Inspector's Report

ABP-314003-22

Development	Open Cycle Gas Turbine plant and ancillary connection infrastructure
Location	Aghada ESB Power Station, Co. Cork.
Prospective Applicant	ESB
Planning Authority	Cork County Council
Type of Application	Pre-Application Consultation under 37B of the Planning and Development Act 2000, as amended
Inspector	Sarah Lynch

1.0 Pre-Application Consultation

1.1. The Board received a request on 8th July 2022 from ESB to enter into pre-application consultation under Section 37B of the Planning and Development Act 2000, as amended, in relation to proposed development at Aghada ESB Power Station, Co. Cork.

2.0 Site Location and Description

2.1. The proposed site is the Aghada Power Station in County Cork, approximately 12km south-east of Cork City, on the eastern side of Cork Harbour. The site is bounded by Cork Harbour to its north, west and south. Bordering its northeast to south-east boundaries are open green fields, intersected with hedging and vegetation.

2.2. The existing ESB Aghada power station site is bisected by the Midleton-Whitegate public road (R630). Access is provided off the R630.

2.3. The Proposed Development site is located at Ballincarroonig, near the village of Lower Aghada, which is sited approximately to the 770m north-east. The village of Whitegate is sited approximately 1.2km south. Irving Oil Whitegate Refinery lies approximately 1.7km south-west, with Fort Davis approximately 430m beyond that.

2.4. Corkbeg Island lies approximately 1.25km south-west. Further beyond, within Cork Harbour, lies Spike Island.

2.5. The entire Aghada Power Station site spans approximately 62.3 hectares (Ha). Electricity is generated by four separate generating units, comprising, 449 MWe Combined Cycle Gas Turbine and Three 90 MWe Open Cycle Gas Turbines.

2.6. Aghada Power Station is one of the largest electricity generating facilities in Ireland, fuelled by natural gas and is identified as a lower tier' Seveso site. Aghada is strategically located close to the entrance of Cork Harbour.

3.0 Proposed Development

3.1. One OCGT unit is proposed, comprising a single gas turbine and a single alternating current (AC) generator. The generator and gas turbine will be housed in separate acoustic enclosures with ventilation ducts. The turbine will have an emissions exhaust

stack, the exact height of which will be determined from air dispersion modelling (c.45-55m) and will be fitted with a continuous emissions monitoring system (CEMS) to monitor flue gas composition.

3.2. The turbine will have an associated control module which will house the turbine controls and an electrical module which will supply power to the turbine and its associated auxiliary systems.

3.3. The turbine will have a transformer to step up the voltage to 220 kV for export to the existing on-site electrical substation. When operational the turbine will use air-cooling radiators to dissipate waste heat from the lubrication oil and other essential systems. Overall, the power generating unit and associated equipment will have a footprint of approximately 3,000 m2.

3.4. The OCGT will generate a maximum of 299MW of power when required 297MW approximately of which will be directly exported onto the grid. The key components of the electrical system will be designed for a maximum export load of 297MW net output (299MW gross power generation) and will not be rated to exceed this amount.

4.0 Planning History

4.1. There is an extensive planning history within the subject site and the power station as a whole which demonstrates the use of the site for power production with numerous upgrades, extensions, alterations and additions to the site.

5.0 Applicant's Case

5.1. The prospective applicant's case can be summarised as follows:

- The maximum power output of the proposed OCGT will be 299MW, which does not constitute 'Seventh Schedule' energy development under the Planning and Development Act.
- There is no heat output in the form of steam or hot water produced by the OCGT, the only useful energy produced is electricity, therefore the 7th Schedule threshold 'an industrial installation for the production of electricity, steam or hot water with a heat output of 300 megawatts or more' is not applicable to the proposed development.

