Inspector's Report
ABP-319023-24

Development	Combined Cycle Gas Turbine and Open Cycle Gas Turbine Thermal Power Plant, Electricity Grid Connection including 2 no. substations, and associated buildings, plant, site works, service and ancillary development
Location	on land within the townlands Knockdrin, Derrygreenagh, Derryarkin, Derryiron, Ballybeg, Coolcor, Barrysbrook, Clonin, Togher and Coole, Co. Offaly. (www.derrygreenaghpowerplanning.ie)
Planning Authority	Offaly County Council
Applicant(s)	Bord na Móna Powergen Limited
Type of Application	Strategic Infrastructure, Section 37E of the Planning and Development Act 2000, (as amended)
Prescribed Bodies	1. Offaly County Council 2. Transport Infrastructure Ireland (TII)

3. Development Applications Unit of Department of Housing, Local Government and Housing
4. Commission for Regulation of Utilities, Water & Energy (CRU)
5. Environmental Protection Agency (EPA)
6. Health and Safety Authority (HSA)

Third Party Observers	1. Kim and Jason Henry Liam Quinn 2. Daniel Reid 3. Cllr Liam Quinn 4. Adele Kierans
Date of Site Inspection	10th of July 2025 and 7th of October 2025
Inspector	Joe Bonner

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1.0 Introduction

1.1. Context

1.1.1. This report has been prepared in respect of a direct application to the Commission for strategic infrastructure under Section 37E of the Planning and Development Act, 2000 (as amended) (PDA). The application is being made by Bord na Móna Powergen Limited for a Combined Cycle Gas Turbine and Open Cycle Gas Turbine Thermal Power Plant, an Electricity Grid Connection including 2 no. substations, associated buildings, plant, site works, service and ancillary development on lands within a number of townlands in north county Co. Offaly, just south of its border with County Westmeath.

1.2. Pre-Application SID Consultations

1.2.1. The applicant entered-into pre-application discussions with the Commission, as provided for by Section 37B of the PDA, which are detailed on File Reference ABP-315916-23. Having considered the anticipated energy output of the proposed thermal power plant, the Commission issued a direction on the 5th of July 2023, that the proposed development falls within the relevant definition of 'Energy Infrastructure' in the seventh schedule of the PDA thereby satisfying the requirements of Section 37(A)(1), that it is considered to be of strategic importance by reference to the requirements of sections 37A(2) (a), (b) and (c) of the PDA and that an application must be made directly to the Commission under Section 37(E) of the PDA. This application is made on foot of that direction.

1.3. Site Location and Description

General description

1.3.1. The subject site lies entirely within County Offaly, in the townlands of Knockdrin, Derrygreenagh, Derryarkin, Derryiron, Ballybeg, Coolcor, Barrysbrook, Clonin, Togher and Coole. The site, occupies an overall area of 312ha, consisting predominantly of lands within the control of Bord Na Mona (BnM) that are known as the Derrygreenagh Bog Group and previously operated as a commercially harvested raised peat bog. The site extends approximately 8.17km from north to south, with its northern extent starting at the Mongagh River, that marks the boundary between

Offaly and Westmeath, while its southern boundary ends at the northern edge of the east west flowing Grand Canal.

1.3.2. The northernmost point of the site lies approximately 3.4km to the southeast of Rochfordbridge, Co. Westmeath, while part of the proposed overhead transmission line (OHL) lies 1.8km to the northwest of Rhode, Co. Offaly. The overall area is rural in nature, but is quite industrialised, as in addition to the existing Bord na Mona works area at Derrygreenagh and expansive areas of cutaway bog, three quarries are located in close proximity to the northeast, northwest and southwest of the proposed Power Plant Area (PPA) and 220kV substation. Seven turbines from the recently completed Yellow River wind farm are located closed to the western side of the route of the proposed 220kV OHL, with a further cluster of six turbines close to its eastern side and additional turbines are located further east of the overall site. The Rhode Energy Park and a solar farm, which is currently under construction adjacent thereto, lie c4.5km to the south of the proposed PPA and c1km east of the proposed interface compound, where the OHL would start running underground.

1.3.3. The site of the proposed PPA lies to the east of the R400, where a workshop and office buildings associated with the existing BnM Derrygreenagh Works are located. These buildings would be demolished as part of the development. A peat deposition area is proposed to be located on bogland to the southeast of the Derrygreenagh Works (proposed PPA), while a c500m long surface water discharge pipe would run northwards from the PPA to an outfall at the Mongagh River.

1.3.4. The balance of the site is located to the west of the R400 and includes the site of the 220kv substation directly opposite the PPA, which would be partially located on a brownfield site. From there, the 220kv overhead line would travel in a south-southeast direction for a distance of c5km across BnM owned lands, to where it would arrive at an interface compound. From there, the 220kv line would travel underground along the route of a former BnM rail track for c1.35km before passing beneath a bridge that runs over the L-1010 local road and would continue southwards for a further c1km, close to the northern edge of the Grand Canal before looping back northwards to the proposed 400KV substation, which would be located on agricultural land adjacent to the existing east-west running Oldstreet to Woodland 400kV transmission line at a point c400m north of the Grand Canal and c 2.5km southwest of Rhode.

1.3.5. The proposed Gas Connection Corridor (GCC), which does not form part of this application, but would form part of the overall project and is assessed as part of the project EIAR, is proposed to run in a north-westerly direction from the power plant area into Co. Westmeath, for a distance of 9.7km, where it would connect to the existing east-west running high pressure Gas Pipeline to the West (BGE/77). The proposed GCC is 1km in width and the pipe would be required to cross 2 no. local roads, 1 no. regional road, the M6 motorway, a river and several streams.

Power Plant Area

1.3.6. The PPA at the northern end of the overall site can be described as being brownfield in nature, given that the existing Bord na Mona Derrygreenagh Works includes workshop and office buildings, hardstanding surfaces, and a narrow-gauge railway associated with the former commercial use of the surrounding bogland. Peat-harvesting and transport equipment was serviced and repaired on the site and it is now used as part of ongoing works related to the site's existing EPA IPC Licence No. PO501-001. Mature trees and hedges screen the site on both the northern and southern approaches along the R400. The topography is relatively flat at between 85m and 86m above ordnance Datum (AOD), rising to c90m at the south, close to the narrow gauge rail line. This part of the site extends over an area of c49 hectares.

1.3.7. The nearest houses to the PPA are located c1.15km to the south and south east of the proposed PPA buildings, along both the R400 and L1009 local road. The proposed peat deposition area is proposed to be located to the south east of the PPA and would be located c350m from the nearest house to its south-east.

220kv Substation

1.3.8. The site of the proposed 220kV substation is on the western side of the R400 directly opposite the PPA, with direct access onto the R400. The lowest part of the site is at 79mAOD, rising to 84m AOD. An existing industrial building that is not within the red or blue lined site boundaries lies between the substation site and the R400. The compound would start c85m from the R400, while the nearest part of the proposed GIS building would be c125m and the nearest pylon would be c170m from the roadside edge. The proposed telecommunications mast would be 110m from the R400. A dense area of trees to the south and east of the proposed substation would restrict views of the site from the southern approach although wind turbines from the

Yellow River Windfarm are clearly visible in the background, when viewing the site from the R400. The nearest house to the site is 1.3km south-east along the R400.

Electricity Connection (overground 220kV line) c5km

1.3.9. The overhead section of the 220kV line would run southwards from the 220kV substation over relatively level and regenerating cutover peatland, starting at an elevation of c82mOD. From there the ground drops to c76.5m at the seventh pylon from the substation, just before changing direction to the south west and crossing a quarry access road and the Yellow River c1.9km south of the substation. The OHL would then pass through two pylons in a southwestern direction, where the ground rises to c77.5m, before turning in a south-southeastern direction to the proposed interface compound, and passing through a further 10 pylons to reach the interface compound at a ground level of c76.8m AOD.

1.3.10. The nearest houses to the OHL would be c900m east along the R400. Rhode village is c2.2km east of the proposed interface compound, while the nearest houses to the would be c800m to the southwest.

Electricity Connection (underground 220kV line) 3.4km to 400kV Substation

1.3.11. The proposed underground line would run for 2.8km through BnM lands before travelling through 550m of third party land to link into the proposed 400kv substation.

1.3.12. From the interface compound, the underground line would run along the route of an old BnM rail track, from a surface level of 76.69mAOD, for 900m in a southeastern and then southeastern direction for c730m, to a point where it would run under a bridge over the L1010 local road at a surface level of 82.73mAOD. From the bridge, the line would continue south eastwards along the route of the existing machine pass and rail track for c375m to a level of 78.86mAOD, before turning southwest for another c450m, where the ground level is to 76.68m. The proposed substation is located c180m south of this point, while the Grand Canal is c600m to the south. Access to the substation would be via the existing machine pass to the south of the L1010.

1.3.13. Two houses are located c40m to the east and west of the underground section of the line in close proximity to the bridge over the L1010 that served as the rail underpass.

1.4. The applicant

1.4.1. The Applicant, Bord na Móna Powergen Ltd., is a subsidiary of Bord na Móna PLC. Bord na Móna PLC is a publicly owned company, originally established in 1946 to develop and manage some of Ireland's extensive peat resources on an industrial scale, in accordance with government policy at the time. Bord na Móna control approximately 80,000 ha in total, located mainly in the Irish midlands. BnM currently manages and operates a portfolio of thermal and renewable assets such as the Edenderry Power Plant (a biomass fired electricity generating unit), Oweninny wind farm, Timahoe North solar farm (under construction) and the Drehid landfill gas facility.

1.4.2. In September 2019, Simons J. gave judgment in Friends of the Irish Environment Ltd. v. Minister for Communications [2019] IEHC 646, [2019] 9 JIC 2002 (Unreported, High Court, 20th September 2019), declaring invalid statutory instruments which classified peat extraction as exempted development and subjected such extraction to licencing by the Environment Protection Agency. This gave rise to a cessation of peat harvesting by Bord na Móna across the country, that was at first temporary and was later made permanent.

1.4.3. Bord na Móna is in the process of rehabilitating 33,000 hectares of its peatlands under the 'Enhanced Decommissioning, Restoration and Rehabilitation Scheme'.

