - Hydrological issues: Including changes to drainage patterns, with particular reference to any water dependant terrestrial ecosystems. Impact of soil/peat excavation on water quality and construction management issues.
 - Flood risk: Proper consideration required for fluvial and pluvial flood risk, noting the proximity to the stream and the low-lying wet peaty soil in the area, with extensive patterns of drainage ditches. Potential increase in flood risk elsewhere as a result of the proposed development. Site-specific flood risk assessment required.
 - Ecology: Impacts on mammals, birds, fisheries and on designated/protected sites, including the nearby Milltownpass Bog NHA.
 - Appropriate Assessment: Including need for proper consideration of potential in-combination effects with the proposed solar farm and any other projects in the vicinity.
 - Archaeology: Potential impact on recorded site adjacent to substation site.
 - Landscape and visual impact: Relatively flat area with expansive views from some areas.
 - · Residential amenity, including operational noise and construction impacts.
 - Traffic issues, including use of the bog road for construction traffic.

9.0 Conclusion

9.1. I consider that the proposed development as described in the submission and associated 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.

10.0 Recommendation

10.1. I recommend that JBM Solar Ireland Ltd. be informed that the proposed development consisting of a 110kV substation and grid connection in the townland of Hightown or Balloughter², Co. Westmeath as set out in the plans and particulars received by An Bord Pleanála on the 18th December 2018 and in the information submitted at the pre-application consultation meeting held on the 15th October 2019, 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

Noted. MyC04/11/19.

4th November 2019

² As noted in Section 2.0 above, the prospective applicant incorrectly refers to the substation site as being located within the townland of Clonfad.

Appendix 1

The following is a schedule of prescribed bodies considered relevant in this instance for the purposes of Section 182A(4)(b) of the Act.

- Minister of Culture, Heritage and the Gaeltacht
- Minister for Communications, Climate Action and Environment
- Westmeath County Council
- Transport Infrastructure Ireland
- An Taisce
- Heritage Council
- Inland Fisheries Ireland
- Health Service Executive
- Commission for Regulation of Utilities
- Irish Water