- The 7th Schedule threshold ‘an industrial installation for carrying gas, stream or hot water with a potential heat output of 300 megawatts or more, or transmission of electrical energy by overhead cables, where the voltage would be 220 kilovolts or more, but excluding any proposed development referred to in section 182A(1)’ is also not applicable as there is no heat output in the form of steam or hot water produced by the OCGT. In regard to electricity transmission, cabling is entirely ancillary to the OCGT, is within the site redline boundary only and will extend a short distance carrying electricity underground from the OCGT main transformer to the existing on-site electrical substation via a replacement 220kV underground cable.
- The proposed OCGT Plant Secondary Fuel Storage Capacity will be 5,120 tonnes (6,000 m3) this is in addition to the existing CCGT and OCGT units on site which require separate secondary fuel store with a capacity of 14,000 tonnes (16,300 m3). The combined fuel storage is significantly below 7th Schedule threshold ‘An installation for the surface storage of oil or coal, where the storage capacity would exceed 100,000 tonnes’ and is therefore not relevant to the proposed development.
- The proposed development does not involve the storage of natural gas and in terms of cumulative output of power, the proposal is not to increase the capacity of the existing generating units at ESB Aghada power station. The OCGT is proposed as a new separate installation which will operate entirely independently, supplying power to the grid independently through the existing on-site substation.
- Development as per 37(A)2 is not of a nature and scale that would constitute strategic infrastructure.
- The plant will be a peaking plant and will not contribute substantially to the fulfilment of national and regional planning objectives. It is not of strategic economic or social importance to the state or region.
- The development is wholly in the administrative area of Cork County Council and will not have a significant effect on the area of more than one planning authority.

- Connection infrastructure is ancillary and is of a lesser scale than similar development that has been confirmed as ancillary by ABP.
- The applicant submits that the proposed development does not constitute Strategic Infrastructure Development.

6.0 Legislative Provisions

6.1. Section 2(1) of the Planning and Development Act 2000, as amended ('the Act'), defines 'strategic infrastructure' as including, *inter alia*:

> "any proposed development referred to in section 182A(1)"

6.2. Section 37A of the Act states that:

> "(1) An application for permission for any development specified in the Seventh Schedule (inserted by the Planning and Development (Strategic Infrastructure) Act 2006) shall, if the following condition is satisfied, be made to the Board under section 37E and not to a planning authority.
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> (2) That condition is that, following consultations under section 37B, the Board serves on the prospective applicant a notice in writing under that section stating that, in the opinion of the Board, the proposed development would, if carried out, fall within one or more of the following paragraphs, namely—
>
> (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."

6.3. Under subsection 182A(1) of the Act, 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.

6.4. Subsection 182A(9) 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."

6.5. 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 Board[1] 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':**

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

"…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—

(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."

7.0 **EIA**

7.1. The applicant has stated that an EIAR will be prepared for the proposed development in accordance with Article 5(1) and Annex IV of Directive 2014/52/EU.

8.0 Appropriate Assessment

8.1. The applicant has stated that an Appropriate Assessment will be prepared for the OCGT development which will describe the investigations, findings and conclusions of the assessment, and any proposed mitigation measures as may be appropriate arising from a Natura Impact Statement. It is further stated that the AA will comply with the requirements of the Habitats Directive.

9.0 Assessment

9.1. Strategic Infrastructure

9.2. This pre-application consultation concerns the development of an Open Cycle Gas turbine which will operate as a peaking plant for short periods of time when there is insufficient electricity being generated from renewable technologies. The development will occur within an area of 10.22 ha which will be entirely located within the existing Aghada Power Station site.

9.3. It is stated by the prospective applicant that the proposed development will generate a maximum of 299MW of power when required 297MW of which will be directly exported onto the grid. Thresholds within the 7th Schedule to which Section 37B refers, specify that development for the purpose of 37A or 37B include the development of *'a thermal power station or other combustion installation with a total energy output of 300 megawatts or more'*. The prospective applicant states within the documentation provided that the proposed development would not exceed 299MW of power generation and is therefore below the threshold outlined within the 7th Schedule. It is further stated that the key components of the electrical system will be designed for a maximum export load of 297MW **net output** (299MW gross power generation) and will not be rated to exceed this amount.