2.0 Proposed Development

2.1. Documentation

The following documents accompany the planning application:

- Cover Letter & Appendices
- ABP SID Planning Application Form and Appendices
- Planning Statement
- Environmental Impact Assessment Report (EIAR)
- AA Screening and NIS (Appendix 9B of EIAR)
- Landowner Consent from ESB Networks
- Site Notices & Newspaper Notices

- Letters to Prescribed Bodies
- Application Drawings

The EIAR, which was prepared by AECOM is presented as follows:

- Non-Technical Summary
- Volume I: Environmental Impact Assessment Report (EIAR) (Main Text)
- Volume II: Appendices
- Volume III: Figures

2.2. Development Description

2.2.1. General Description

The proposed development consist of a 10-year planning permission to develop a Combined Cycle Gas Turbine ('CCGT') and Open Cycle Gas Turbine ('OCGT') Thermal Power Plant, Electricity Grid Connection including 2 no. substations, and associated buildings, plant, site works, services and ancillary development.

The proposed development would encompass a Power Plant Area and an Electricity Grid Connection.

2.2.2. Power Plant Area

The development of the Power Plant Area would include the following:

- Demolition of existing buildings at the Derrygreenagh Works site (Including office building, boiler house, workshops, water tank and storage unit);
- Construction of CCGT power plant (570MW) [Including turbine hall and associated buildings, air cooled condensers ('ACC'), Heat Recovery Steam Generator ('HRSG'), air intake, emissions stack (60m high) with Continuous Emissions Monitoring System ('CEMS') and platform];
- Ancillary coolers;
- Fuel gas performance heating room;
- Generator transformer and unit auxiliary transformer;

- OCGT power plant (140MW) [Including turbine enclosures, air intakes, fin fan coolers, emissions stack (45m high), electrical rooms, main transformer];
- Secondary fuel storage tanks and unloading area [Including unloading layby, 2 no. fuel storage tanks, fuel pumping and cleaning plant, fuel forwarding building];
- 2 no. water abstraction boreholes;
- Raw water storage tank;
- 2 no. demineralised water storage tanks;
- Water treatment plant;
- Administration building and staff car park;
- Wastewater treatment plant;
- Workshop and stores building;
- Process water treatment plant;
- Gas Above Ground Installation ('AGI') compound [Including regulator building, instrumentation kiosks, palisade fencing];
- Gas receiving facility [Including gas compressor building, fin fan coolers, pressure reducing station];
- Drainage infrastructure [Including surface water attenuation tank, surface water discharge pipeline (Discharging to the Mongagh River), treated process and wastewater discharge pipeline (Discharging to the Yellow River)];
- A new site access from the R400 road;
- All internal access roads;
- Security fencing and gates;
- Landscaping;
- Site works and services;

- All ancillary infrastructure and plant [Including firefighting systems, fire water pumphouse, raw water pumphouse, emergency diesel generator, propane stores, drains, safety valves, lighting, and pipe gantries];
- A permanent Peat and Spoil Deposition Area ('PDA') of approx. 225,000 sq. m. will be located to the south-east of the Power Plant Area.

2.2.3. Electricity Grid Connection

The development of the Electricity Grid Connection would include the following:

- A 220kV substation located west of the PPA and R400 [Hybrid gas insulated switchgear ('GIS')/air insulated switchgear ('AIS') substation design including switchgear building; control room building; transformer bays; 2. no. lattice gantries (c.20m high) to support overhead line connection; security fencing; telecommunications mast (c.36m high); landscaping, new access on to R400];
- 220kV overhead line running for c. 5km to the south of the 220kV substation, facilitated by double circuit suspension pylon towers (13 no.; c. 44m high) and strain pylon towers (6 no. c.38m high);
- 220kV line-cable interface compound [Including interface tower gantry (c. 20m high); cable sealing ends; security fencing];
- 220kV underground cable connection running south c.3.4km [paved and gated service road, 12 no. joint bays to facilitate construction and servicing];
- A 400kV GIS substation located adjacent to the existing Oldstreet-Woodland 400kV overhead line [Including a 400kV GIS building; 220kV GIS building; transformer compound; 2 no. lattice gantries (c. 28m high) to support overhead line connection to 2 no. new loop-in strain towers (c. 32.5m high) on the Oldstreet-Woodland 400kV line; telecommunications mast (c. 36m high); security fencing; landscaping, access off L1010 road];
- 2 no. permanent Peat Deposition Areas would be provided as part of the EGC – one to the north of the 400kV substation (c. 75,300 sq. m) and one to the southwest of the 220kV substation (c. 50,200 sq. m.);
- Tree Replanting Areas (c. 17.5 ha.) to compensate for all tree felling requirements associated with the proposed development.

The application relates to development for the purposes of an activity requiring a licence from the Environmental Protection Agency under the Environmental Protection Agency Act 1992, as amended. It also relates to a COMAH establishment and therefore falls under the requirements of the Chemicals Act (Control of Major Accident Hazards Involving Dangerous Substances) Regulations, 2015.

2.3. Other Consent Processes

2.3.1. The proposed development relates to an activity requiring an Industrial Emission Licence and a submission on the application has been received from the EPA.

2.3.2. Submissions have been received from the Health and Safety Authority (HSA), as the development would constitute a COMAH establishment (COMAH Regulations 2015 (S.I.209 of 2015).

2.3.3. Authorisation is required from the Commission for the Regulation of Utilities (CRU) to construct a power plant, as well as a licence to generate electricity. As part of the licence approval, a Safety Case would also be required to be submitted for acceptance by the CRU.

2.3.4. The development would be required to register with the EPA the material to be imported onto the lands, in accordance with Article 27 of the European Communities (Waste Directive) Regulations 2011, S.I. No. 126 of 2011.

2.3.5. Other consents would also be required from the roads authorities and TII.

2.4. EIA Screening

The proposed development falls within the definition of a project under the EIA Directive 2011/92/EU as amended by EIA Directive 2014/52/EU. It also falls within the scope of Class 2 (a) under Part 1 Schedule 5 of the Planning and Development Regulations 2001 (as amended) ‘a thermal power station or other combustion installation with a heat output of 300 megawatts or more’ as the maximum power output of the proposed CCGT power plant would be 570MW and maximum power output of the proposed OCGT would be 140MW, which is in excess of the threshold set out under Schedule 5 for a ‘thermal power station’. A mandatory EIA is therefore required. An EIAR accompanies the application. (See Form 1 – Appendix 1 – EIA Pre-Screening) and Sections 12 to 27 of this report.

2.5. Natural Heritage Designations

2.5.1. There are six European sites within 15km of the site, with the nearest being Raheenmore Bog SAC (Site Code: 000582) 7.1km southwest, followed by Lough Ennell SAC (000685) 10.2km northwest and Lough Ennell SPA (004044) 10.8km northwest. Split Hills and Long Hill Esker SAC (001831) is 11.1km southwest, while Mount Hevey Bog SAC (002342) is 13.9km northeast. Wooddown Bog SAC (0002205) is located 15km north of the site. None of these sites have direct hydrological linkages to the site, but were included in the applicants Appropriate Assessment (AA) Screening Report on the basis of proximity, on the basis that pollution-sensitive habitats and mobile SCI species (qualifying interests) are present on the sites and that the sites lie within the potential ZoI for atmospheric pollutants released from the operational stacks of the proposed power plant, as well as the ZoI for dust deposition during the construction and decommissioning phases.

2.5.2. Two other European sites, that are hydrologically linked to the proposed power plant area are the River Boyne and River Blackwater SAC (002299) and the River Boyne and River Blackwater SPA (004232) which are both located 16.6km north east of the PPA and more than 25km downstream.

2.6. Appropriate Assessment (AA) Screening and NIS

2.6.1. An AA Screening Assessment was carried out and a Natura Impact Statement has been submitted by the applicant. The Screening report concluded that :

Following an examination of the Proposed Development, encompassing the Power Plant Area and Electricity Grid Connection, and the likely impacts arising from construction, operation and decommissioning it has been concluded that in the absence of mitigation there is potential for likely significant effects of the Proposed Development on the following European sites:

- Lough Ennell SPA;
- River Boyne and River Blackwater SAC; and
- River Boyne and River Blackwater SPA

2.7. The AA screening is addressed in Appendix 2 – ‘Screening for Appropriate Assessment - Test for likely significant effects’ while the Screening Determination is also set out in section 29.2 below. The ‘Appropriate Assessment Conclusion:

Integrity Test' is presented in Appendix 3, while its conclusions are set out in section 29.3 below.

3.0 Planning History

3.1.1. Due to the linear nature of the proposed development, consisting of a proposed PPA and 220kv substation at its northern end, a 400kv substation at its southern end of the site and c8.4km of cabling in between (c5km overground with pylons and c3.4km underground), relevant and proximate planning history is set out relative to specific geographic areas, as explained below.

Power Plant Area

3.1.2. Pre-Application Consultation

- **ABP-315916-23** – Pre application consultation in respect a Combined Cycle Gas Turbine unit and an Open Cycle Gas Turbine unit power plant. The prospective applicant was Bord na Móna Powergen Limited. The Commission determined on the 4th of July 2023 that the proposed development would constitute SID.

3.1.3. Relevant Planning Applications on site of proposed Power Plant Area

Relevant planning history associated with the PPA site is set out below. I refer the Commission to other planning history relating to existing buildings on site, which are referred to in the application, including in various chapters of the EIAR.

- **19.PA0011 –** 10 year permission GRANTED by the Commission on the 12th of April 2010, for a 600MW power plant comprising (430MW Combined Cycle Gas Turbine Unit and a 170MW Open Cycle Gas Turbine Unit), associated buildings and infrastructure. The grant of permission was subject to 26 conditions including:

  (3) Electricity substation to be subject of a separate planning application.

  (4) IPPC licences to be obtained prior to commencement of development

  (6) HGV traffic to access and exit site from the north along the R400.

  (7) R400 improvements from the site to the M6 to be carried out prior to commencement of development.

(22) and (23) special contributions in respect of improvements, maintenance and re-instatement on the section of R400 from the M6 to Rhode village, associated with the construction and operational phases.

(26) a community gain fund to be established.

The grant of permission was later extended under Section 42 Planning and Development Act 2000 (as amended). It expired on the 11th of April 2025.

3.1.4. Applications close to power plant and 220kV substation

Sites through which the surface water discharge pipe would flow (to north of PPA)

- A surface water discharge pipe is proposed to run north from the power plant area and discharge into the Mongagh River. It would follow the route of a disused railway line, before crossing two roads and discharging into the river. The two roads are used as part of the Drumman biomass facility, where 6km of linear log storage space with capacity equating to 31,320 tonnes of wet logs may be stored following from a GRANT of temporary retention permission issued on the 10th of June 2021 to Bord Na Mona Energy Limited under **P.A. Reg. Ref. 20/329**. This permission will expire on the 31st of December 2030.
- **P.A. Reg. Ref. 19/25** – 18 year permission GRANTED on the 29th of April 2019 for an 87.6Ha extension to an existing 146.1ha sand and gravel quarry to the immediate east of the proposed PPA. A further 2 years are allowed for completion of restoration works, which the application proposed would be a naturally regenerated wildlife habitat, water ponds and have potentially long-term amenity use. Conditions require special contributions for upkeep and maintenance of the R400. The surface water pipe would flow beneath the quarry access road.

Telecommunications structure to south of proposed power plant

- Permissions relating to a 30m telecommunications structure on a site c125m to the south of the PPA, within the blue lined landholding. The first GRANT of permission issued on the 18th of February 1999 (**P.A. Reg. Ref. 98/693)**, and was followed by two temporary retentions under **P.A. Ref. Reg. 04/988** and **P.A. Reg. Ref. 09/238 (ABP-234553).** Permanent retention permission was GRANTED on the 2nd of March 2016 under **P.A. Ref. Reg. 15/330.**

Site to south of proposed 220kv Substation (within red lined site boundary)

- **P.A. Reg. Ref. 19/176** – 6 year permission GRANTED on the 17th of July 2019, to Bord Na Mona Powergen Ltd for a 100m high guyed wind monitoring mast to assess the suitability of the company's adjacent lands for wind farm development. The site location was c180m south of the proposed 220kv substation.

Site between proposed 220kv substation and R400

- **P.A Reg. Ref. 07/1394 –** Permission GRANTED on the 13th of December 2007 to change the use of existing building from oil storage to a pilot scale biodiesel processing facility.

Windfarm to north, west and east of site

- **PA.0032** – Permission GRANTED by the Commission on the 3rd of June 2014 for a 29 turbine windfarm. The Yellow River Windfarm is operational since late 2024. The closest turbine is located c500m east of the proposed 220kv OHL.

Leave to apply for Substitute Consent

- **ABP-306236-19** – Leave to apply for substitute consent for peat extraction GRANTED to Bord Na Mona on the 1st of May 2020. The site included part of the site over which the route of the 220kv OHL and most of the underground section would run. The decision was quashed by the High Court on the 7th of May 2021.

3.1.5. Applications between proposed 220kv substation and Yellow River (L10091)

From the 220kv substation, the OHL would travel south and south-eastwards via 5 no. 44m high pylons, before turning southwest and crossing the Yellow River and the L10091, c1.67km south of the 220kV substation. A process water pipe from the PPA would also run along the sites western boundary and discharge into the Yellow River near where the OHL would cross the road. It is proposed to plant replacement trees along c1.42km of this boundary close to the proposed pipe route, and part of this section of the site would be used as a peat deposition area. Recent applications decided in close proximity to its western boundary and are set out below.

Materials recovery facility - c190m to the west of the site

- **ABP-318566-23 (P.A. Reg. Ref. 22/490 Offaly Co. Co.)** – Permission REFUSED by the Commission on the 19th of September 2024 for demolition of structures, construction of a materials recovery facility for acceptance of up to 90,000 tonnes

per annum of household, commercial, industrial and construction and demolition waste. A NIS and EIAR were submitted. The refusal reasons include:

1 On the basis of information provided,…including the NIS, and the inspectors assessment, the Board is not satisfied that the proposed development individually, or in combination…would not adversely affect the integrity of the River Boyne and River Blackwater SPA and SAC in view of their Conservation Objectives. …the Board is precluded from granting permission…based on the lack of certainty in relation to use of water for firefighting and its containment /disposal, and the inadequacy of proposed monitoring of surface water discharges,…reasonable doubt remains as to the actual effects of the development on the conservation objectives and site integrity of the sites.

2 Access is via a narrow rural road which provides access for substantial existing commercial development exiting to the R400 that is specifically identified in the development plan as a regional route restricted for carrying capacity reasons. The Board was not satisfied that the proposed development, in conjunction with the substantial existing commercial development, would not be likely to create a traffic hazard and endanger public safety from conflict of vehicles on a substandard rural road and conflict with the development plan policy for the R400 by creating additional vehicular traffic on an identified restricted regional route. The Board noted that the nature of the development was distinct from the pig farm, quarry and wind farm developments which by their nature are location specific in a rural area.

Quarry – immediately west of and abutting the sites western boundary

- **P.A. Reg. Ref. 23/322** – Permission REFUSED on the 29th of August 2023 for rock extraction from an area of 3.6 hectares, to the immediate west of the site. The planning authority attached 4 refusal reasons**,** which can be summarised as:

1 Unauthorised breach of previous permission on a neighbouring site by extracting 500,000 tonnes of material, the absence of a restoration plan for that site, and its implementation.

2 The effects of unauthorised development have not been documented, so the Planning Authority cannot adequately assess direct and indirect

environmental effects of the development on, but not limited to surface water, groundwater and European Sites.

3 The EIA Screening document is inadequate and an EIAR is required, but was not submitted.

4 The AA Screening Report is inadequate and the Planning Authority is unable to ascertain the development would not have significant adverse effects on any European Site.

Site c800m south of the proposed PPA on the R400 Regional Road.

- **P.A. Reg. Ref. 23/277** – Permission REFUSED on the 12th of August 2024 to import soil and stone not exceeding 25,000 tons over a period of 2 years to raise the ground levels by up to 1.2m and restoration to agricultural use. The planning authority attached 2 refusal reasons**,** which can be summarised as:

  1 May increase the risk of flooding including on the adjacent public road.

  2 Contrary to Policy BLP-20 of the development plan, which requires the preservation of a 10m buffer strip either side of water watercourses.

3.1.6. Between Yellow River (L10091) and end of overhead line (c3.3km)

c180m after crossing the Yellow River, the OHL turns south-eastwards and runs in a straight line for c 3.2km to where it would go underground at the interface compound, c2.15km to the south west of the Rhode Green Energy Park and Derryiron Substation. Permission has been granted 3 times for a wind monitoring mast on a site, within the blue lined area, c440m east of the proposed overhead line. They are:

- **19.PA0032** Permission GRANTED on the 3rd of June 2014 for the Yellow River Windfarm with 29 turbines with a maximum tip height of 166m.
- **PL19.243080 (P.A. Reg. Ref. 13/242)** – Permission GRANTED on the 1st of August 2014 to Bord Na Mona Energy Limited for the erection of a guyed wind monitoring mast, with instruments, up to 100m in height.
- **P.A. Ref. Reg. 19/315** – 3 year permission GRANTED on the 30th of September 2019, to Bord Na Móna Powergen Limited to continue using the mast to assess the suitability of the company's adjacent lands for wind farm development.

- **P.A Reg. Ref. 22/446** – Permission GRANTED for a further 3 years, to Bord Na Móna Powergen Limited to continue using the high mast. The permission expired on the 4th of December 2025.

3.1.7. Cluster of applications around Rhode Green Energy Park to immediate east of red lined site boundary and c4.2km south east of the proposed PPA

- **P.A. Reg. Ref. 19/161** – Permission GRANTED on the 11th of July 2019 for a 20MW Battery Storage facility.
- **P.A. Reg. Ref. 20/237** – Permission GRANTED on the 22nd of June 2021 for a combined heat and power generating biomass gasification plant, which would convert carbon dioxide, steam and methane into renewable energy and connect to the existing Derryiron 110kv substation.
- **P.A. Reg. Ref. 20/238** – Permission GRANTED on the 29th of June 2021 for battery energy storage facility on a 2.7 ha site, including (i) 16 No. battery enclosures and 16 No. medium voltage power station (MVPS) enclosures, (ii) synchronous condenser compound (iii) electrical substation to connect to the existing Derryiron 110kV substation on lands adjoining the site to the south.
- **P.A. Reg. Ref. 16/246** – 10-year Permission GRANTED on the 7th of March 2017 for a solar PV energy development with an area of 71ha (c.96.6ha sought) including a single storey substation, ground mounted PV panels and access roads. The grant was subject to 20 conditions. The nearest part of the site is c1km to the east of the proposed 220kV OHL. (under construction February 2026).
- **ABP-304925 (P.A. Reg. Ref. 19/194)** - Permission GRANTED by the Commission on the 11th of March 2021 for a Solar P.V. energy development on a 15ha site. This area was previously omitted by condition in P.A. Reg. Ref. 16/246.
- **P.A. Reg. Ref. 21/364** – 10 year permission GRANTED on the 22nd of February 2022 for a 1.74ha solar farm extension, c1.15km east of proposed 220kV OHL.
- **RL3503** – The Commission determined on the 18th of April 2017 that the provision of a connection between the Yellow River Wind farm granted under 19.PA0032 and Derryiron 110kV substation is development and is exempted development.

- **ABP-309491-21** – On the 13th of October 2021, the Commission APPROVED a 110kV substation, 110kV underground grid connection, cabling and associated works, on a linear site running 3km from Derryiron to Srah.
- **P.A. Reg. Ref. 22/664** – Permission GRANTED on the 30th of March 2023 to EirGrid to upgrade the existing Derryiron 110kv substation.
- **P.A. Reg. Ref. 24/60289** – Permission GRANTED on the 16th of September 2025 on a 22ha site, c1km east of the proposed OHL and immediately north of the solar farm under construction, for (i) 2 air dome structures for the storage of carbon dioxide at atmospheric pressure (each 500m x 120m x 34m high), access roads and connection to existing and consented roads at Rhode Green Energy Park and underground electrical cable connection to Derryiron 110kV substation.

3.1.8. Application to east of site and East of R400

- **P.A. Reg. Ref 20/494** – Permission GRANTED on the 15th of June 2021 for a 132has solar farm, c3.6km to the south east of the PPA.
- **P.A. Reg. Ref 21/488** – Permission GRANTED on the 28th of January 2021 for a 22.98ha extension to the solar farm permitted under P.A. Reg. Ref. 20/494.

3.1.9. Sites close to proposed underground cable / rail track that crosses the L1010

The applications below are for lands adjacent to where the proposed 220kv line would be undergrounded and at a point where an existing overhead 110kv line crosses the sites and the former rail line that runs below the L1010 road via a bridge.

- **P.A. Reg. Ref 18/445** – Permission GRANTED on the 29th of January 2019 for a two storey house c50m to the west of the proposed underground 220kV line.
- **P.A. Reg. Ref 19/392** – Permission GRANTED on the 5th of February 2020 for a single storey dwelling and garage on a site c45m east of the proposed 220kv line.
- **P.A. Reg. Ref 24/60256** – Permission GRANTED on the 17th of December 2024 for the erection of No. 4 glamping pods, septic tank, percolation area and associated site works c120-160m east of the proposed underground 220kV line.