9.4. The 7th Schedule also refers to a number of thresholds which the prospective applicant has addressed within the documentation submitted and includes the following:

- *'an industrial installation for the production of electricity, steam or hot water with a heat output of 300 megawatts or more'*.

9.5. It is stated that there is no heat output in the form of steam or hot water produced by the OCGT the only useful energy is electricity.

- *An industrial installation for carrying gas, steam or hot water with a potential heat output of 300 megawatts or more, or transmission of electrical energy by overhead cables, where the voltage would be 220 kilovolts or more, but excluding any proposed development referred to in section 182A*

9.6. The prospective applicant states again that there is no heat output in the form of steam or hot water produced by the OCGT. With regard to electricity transmission, cabling is entirely ancillary to the OCGT, is within the site redline boundary only and will extend a short distance carrying electricity underground from the OCGT main transformer to a new bay of the existing on-site electrical substation. It is submitted that the proposed development does not fall within this criterion.

9.7. The prospective applicant referred to the need for a secondary fuel storage area within the site in the case of an emergency power failure and examined the relevant threshold of the 7th Schedule in this regard within the written clarification submitted.

- *An installation for the surface storage of oil or coal, where the storage capacity would exceed 100,000 tonnes.*

9.8. It is stated by the prospective applicant that the OCGT Plant Secondary Fuel Storage Capacity is 5,125 tonnes (6,000 m^3) this is in addition to the CCGT plant which maintains its own separate secondary fuel store will a capacity of 16,300m^3. Combined fuel storage is signficantly below 7th Schedule threshold and is therefore not relevant to the proposed development.

9.9. It is of note that there is no storage of natural gas proposed and in terms of the cumulative output of power it is stated that the proposal is not to increase the capacity of the power station, it is for a new separate installation which will operate entirely independently, supplying power to the grid independently through separate transformers and substation bays.

9.10. With regard to transmission, the proposed development will connect to existing infrastructure on the site such as the gas pipeline and the electricity substation is stated to be ancillary to the proposed OCGT and the prospective applicant has confirmed that no new transmission infrastructure is being created. I draw the Board's attention to the prospective applicant's contentions that the proposed development is similar to a number of previous proposals in other locations where the Board determined that the development of such infrastructure was ancillary to the overall

development and did not fall within provisions of section 182A of the Act ABP Ref: ABP310334-21.

9.11. In this regard I note that the proposed development will not create a new node on the network and merely distributes electricity from the OCGT to the existing substation and associated transmission lines on site and is therefore ancillary infrastructure to the existing power station. Given that the proposal does not comprise of transmission within the meaning of the Act I am satisfied that it does not constitute strategic infrastructure as per section 182A of the Planning and Development Act 2000, as amended.

9.12. Having regard to the foregoing and taking into account the relevant thresholds outlined within the 7th Schedule and the parameters set out in section 182 A of the Planning and Development Act 2000, as amended, I consider that the elements of the proposed development do not fall within either section 182A of the Act or within the 7th Schedule thresholds.

9.13. With regard to Section 37A of the Planning and Development Act, as amended, I consider given the nature of the proposed development which seeks to provide a peaking plant within an existing power station in which no new transmission infrastructure is proposed, and which will operate independently of the power station, that the proposed development would not be of strategic economic or social importance to the State or the region in which it would be situate.

9.14. I further note that the proposed development would not have a significant effect on the area of more than one planning authority and it would not 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.

9.15. I conclude that the proposed development consisting of the Open Cycle Gas Turbine plant and ancillary connection infrastructure within the Aghada Power Station complex, Co. Cork, does not fall within the scope of section 37 B or section 182A of the Planning and Development Act 2000, as amended.

10.0 **Recommendation**

I recommend that ESB be informed that the proposed development consisting of Open Cycle Gas Turbine plant and ancillary connection infrastructure as set out in the plans and particulars received by An Bord Pleanála on the 8th July 2022, does not fall within the scope of section 37A or section 182A of the Planning and Development Act 2000, as amended, and that a planning application should be made in the first instance to Cork County Council.

Sarah Lynch
Senior Planning Inspector

15/07/22