3.1.10. Applications close to the 400kv substation at the southern end of the site

- The Oldstreet to Woodland 400kv line runs west to east through the site, c25m south of the proposed 400kv substation. The closest house is located c190m

south east and a cluster of agricultural structures located c71m to the south of the substation. The house was GRANTED in 2005 under **P.A. Reg. Ref. 05/699**.

3.1.11. Application by Bord Na Móna to south of Grand Canal

- **P.A. Reg. Ref. 25/60115** – Permissin was GRANTED on the 12th of March 2026 on a site that extends from immediately south of the Grand Canal, (immediately opposite the southern end of the boundary of the current application and c450m south of the proposed 400kv substation). The applicant is Bord na Móna Energy Ltd and the proposed development is described as:

  Development of a recreational shared cycle and walkway located on BnM lands, including a) A shared cycle and walkway, repurposing 18,958m of existing former rail bed and 827m along pre-existing machine access routes b) connect cycle and walkway into the existing Grand Canal Way; the Public Amenity Facilities at Mountlucas Wind Farm; and the Cloncreen Wind Farm Amenity Track. Construct car and / or bicycle parking facilities and the provision of EV Charging spaces. The application included a AA Screening Report, A NIS and a ECIA (Ecological Impact Assessment.

3.2. Westmeath

Site c4.5km to the north west of the proposed power station and north of the M6

- **P.A. Reg. Ref. 21/515** – 10 year Permission GRANTED on the 11th of May 2022 to Lumcloon Energy Ltd for the development of 275MWe reserve gas-fired generator to boost and back up the power system including (a) 5no. open cycle gas turbine (OCGT) modules; (b) 1no two-storey administration building (c) 2no. 2,400m3 bunded secondary fuel storage tanks (d) fenced AGI compound (e) fuel pump and filter unit, (f) containerised water treatment module; (g) 10m3 purified water storage tank; (h) 2 diesel generators with integrated stacks; (i) 50m3 ammonia storage tank; (j) fire pump skid building; (k) 500m3 capacity water tank; (l) single storey IPP building; (m) bunded transformers (n) air compressor building (o) demolition of existing buildings. The development is constructed (NOTE: it is referred to as the ‘Castlelost’ project in the current application).

- **ABP-312783-22** – APPROVAL issued on the 9th of September 2022 for a 220kV Gas Insulated Switchgear (GIS) electrical substation and two 220kV underground transmission cables, interface compounds, pylons and associated works.

3.3. Other planning history

3.3.1. Appendix 4A to the EIAR contains a long list of planning applications in the surrounding area in both Offaly and Westmeath, including in Rochfortbridge, the nearest point of which is c 3.4km to the north-west of the site, and Rhode, while many of the application refer to houses or extensions thereto.

3.4. Other licence application(s)

- EPA Licence No. PO501-001: IPC Licence granted to BnM in April 2000 to carry out peat extraction on lands in excess of 50ha, this licence regulates activities over 11 bog units including much of the current application site, and it was amended in 2012, 2013 and 2014.

4.0 Policy Context

Due to the nature and extent of the proposed development, relevant International, European, National, Regional, Local, and energy sector specific policy include the following:

International Policy

- United National Framework Convention on Climate Change (1992)
- Paris Agreement (2015)

European Policy (in order of date published from oldest to most recent)

- Energy Roadmap 2050 (2011)
- 2030 Climate and Energy Framework (October 2014)
- Regulation (EU) 2018/842
- European Green Deal 2020
- REPowerEU Plan 2022 and Directive EU 2018/2001, as amended 18.05.2022
- RED III (European Renewable Energy Directive (EU/2023/2413))

- REPower EU Roadmap (May 2025)
- EU Action Plan on Grids, November 2023
- Renewable gas, Natural gas and Hydrogen Market Directive (13th of June 2024)
- Electricity infrastructure development to support a competitive and sustainable energy system - 2024 Monitoring Report (16th December 2024)
- EU Action Plan for Affordable Energy (February 2025)

National and Sectoral Policy and Reports (date order from oldest to most recent)

- Government Policy Statement on the Strategic Importance of Transmission and Other Energy Infrastructure (July 2012)
- White Paper - Ireland's Transition to a Low Carbon Energy Future 2015-2030 (September 2015)
- Climate Action and Low Carbon Development Act 2015 (as amended) (7th of September 2021)
- Government Policy Statement on Security of Electricity Supply (Nov. 2021)
- National Energy Security Framework (April 2022)
- Territorial Just Transition Plan – EU Just Transition Fund 2022 (15th Dec. 2022)
- Energy Security in Ireland to 2030, Energy Security Package (November 2023)
- Climate Action Plan 2024 (CAP 2024) (20th of December 2023)
- Second National Adaptation Framework (NAF) 2024 (5th of June 2024)
- Ireland's Long-term Strategy on Greenhouse Gas Emissions Reduction 2024 (Climate Action Strategy) (submitted to EC and UNFCCC on 23rd of July 2024)
- National Energy & Climate Plan 2021-2030 (NCEP) (July 2024)
- National Risk Assessment 2024 – Overview of Strategic Risks (Sept. 2024)
- Programme for Government 2025 (Securing Ireland's Future) (23rd of January 2025
- Project Ireland 2040 - National Planning Framework (updated 8th April 2025)
- Climate Action Plan 2025 (CAP 2025) (15th of April 2025)

- Commission Assessment of the Final Updated National Energy and Climate Plan of Ireland (28th of May 2025)
- Ireland's Greenhouse Gas Emissions Projections 2024-2055 (May 2025)
- National Development Plan Review 2025 (22nd July 2025)
- Electricity and Gas Networks Climate Change Sectoral Adaptation Plan 2025 (18th of November 2025)

Local and Regional Policy

- Regional Spatial and Economic Strategy for the Eastern and Midland Region 2019-2031 (RSES)
- Offaly County Development Plan 2021-2027 (CDP)
- Offaly County Council – Climate Action Plan 2024-2029
- Westmeath County Development Plan 2021-2027

Electricity / Power Provider Policy

- Smart Grids and Smart Cities Action Plan (July 2013)
- Long Term Resilience Study 2018
- SEAI Energy Security in Ireland (September 2020)
- Eirgrid Group – Strategy 2020-2050: Transform the Power System for Future Generations
- CRU Information Paper - Security of Electricity Supply – Programme of Actions (September 2021)
- Eirgrid/SONI – Shaping our Electricity Future 1.1 – Roadmap (July 2023)
- Tomorrow's Energy Scenario's – 2023 Consultation Report
- (Eirgrid/SONI) All-island Resource Adequacy Assessment 2026-2035

Other relevant Policies and Strategies

- The National Peatlands Strategy 2015-2025 (DAHG, 2015)
- National Hydrogen Strategy (July 2023)
- Biomethane Energy Report - Gas Network Ireland - (September 2023)

- National Biomethane Strategy (May 2024)
- Irelands 4th National Biodiversity Action Plan 2023-2030
- Guidelines for Planning Authorities on Telecommunications Antennae and Support Structures, 1996
- Spatial Planning and National Roads Guidelines for Planning Authorities (2012)
- National Landscape Strategy for Ireland, 2015-2025 (June 2015)
- (HSA) Guidance on technical land-use planning advice (Version 2 January 2023)
- EPA (2019) Guidance on Soil and Stone By-products in the context of Article 27 of the European Communities (Waste Directive) Regulations 2011
- Water Framework Directive (WFD)
- Water Action Plan 2024 - A River Basin Management Plan for Ireland
- 110 kV, 220 kV and 400 kV Underground Cable Functional Specification CDS-GFS-00-001-R2 (updated the 3rd of March 2025)
- Bord Na Móna Brown to Green Strategy
- Connecting People - Connecting Places - A Strategy for Walking and Cycling in Offaly (2015)
- Feasibility Study on the Development of a Major Cycling Destination in the Midlands of Ireland (2016)

Documents relating to EIA and Appropriate Assessment

- Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment (Dept. of Housing, Planning & Local Government, August 2018).
- Guidelines on the information to be contained in Environmental Impact Assessment Reports (EPA, May 2022).
- Appropriate Assessment of Plans and Projects in Ireland Guidance for Planning Authorities (2009).
- OPR Practice Note PN02 - Environmental Impact Assessment Screening (June 2021).

Legislation

- European Union (Large Combustion Plants) Regulations 2012 (S.I. 566 of 2022)

International Policy

4.1. United National Framework Convention on Climate Change (1992)

4.1.1. This is the principle global treaty for coordinating international responses to climate change and provided the framework for the Kyoto protocol and the Paris Agreement. The ultimate objective of the Convention is to stabilise greenhouse gas concentrations "at a level that would prevent dangerous anthropogenic (human induced) interference with the climate system.

4.2. Paris Agreement (2015)

4.2.1. This is a legally binding international treaty on climate change, which has at its overarching goals the limiting of “the increase in the global average temperature to well below 2°C above pre-industrial levels” and also seeks to pursue efforts “to limit the temperature increase to 1.5°C above pre-industrial levels.” The signatory countries, including Ireland, are required to set and achieve their own climate goals or (NDC’s) National Determined Contributions on a five year cycle. In the NDC’s, countries communicate actions that they will take to reduce their greenhouse gas emissions in order to reach the goals of the Paris Agreement.

European Policy

4.3. Energy Roadmap 2050 (2011)

4.3.1. In decarbonising and transforming the energy system through renewables, the focus should remain on energy efficiency and security of supply. Gas will be critical for the transformation and its use will stay high in the power sector after 2030. With evolving technologies, such as Carbon Capture and Storage (CCS) and alternative fuels such as Hydrogen are available, gas-fired power generation might play an increasing role in the future, as gas may become a low-carbon technology and would be more energy efficient than other forms of fossil fuels. Gas-fired power stations have lower upfront investment costs, are rather quickly built and relatively flexible in use.

4.4. 2030 Climate and Energy Framework (October 2014)

4.4.1. EU-wide targets for the period from 2021 to 2030 include:

- binding EU targets of 1) at least 40% less greenhouse gas emissions by 2030, compared to 1990 and 2) at least 27% renewable energy consumption in 2030.
- an indicative target of at least 27% improvement in energy efficiency.

4.4.2. The European Council also endorsed further measures to reduce the EU's energy dependence and increase the security of its electricity and gas supplies.

4.5. Regulation (EU) 2018/842

4.5.1. Ireland's binding greenhouse gas emission reduction target for 2030 in relation to 2005 levels as 30%, to comply with Paris Agreement commitments.

4.6. European Green Deal 2020

4.6.1. Its aim is to make Europe climate neutral by 2050. The 2021 ‘European Climate Law’ made a legal obligation of the greenhouse gas emissions reduction target of at least 55% by 2030, compared to 1990 levels. By October 2023, all 15 elements of the ‘Fit for 55’ package of legislation had been adopted, across different sectors including energy, and included the Renewable Energy Directive (RED III), while member states will keep track of progress through national energy and climate plans.

4.6.2. In December 2023, the EU Commission recommended Ireland step up climate mitigation efforts, by making tangible progress on existing and planned policies and consider additional, urgent measures to align the expected greenhouse gas emission reductions and projections with the climate-neutrality objective.

4.7. REPowerEU Plan 2022 and Directive EU 2018/2001 (RED II), as amended 18.05.2022

4.7.1. REPowerEU was prepared in response to Russia’s invasion of Ukraine with a focus on phasing out EU dependence on Russian fossil fuels, saving energy, diversifying energy supplies and producing clean energy, while tackling the climate crisis. This requires targeted investments for security of supply in gas infrastructure. REPowerEU Plan amended the RED II Directive (2018/2001), to increase the EU binding renewable energy target for 2030 from 32%, to 42.5%.

4.8. EU Action Plan on Grids, November 2023

4.8.1. Recognises that electricity grids are critical for the clean energy transition. To bring renewable electricity to consumers and empower them to produce it, grids need to develop further and faster and will help to reduce greenhouse gas emissions and energy costs for consumers.

4.9. Renewable gas, Natural gas and Hydrogen Market Directive (13th of June 2024)

4.9.1. This Directive (EU) 2024/1788 should contribute to achieving the objectives of cutting greenhouse gas emissions and climate neutrality, while ensuring security of supply, by ensuring the ramp-up of a market for hydrogen and an efficient market for natural gas. As envisaged in REPower EU, scaling up sustainable biomethane and the roll-out of renewable hydrogen could play a decisive role.

4.9.2. Article 9 - aims to facilitate the penetration of renewable gas and low-carbon gas and hydrogen into the energy system, enabling a shift away from fossil gas.

4.9.3. Article 10 - integration of sustainable biomethane into the natural gas system, as per RED II, supports EU climate objectives and helps diversify energy supply.

4.9.4. Article 12 - renewable hydrogen is expected to be deployed on a large-scale basis from 2030 onwards for the purpose of decarbonising certain sectors, in line with the EU Hydrogen Strategy.

4.9.5. Article 13 - the priority for the Union is to develop renewable hydrogen produced using mainly wind and solar energy. Renewable hydrogen produced using biomass energy falls under the definition of biogas, as defined in RED II. Renewable hydrogen is the most compatible with the union's climate-neutrality objective and zero-pollution goal in the long term and the most coherent with an integrated energy system. However, renewable hydrogen production is not likely to be scaled up fast enough to meet the expected growth in demand for hydrogen in the Union. Therefore, low-carbon fuels may play a role in the energy transition.

4.10. Electricity infrastructure development to support a competitive and sustainable energy system - 2024 Monitoring Report (16th December 2024)

4.10.1. Prepared by the European Union Agency for the Cooperation of Energy Regulators, it states that as Europe moves towards a decarbonised energy system, the links between electricity, gas and hydrogen will grow. It is crucial to assess all energy

carriers, and develop infrastructure in a coordinated, cost-effective way. Electricity grid development must be coordinated with other energy sectors.

4.10.2. It notes that natural gas would likely continue to be used in the near and mid-term future to compensate for variable renewable energy deficits, directly impacting the electrical system, while potentially also facilitating hydrogen uptake through repurposed natural gas pipelines.

4.11. EU Action Plan for Affordable Energy (February 2025)

4.11.1. Its eight Action Plan includes:

Action 2 – Bring down the cost of electricity supply – that includes accelerate permitting procedures for key energy projects, reinforce grids and boost flexibility.

4.12. RED III (European Renewable Energy Directive (EU/2023/2413))

4.12.1. It notes that the energy sector currently contributes over 75% of total greenhouse gas emissions in the EU. RED III sets a binding renewable energy target that by 2030, at least 42.5% of energy will come renewable sources, but is aiming for 45%, up from the previous 32% target in RED II.

4.13. REPower EU Roadmap (May 2025)

4.13.1. The plan set out a coordinated, secure and gradual phase out of the remaining element of Russian gas, oil and nuclear energy imports, noting gas imports from Russia decreased from 45% in 2021 to 19% in 2024.

4.13.2. Parallel to sourcing new and reliable suppliers of gas, alternatives to natural gas imports should continue to be developed where possible, notably via electrification or boosting the production of biogas, biomethane and clean hydrogen.

National and Other Energy Sector Policy, Reports and Legislation

The documents discussed below are set out in chronological order, to demonstrate the relevant policy changes that have occurred over time.

4.14. Government Policy Statement on the Strategic Importance of Transmission and Other Energy Infrastructure (July 2012)

4.14.1. The Government approved that it is appropriate for additional electricity transmission and distribution grid infrastructure to be permitted and developed in order to support the growth of renewable energy and to support security of electricity supply.

4.15. White Paper - Ireland's Transition to a Low Carbon Energy Future 2015-2030

4.15.1. Set an 'Energy Vision' to reduce GHG emissions from the energy sector by between 80% and 95% by 2050, compared to 1990 levels, falling to zero or below by 2100.

4.15.2. To hit the 2050 GHG reduction target, the share of fossil fuels in the energy system would be of the order of 19-30% of final energy demand. This means that non-renewable energy sources will make a significant – though progressively smaller – contribution to our energy mix over the course of the energy transition. Gas will contribute to security of supply through the period of transition, on a declining basis over time but renewable energy cannot be dispatched in the same way as traditional generators and this presents challenges for the electricity system.

4.15.3. Since 2009 conventional gas-fired electricity generators are required to be capable of operating on secondary fuel for five days in the event of a gas supply disruption.

4.16. Climate Action and Low Carbon Development Act 2015 (an amended) 7th of September 2021)

4.16.1. The 2021 Amendment Act introduced a series of successive five-year carbon budgets starting in 2021. Through its first two carbon budgets it commits Ireland to reducing emissions by 51% over a 12 year period to the 31st of December 2030. It also established sectoral emissions ceilings compared to 1990 levels, and a net zero commitment for 2050.

4.16.2. The **National Climate Objective** was introduced as an amendment to section 3 in 2021 and it states that 'The State shall, so as to reduce the extent of further global warming, to pursue and achieve, by no later than the end of the year 2050, the transition to a climate resilient, biodiversity rich, environmentally sustainable and climate neutral economy'. This will be achieved through a) carbon budgets; b) a sectoral emissions ceiling; c) climate action plans; d) a national long term climate action strategy; and e) a national adaptation framework.

4.16.3. Section 15 (1) (as amended) in 2021, provides that:

A relevant body shall, in so far as practicable, perform its functions in a manner consistent with —

- a) The most recent approved climate action plan,
- b) The most recent approved national long term climate action strategy,
- c) The most recent approved national adaptation framework and approved sectoral adaptation plans,
- d) the furtherance of the national climate objective, and
- e) the objective of mitigating greenhouse gas emissions and adapting to the effects of climate change in the State.

4.17. Government Policy Statement on Security of Electricity Supply (Nov. 2021)

4.17.1. To contribute to a 51% greenhouse gas emission reduction between 2021 and 2030, the Government has committed that up to 80% of electricity consumption will come from renewable sources by 2030 on a pathway to net zero by 2050 and that security of electricity supply must also be maintained throughout the transition period as a national level priority. Challenges to ensuring security of electricity supply include:

- ensuring adequate generation capacity, storage, grid infrastructure, interconnection and system services are in place to meet demand/peak demand.
- developing and operating the grid infrastructure in a safe and reliable manner.

4.17.2. It is expected that the majority of renewable energy generated by 2030 will be from wind and solar which are variable, and require other technologies to both support their operation and provide electricity when they are not generating. This will require a combination of conventional generation (typically powered by natural gas), interconnection, demand flexibility, other technologies such as energy storage and renewable gases (e.g. biomethane and hydrogen from renewable sources).

4.17.3. Much of the older high-emitting conventional generation, which is powered by peat, coal and heavy fuel oil, is expected to close over the coming years, but needs to be replaced by generation with the same support and backup capability, but is also flexible thus enabling it to support high levels of generation from wind and solar. As more wind, solar, storage and interconnection is added, conventional generation is expected to operate less, but sufficient capacity will still be required and it will spend

much of its time in reserve. It is anticipated that natural gas will form the vast majority, and more enduring, part of this conventional generation. It further notes that there will also be a need for gas-fired generation to be able to operate on gasoil/distillate as a backup fuel.

4.17.4. There will be a continuing need for conventional generation beyond 2030 and it is expected that the proportion of dispatchable generation using alternative zero and low-carbon fuel sources will increase in order to achieve net zero emissions.

4.17.5. The Government recognises that 1) ensuring security of electricity supply continues to be a national priority as the electricity system decarbonises towards net zero emissions and 2) there is a need for very significant investment in additional flexible conventional electricity generation, electricity grid infrastructure, interconnection and storage in order to ensure security of electricity supply.

4.17.6. The Government has approved that:

- development of new conventional generation (including gas-fired and gasoil/distillate-fired generation) is a national priority and should be permitted and supported in order to ensure security of electricity supply and support the growth of renewable electricity generation.
- It is appropriate for 1) additional electricity transmission and distribution grid infrastructure, electricity interconnection and electricity storage to be permitted and developed in order to support the growth of renewable energy and security of electricity supply; 2) additional natural gas transmission and distribution grid infrastructure to be permitted and developed, in order to support security of electricity supply.

4.17.7. The policy statement was accompanied by a circular letter 12/2021. In it, planning authorities are advised that where planning applications are submitted for electricity infrastructure or infrastructure that may impact on electricity supply – including for existing conventional electricity generation – that they should, until further notice, be considered having regard to the Policy Statement.

4.18. National Energy Security Framework (April 2022)

4.18.1. This framework addresses Ireland's energy security needs in the context of the ongoing war in Ukraine. Energy security is the uninterrupted availability of energy

sources at an affordable price. It coordinates energy security work across the electricity, gas, and oil sectors and sets out a whole-of-Government response.

4.18.2. Section 2.3.3 notes that ‘natural gas generate circa 50% of Ireland’s electricity so impacts on gas security of supply will affect electricity supplies’ and’ that 'all large gas-fired power stations are required to have secondary fuel capability along with stocks (generally oil) that would allow them to operate for up to three to five days without natural gas. This provides the electricity system a limited level of resilience to short-term issues with natural gas supplies'.

4.18.3. Section 2.3.3 also states that 'the level of dispatchable electricity generation capacity (i.e. capacity that does not rely on wind or solar energy) needs to increase significantly over the coming years due to reduced reliability of existing plants, anticipated new power stations not being developed as planned, expected strong growth in demand for electricity, and the closure of existing generation’.

4.18.4. Section 3 outlines how the National Gas Emergency Plan provides measures to minimise the impact on electricity generation in the event of a gas emergency, to include the timely switch over of gas-fired power generation to backup fuel (generally oil) to minimise the impact of a gas emergency on the electricity system.

4.19. Territorial Just Transition Plan – EU Just Transition Fund 2022 (Dec. 2022)

4.19.1. This plan was adopted by the European Commission on the 15th of December 2022 following approval by the Government on the 29th of November 2022.

4.19.2. Section 1.1 notes ‘at least 2 GW of additional gas generation capacity will be required by 2030, largely by mid-decade, to ensure security of supply, and underpin increased renewable electricity capacity. Overall, the proportion of electricity generated by natural gas is expected to decline from c.50%-30% by 2030 as renewable generation increases’.

4.19.3. Section 1 states that ‘the sudden closure of 2 peat burning stations in the Midlands in 2020, prevented 2 million tonnes of Bord na Móna peat being burned, reducing carbon emissions by 51% (avoiding at least 1.25 million tonnes of CO2 emissions) and contributing to a 7.9% reduction in generation emissions. This was made possible by the Enhanced Decommissioning, Rehabilitation and Restoration Scheme (EDRRS), an initiative aligned to Ireland’s National Peatlands Strategy (2015-25),

which sets out a long-term framework to responsibly manage Ireland's peatlands. It also stated that 'Bord na Móna announced its Brown to Green Strategy, a move to a climate solutions company, focused on renewable energy, recycling, peatland restoration, habitat management and provision of other low carbon goods and services'.

4.19.4. Section 2 notes that the EU and Irish government have supported a number of interventions to address the socio-economic impacts of the cessation of peat burning includes the repurposing of the former Rhode power station to the Rhode Green Energy Park, while up to €108 million in EDRRS is to be invested to rehabilitate 33,000 hectares of peatlands over 82 Bord na Móna bogs, previously used for peat extraction for electricity generation. It further notes that rehabilitation of over 10,000 hectares of peatlands has taken place to date and will encompass 32,779 hectares when complete, protecting between 62-78 million tonnes of existing carbon stores.

4.19.5. Priority 2 is "supporting the restoration and rehabilitation of degraded peatlands and regeneration and repurposing of industrial heritage assets" and Section 4 states that this indicator will measure how these actions participate in the restoration and rehabilitation of land in order to protect and restore biodiversity and ecosystems, reduce greenhouse gas emissions, and improve hydrological status.

4.20. Energy Security in Ireland to 2030, Energy Security Package (November 2023)

4.20.1. Confirms Ireland's future energy will be secured by moving from an oil, peat, coal and gas-based energy system to an electricity-led system maximising our renewable energy potential and flexibility and being integrated into Europe's energy systems.

4.20.2. Action 4 commits to amend gas connection policy to ensure that it is in line with the country's climate ambitions and introduce gas demand flexibility measures.

4.20.3. Action 8 is 'To complete implementation of the CRU Security of Electricity Supply Programme that includes 'The procurement of at least 2GW of new, flexible, enduring, capacity through market mechanisms'.

4.20.4. Action 12 is 'To accelerate delivery of power system flexibility' and states that embedding flexibility in the power system can change how Ireland utilises conventional capacity and contribute to a secure transition.

4.20.5. Action 13 is ‘To successfully complete and integrate additional electricity interconnections’ and referring to the importation of gas, states that ‘gas plays a back-up role to an electricity system with increased demand, dominated by variable renewable generation.

4.20.6. Action 18 is ‘To strengthen the supply chain of secondary fuels for gas-fired power generation’ and ‘gas generators with a capacity greater than 10 MW to have the capability of running on a secondary fuel, and to hold set quantities of fuel stocks’.

4.20.7. Its conclusions include:

- Ireland’s future energy will be secure by moving from and oil and gas-based energy system to an electricity-led system.
- Plans for an electricity system, focused on additional renewable generation, demand side flexibility, new gas-fired generation as back-up, interconnection and storage are the right ones to secure electricity supplies.
- Lower reliance on gas imports, reduce natural gas demand and increase renewable indigenous gas supply.

4.21. Climate Action Plan 2024 (CAP 2024) (20th of December 2023)

4.21.1. Sectoral emission ceilings were approved by Government in July 2022 for sectors including electricity, which requires a 75% reduction in emissions by 2030, based on 2018 levels, and central to achieving this goal is the strategic increase in the share of renewable electricity to 80% by 2030, largely from solar and wind.

4.21.2. Section 5.6 refers to emerging technologies and to the feasibility of additional decarbonisation measures for Ireland, wherein the National Hydrogen Strategy has a vision for hydrogen production and its usage in electricity and industry.

4.21.3. A key target in Table 3.1 of Chapter 12 ‘Electricity’ is the delivery of at least 2 GW of New Flexible Gas Plant by 2030, while CAP24 also seeks to accelerate the delivery of onshore wind, offshore wind and solar through a competitive framework to reach 80% of electricity demand from renewable energy by 2030 and where possible, barriers for the installation of renewables and flexible technologies should be removed and the need to build new grid connections reduced.

4.21.4. Page 159 referring to 'the scale of the challenge' states that 'rapid delivery of flexible gas generation is needed at scale and in a timeframe to replace emissions from coal and oil generation as soon as possible to reduce impacts on the carbon budgets. The introduction of renewable gas generation into the grid is an important factor of ensuring a security of supply for Ireland's electricity system'.

4.21.5. The Plan aims to accelerate grid flexibility and to deliver at least 2 GW of new flexible gas-fired power generation by 2030, while at the same time phasing out and ending the use of coal and peat in electricity generation. It also refers to longer term plans to have zero-emission gas-fired electricity generation from biomethane and hydrogen commencing by 2030.

4.22. Second National Adaptation Framework (NAF) (5th of June 2024)

4.22.1. Incremental climate adaptation will be necessary, while 14 identified priority sectors including 'Electricity and Gas Networks', and 'Planning and Built Environment'.

4.22.2. While the objective is to reduce greenhouse gas emissions and as a result scale of the impacts of climate change, it accepts the need to implement adaptation measures, by using energy sources and technologies that produce minimal environmental pollution and greenhouse gas emissions, thereby promoting a more sustainable and eco-friendly energy supply.

4.22.3. Electricity and gas networks are identified as critical infrastructure, while Appendix 3 provides a summary of sectoral climate change impacts, which for the electricity and gas networks sector includes that 'increased wind variability may require backup generation or storage'.

4.23. Ireland's Long-term Strategy on Greenhouse Gas Emissions Reduction 2024 (Climate Action Strategy) (submitted to EC and UNFCCC on 23rd of July 2024)

4.23.1. It sets out indicative pathways, beyond 2030, towards achieving carbon neutrality for Ireland by 2050 and serves as a vital link between shorter-term Climate Action Plans and Carbon Budgets and the longer-term objective of the European Climate Law and Ireland's National Climate Objective. Its purpose is to build on the targets, policies, measures and actions already committed to in the period to 2030.

4.23.2. Chapter 7 sets out a number of cross-sectoral challenges that need to be addressed over the coming decade through successive Climate Action Plans, including:

- Define the future of the gas grid: zero-emissions gas will be required in a climate neutral pathway for mid-century. Decisions on the future configuration of the grid will be needed in the next number of years. This will inform investment in research and development, infrastructure requirements (e.g., hydrogen readiness), and the future of the grid, including at regional, county and urban levels. In order for a coherent national approach to the development and supply of zero-emission and renewable gases on a cross-sectoral basis, there will need to be measures taken to ensure an economic, steady, resilient, and reliable supply.

4.23.3. Chapter 8 'Pathways to Climate Neutrality by Sector' states that the carbon intensity of Ireland's electricity has reduced in the last decades from 636 gCO2 eq. per kWh in 2005 to 331gCO2 eq. per kWh in 2022, largely due to increased renewable electricity generation and the use of higher-efficiency natural gas turbines, leading to a shift away from oil and coal generation. It also states that the total demand for natural gas will decrease as Ireland decarbonises its energy system.

4.23.4. Chapter 8 continues that the timely modernisation and expansion of the power grid in a cost-effective way is needed to achieve the required increase in renewable electricity capacity and this in turn requires resources and new technologies to manage intermittency on the grid and ensure our energy supply is stable and secure.

4.23.5. The delivery of a range of flexible technologies and practices that could enable the grid to function with high levels of intermittent sources of power, include power-to-gas: conversion of electrical power into renewable gases that can later be distributed on an as-needed basis, enabling the balance of supply from intermittent sources and demand.

4.23.6. Referring to CAP 2024 it notes that a long-term electricity system development strategy may require the following potential policies and opportunities:

- Policy to require future dispatchable generation to be zero carbon gas ready;
- The continued delivery of demand flexibility, to incentivise demand when low carbon variable renewable electricity is available;
- Policies to ensure that zero carbon gases, like hydrogen, are utilised in the electricity sector to provide zero carbon dispatchable electricity at sufficient scale;

4.23.7. Chapter 8.1 concluded by stating that there will be a requirement for market mechanisms that support intermittent energy sources, as well as provision of capacity and effective market signals to produce a reliable demand-side response and that zero-emissions gas will also be required in a climate neutral pathway in order to support the intermittency of wind and solar generation.

4.24. National Energy & Climate Plan 2021-2030 (NECP) (July 2024)

4.24.1. The updated NECP was drafted to reflect Ireland's and the EU's increased ambition on energy and climate following the Fit for 55 legislative package and to enable the EU to meet its target of reducing greenhouse gas emissions by 55%, by 2030.

4.24.2. The Plan covers five dimensions of the Energy Union being 1) Decarbonisation; 2) Energy Efficiency; 3) Energy Security; 4) Internal Energy Market; and 5) Research, Innovation and Competitiveness. It acts as a collation of existing policies and an analysis of how Ireland is performing relative to EU-wide targets, including projections on expected future performance, based on current trajectories.

4.24.3. Section 2.3.1 states that peat and coal will no longer be part of Ireland's electricity generation mix by 2025, with increasing reliance on natural gas, a reduced fuel mix diversity and impact on security of supply.

4.24.4. Section 2.3.2 states that a continuing secure supply of gas is crucial to support a highly renewable electricity system given the variability of wind and solar energy, and an objective to achieve that is to support projects, which are needed for energy security and consistent with national and EU climate policy objectives.

4.24.5. Section 2.3.3 notes Ireland has a high and increasing reliance on natural gas for electricity. In light of the potential increasing role of gas in the energy mix for power generation, including as a back-up for variable power generation, the government has an objective to reduce natural gas demand and develop renewable, indigenous gas supply and renewable gas-compatible storage solutions.

4.24.6. CAP 2023 tasked the CRU with delivery of a Demand Side Strategy, now called the National Energy Demand Strategy (NEDS), with the aim of 20%-to-30% of electricity demand to be flexible by 2030, and a target of 15%-to-20% flexibility by 2025.

4.24.7. Section 2.4.2.2 notes that the gas and electricity networks must be planned and developed to smooth the transition to a low carbon economy, and that as the

penetration of electricity generated from wind increases, the electricity network must be flexible enough to handle the unpredictability of wind while operating in a secure manner, thus placing an increased reliance on Ireland's gas network.

4.24.8. Section 3.3 notes that national policy in Energy Security in Ireland to 2030 and the Climate Action Plan include for the delivery of new gas-fired generation as back-up.

4.24.9. CRU-led Security of Supply actions include 1) Procurement of at least 2 GW of new, flexible, enduring, capacity through market mechanisms; and 2) temporary retention of older generating units until new enduring capacity is delivered.

4.25. National Risk Assessment 2024 – Overview of Strategic Risks (Sept. 2024)

4.25.1. It highlights 24 different types of risk facing the country and includes:

- 'Infrastructure Deficits' as an Economic Risk, from planning and judicial delays ta would have implications for delivery of energy generation and grid capacity to accommodate demands from growing population and economy.
- 'Climate Change' as an Environmental Risk, states that failure to rapidly move to a carbon-neutral economic model and progress adaptation measures, risks locking Ireland into a redundance fossil-fuel based economic model, while failure to meet emissions reduction obligations risks substantial compliance costs post 2030.
- 'Energy Security' as a Technological Risk. With high dependence on energy imports, Ireland have limited diversity of supply and no gas storage. Notwithstanding the increased use of renewables and planned energy efficiencies, Ireland will continue to rely on gas as we move away from other fossil fuels. While the Electricity Security Supply programme is delivering new capacity, a combination of deteriorating performance of the stock of existing thermal electricity generating power plants, the ongoing problems of delivery of planned thermal generation capacity through auction processes, and planning and permitting has left the outlook for Ireland's electricity supply in a very challenging state. Significant investment in our electricity grid is also required in the coming years.

4.26. Programme for Government 2025 (Securing Ireland's Future) (23rd of Jan 202)5

4.26.1. Government is committed to achieving 80% of Ireland's electricity generation from renewable sources by 2030. It will prioritise investment into our electricity grid to

update our power generation systems to enhance security and affordability and take all necessary action to ensure and protect Ireland's energy security, and intensify the transition to lower-cost renewables in electricity generation such as Biomethane and Hydrogen, and transition away from expensive imported fossil fuels.

4.26.2. The governments climate goals will:

- Deliver actions to achieve a 51% reduction in emissions from 2018 to 2030 and net-zero emissions no later than 2050.
- Set ambitious targets to reduce greenhouse gas emissions by 2040 and ensure the correct mix of incentives and regulations to deliver those aims.
- Publish an annual Climate Action Plan.

4.27. Project Ireland 2040 - National Planning Framework (updated April 2025)

4.27.1. Chapter 9.2 'Resource Efficiency and Transition to a Neutral Carbon Economy' states that 'The National Biomethane Strategy proposes, carbon-neutral renewable Biomethane gas is to deliver/produce 5.7 TWh of indigenous biomethane by 2030'.

4.27.2. National Policy Objective 69 seeks to - reduce our carbon footprint by integrating climate action into the planning system in support of national targets for climate policy mitigation and adaptation objectives, as well as targets for greenhouse gas emissions reductions as expressed in the most recently adopted carbon budgets.

4.27.3. 'Energy Policy and Planning' states that Ireland's national energy policy is focused on three pillars: (1) sustainability, (2) security of supply and (3) competitiveness, and that while Ireland must reduce greenhouse gasses, at the same time it must ensure security of supply of competitive energy sources to our citizens and businesses.

4.27.4. The 'transition to a zero carbon energy future requires a shift from predominantly fossil fuels to predominantly renewable energy sources'.

4.27.5. As per 'Energy Security in Ireland to 2030', gas will continue to play a key role to support the secure transition to an energy system, based on electrification and greatly increased renewables penetration. Existing infrastructure and supply sources are largely able to meet Ireland's gas demand requirements in the medium to long-term. Mitigation measures for "Securing Ireland's Gas Supplies" includes the need

for additional capacity of indigenous renewable energy, but also energy imports, energy storage, fuel diversification, demand side response, and renewable gases.

4.27.6. 'Making a Just Transition – Peatlands' states that 'some of Ireland's cutaway bogs are suitable to facilitate the generation of energy, most notably wind/biomass and a plan will be prepared for the long-term management of semi-state owned lands, and build on the National Peatlands Strategy'. It continues by stating that 'a careful balance will be required between realising the potential for renewable energy development to meet sectoral emissions targets, and the management of the potential for environmental impacts in terms of the protection and restoration of nature and cultural heritage in peatlands'.

4.27.7. National Policy Objective 71 seeks to - Support the development and upgrading of the national electricity grid infrastructure, including supporting the delivery of renewable electricity generating development.

4.27.8. NSO No 8 'Transition to a Carbon Neutral and Climate Resilient Society' includes:

- The Climate Action and Low Carbon Development (Amendment) Act 2021 commits to a binding target to reduce greenhouse gas emissions by 51% and increase the share of electricity generated from renewable sources to 80% over the decade (2021 – 2030), and to achieve net-zero emissions no later than 2050.
- The electricity sector faces a significant challenge to meet its requirements under the targets set out in CAP 2024 and the accelerated delivery of additional renewable electricity generation is essential for Ireland to meet its climate targets, reduce its greenhouse gas emissions, and improve its energy security by reducing reliance on imported fossil fuels and diversifying its electricity supply.
- New energy systems and transmission grids will be necessary for a more distributed, more renewables focused energy generation system.

4.28. Climate Action Plan 2025 (CAP 2025) (15th of April 2025)

CAP 2025 builds upon CAP 2024 by refining and updating the measures and actions required to deliver carbon budgets and sectoral emissions ceilings, and it should be read in conjunction with CAP 2024.

4.28.1. It notes that the greatest reductions in emissions have come in the energy sector and that since 1990 to the end of 2024, emissions from electricity generation fell by

32.1% during a timeframe where electricity consumption grew by 164% and the population by c50%. It notes in chapter 2.1 that these reductions have been driven by more efficient gas-fired power plants replacing older peat and oil-fired plants, an increased share of renewables, and increased interconnectivity.

4.28.2. Key trends in Chapter 11 'Electricity' include consistent decreases in electricity emissions with a 22% reduction (2021 to 2023) due to an increase in the share of renewable electricity generation, an increase in net imports of electricity, and a reduction in the use of coal, oil, and gas-fired plant for domestic generation.

4.28.3. The key target of 2 GW of 'New Flexible Gas Plant' remains in place for 2030, while Chapter 22 'Adaptation' includes a series of actions for 2025 including to develop a Sectoral Adaptation Plan for Electricity and Gas Networks sector.

4.29. Commission Assessment of the Final Updated National Energy and Climate Plan of Ireland (NECP) (28th of May 2025)

4.29.1. In February 2024, the Commission, published a thorough assessment of Ireland's draft NECP and provided recommendations for the preparation of the final NECP.

4.29.2. Regarding Fossil Fuels, it states that Ireland has partially addressed recommendation 19 as the plan indicates that peat and coal are expected to no longer be part of the electricity generation mix post 2025.

4.29.3. Section 2.4 addressed 'Energy Security Dimension' and states:

- Ireland has partially addressed recommendation 13. The final plan does not further explain envisaged measures to diversify gas supply and to continue encouraging gas demand reduction towards 2030. The plan only refers to the general objectives of reducing 'natural gas demand and develop renewable, indigenous gas supply and renewable gas-compatible storage'. The final plan contains a forecast for the evolution of natural gas consumption, which should decrease from 4,294 ktoe in 2021 to 2,447 ktoe in 2030 and 1,014 ktoe in 2050.
- The final plan adds more details on measures related to electricity security of supply, referring to the Energy Security Package with several relevant actions.

4.30. Ireland's Greenhouse Gas Emissions Projections 2024-2055 (May 2025)

4.30.1. The key findings of this EPA report include:

- Climate Act - Ireland is not on track to meet the 51% emissions reduction target (2030 compared to 2018) which includes many 2024 Climate Action Plan measures. GHG emissions are projected to be 9 to 23% lower by 2030.
- Carbon Budgets - Period 1 (2021-2025) budget of 295 Mt CO2eq is projected to be exceeded by between 8 to 12 Mt CO2eq. Period 2 (2026-2030) of 200 Mt CO2eq is also expected to be exceeded by a significant margin of 77 to 114 Mt CO2eq (with carryover from Budget period 1) (compared to 2018).
- Sectoral Emissions Ceilings – 2030 ceilings projected to be exceeded by the Buildings, Electricity, Industry and Transport sectors.
- 2030 EU Targets - Ireland is not projected to meet its EU target, set under the Effort Sharing Regulation, of a 42% emissions reduction by 2030, compared to 2005 with only 10-26% reductions expected.
- Electricity Generation - By 2030, 60 to 68% of electricity generation is projected to come from renewable energy sources.

4.30.2. Section 2.2 'Excluded Policies and Measures' states that in so far as is possible, the policies and measures contained in the Climate Action Plan 2024 are included in these projections. Under the heading of Electricity 'policies and measures up to 2030', they include:

- Eirgrid data were used to produce an adjusted trajectory yielding new gas fired generation of 1.4 GW by 2030 in the WEM (with existing measures) and WAM (with additional measures) scenarios, as an implementation pathway to the CAP 2024 target of "at least" 2 GW for new flexible gas fired generation is not available.

Excluded Electricity 'policies and measures post-2030' include:

- Zero-emission gas-fired generation from biomethane and green hydrogen (via 2 GW offshore wind) commencing by 2030 is not currently included.
- The majority non-renewable energy generation is projected to come from natural gas by 2030. Existing Measures (WEM) emissions from the Energy Industries sector are projected to decrease by 59% over the period 2018 to 2030 and will include new 1.4 GW of net gas-fired generation capacity added by 2030.

4.31. National Development Plan Review 2025 (22nd July 2025)

4.31.1. It notes that €500 million has been allocated to the Department of Climate, Energy and the Environment to fund projects and programmes that will support climate mitigation and renewable energy development.

4.32. Electricity and Gas Networks Climate Change Sectoral Adaptation Plan 2025 (18th of November 2025)

4.32.1. The second Plan known as EGN SAP 2025 was published by the Department of Climate, Energy and the Environment. It is a strategic document focused on climate adaptation for the period 2025-2030. It considers national scale impacts and risks for the three EGN subsectors (electricity generation, electricity networks and gas networks), in the context of Ireland's climate objective of achieving a climate neutral economy by 2050 and a Climate Action Plan target of 80% renewable energy generation by 2030.

4.32.2. 45 climate risks were identified for the EGN network, with 15 identified as priorities and there are three goals being (i) Establish structures to strengthen and enable action across the EGN sector to increase resilience; (ii) Strengthen the capacity of the EGN sector to ensure long-term resilience and (iii) Deliver a sustainable and resilient EGN sector.

4.32.3. Section 2.1 'Electricity Generation' states that it is delivered by a range of power generation assets that contribute to the energy mix; including biomass, gas, hydro, wind and solar power. In 2023, 44.3% of electricity was generated by natural gas.

4.32.4. Section 2.3 'Electricity Networks' states that 'Due to Ireland's dispersed rural population, the electricity network in Ireland is four times longer per capita when compared to the European average'.

4.32.5. Section 2.3 'Gas Networks' states that 'the gas network also plays a key role in the energy transition, complementing wind and solar energy and their inherent intermittency'. It continues by stating that 'The complimentary partnership between flexible gas-fired power generation and intermittent renewable generation is critical to optimising Ireland's renewable energy production', that 'This is likely to increase in importance as more renewables connect to the electricity grid and meet our target of 80% renewable electricity by 2030', and that 'In response to this, the Government announced that an additional 2,000 megawatts (MW) of flexible gas-fired generation

are to be built by 2030'. Gas-fired electricity generation is particular necessary during periods of extremely low winds or extreme cold.

4.32.6. Section 3.3 'Electricity Networks refers to the pertinent elements of the 'Energy Transmission and Distribution subsystem to include high voltage substations, transmission lines, overhead distribution lines, and transmission underground cables.

4.32.7. Climate change poses significant risks to Ireland's Electricity and Gas Network (EGN) Sector with the most immediate risks predominantly associated with changes in extremes, such as windstorms and flooding. With respect to 'Electricity Distribution' ESBN is carrying out climate adaptation measures that included the likelihood of a flooding scenario for a HV substation location being identified by the 'Annual Exceedance Probability', expressed in return periods of between 1 in 10 years and 1 in 1,000 years.

4.32.8. Case Study 6 relating to impacts on the gas network from Story Éowyn note that all GNI transmission installations have back-up power made up of a combination of Gas and diesel powered generators and batteries.

Regional and County Level Policy

4.33. Regional Spatial and Economic Strategy for the Eastern and Midland Region 2019-2031 (RSES)

4.33.1. The priority of Regional Strategic Outcome 16 'Support Transition to a Low Carbon, Circular & Climate Resilient Region' is to minimise energy demand and waste, and then address how energy will be supplied and renewable technologies incorporated.

4.33.2. 'Decarbonising the Energy Sector' required a regional shift from reliance on using fossil fuels and natural gas as main energy source to a more diverse range of low and zero-carbon sources, including renewable energy and secondary heat sources.

4.33.3. Electricity and gas networks are identified as critical infrastructure and incorporating renewable energy within Ireland's energy supply may improve the resilience of energy infrastructure as reliance on energy imports and the associated concentrated infrastructure is reduced.

4.33.4. Section 10.3 'Energy', states that there is an established tradition of energy production in the Midland counties by state agencies, however, national environmental policies are dictating the wind down of traditional fossil fuel powered stations, such as peat fired power plants in these counties. It continues by stating that the main energy networks serving the Region are electricity and gas. Having regard to projected population growth and economic growth in the Region it is important that the existing electricity and gas networks can be upgraded to provide appropriate capacity to facilitate development of the Region. Developing the grid will enable the transmission system to safely accommodate more diverse power flows from renewable generation and also to facilitate future growth in electricity demand. These developments will strengthen the grid and will improve the security and quality of supply.

4.33.5. The Guiding Principles that will guide Future Electricity and Gas Supply and Demand, thorough local authority development plans, include:

- The route proposed has been identified with due consideration for social, environmental and cultural impacts and address issues of climate resilience, biodiversity, impact on soils and water quality.
- The design is such that it will achieve least environmental impact.
- Where impacts are inevitable mitigation features have been included.
- Corridors for energy transmission or pipelines should avoid creating sterile lands proximate to key public transport corridors, particularly rail routes, and in built up urban areas.
- Regard for any National or Regional Landscape Character Assessment.

4.33.6. Regional Policy Objective (RPO) 10.20 supports and facilitates 'the development of enhanced electricity and gas supplies, and associated networks, to serve the existing and future needs of the Region and facilitate new transmission infrastructure projects that might be brought forward in the lifetime of this Strategy. This includes the delivery of the necessary integration of transmission network requirements to facilitate linkages of renewable energy proposals to the electricity and gas transmission grid in a sustainable and timely manner subject to appropriate environmental assessment and the planning process.'

4.33.7. RPO 10.22 supports 'the reinforcement and strengthening of the electricity transmission and distribution network to facilitate planned growth and transmission/ distribution of a renewable energy focused generation across the major demand centres to support an island population of 8 million people.'

4.34. Offaly County Development Plan 2021-2027 (CDP)

4.34.1. The Offaly County Development Plan 2021-2027 came into effect on the 22nd of October 2021.

4.34.2. Chapter 3 'Climate Action and Energy' Policies include:

- **CAEP-01:** It is Council policy to support the development, reinforcement, renewal and expansion of the electricity transmission and distribution grid, including the development of new lines, pylons and substations….
- **CAEP-03:** …proposals for new electricity distribution lines 38 kV or above along with transmission lines 110 kV or above will be considered subject to the protection of Designated and Non Designated Sites as outlined in Objectives BLO-02 to BLO-06 and landscape considerations as outlined in objectives BLO-22 Areas of High Amenity, BLO-24 Landscape and BLO 26 and BLO-27 Protection of Key Scenic Views, Prospects and Key Amenity Routes.
- **CAEP-07:** …to support and facilitate European and national objectives for climate adaptation and mitigation as detailed in the following documents, taking into account other provisions of the Plan (including those relating to land use planning, energy, sustainable mobility, flood risk management and drainage);
  - Climate Action Plan (2019 and any subsequent versions);
  - National Mitigation Plan 2017 (or subsequent editions);
  - National Climate Change Adaptation Framework (2018 and any subsequent versions);
  - Relevant provisions of any Sectoral Adaptation Plans;
  - Offaly Climate Change Adaptation Strategy.
- **CAEP-10:** …support local, regional, national and international initiatives for climate adaptation and mitigation and to limit emissions of greenhouse gases through energy efficiency and the development of renewable energy sources

which make use of all natural resources, including publicly owned lands, in an environmentally acceptable manner.

- **CAEP-11:** …to support the transition to a competitive, low carbon, climate-resilient and environmentally sustainable economy by 2050, by way of reducing greenhouse gases, increasing renewable energy, and improving energy efficiency.

4.34.3. Relevant Peatlands Policies are **CAEP-16** (Peatlands will transition to uses including energy development and climate mitigation); **CAEP-19** (possible assessments on applications) and **CAEP-20** (National Peatlands Strategy).

4.34.4. The following refers to 'Reasonable Alternatives and Existing Infrastructural Assets':

- **CAEP-23:** It is Council policy to require that environmental assessments should address reasonable alternatives for the location of new energy developments, …

4.34.5. The following policies refer to 'Renewable Energy':

- **CAEP-24:** Offaly County Council recognises the significant economic and social impact of the cessation of peat harvesting in parts of County Offaly and the added impact of the closure of associated power stations in some areas. The Council also recognises that it is imperative that these impacts be mitigated to the greatest extent possible….In that context, it is Council policy to support the application of the 'Just Transition' concept in the affected areas.

  In that context funding will focus on a number of areas including:

  Appropriate re-use of some, (where identified within an overall strategic framework) former industrial peatlands and associated infrastructure / works sites with a focus on sustainable employment generation, renewable energy projects community resilience, tourism facilities and amenities.

- **CAEP-27:** …ensure that whenever possible, community benefits are derived from all renewable energy development in the county such as near-neighbour benefit funds and general community benefit funds…

4.34.6. Relevant Flood Risk Management Policies are **CAEP-53** (Flood Risk Directive, Regulations and Management Guidelines); **CAEP-54** (Protect Flood Zone A and Flood Zone B from inappropriate development and direct developments into the

appropriate Flood Zone); **CAEP-55 (**Require Site-specific Flood Risk Assessment (FRA) for all planning applications in areas at risk of flooding, even for developments deemed appropriate in principle); **CAEP-59:** (Consult with the OPW and retain a 10m strip either side of rivers/drainage channels to facilitate access).

4.34.7. Chapter 3.9 contains 'Climate Action and Energy Objectives' including:

- **Gas - CAEO-09:** It is an objective of the Council to support the further extension of the gas grid into County Offaly to serve existing and envisaged future residential, commercial and industrial development.
- **Gas - CAEO-10:** It is an objective of the Council to support and facilitate the; (i) production of low carbon renewable biogases such as hydrogen and biomethane, produced largely from agricultural organic matter, that can be exported to the National Grid;

Biodiversity and Landscape

4.34.8. Chapter 4.14.1 sets out the sensitivity of landscape throughout the county, being Low, Moderate and High Sensitivity. The site is located in areas of low and moderate sensitivity. Table 4.18 sets out characteristic, sensitivities, the acceptability of development and the need for landscaping and appropriate design in Low Sensitivity Areas while Table 4.19 addresses the same matters for Medium Sensitivity Areas.

4.34.9. Section 4.14.2 'Protection of Key Scenic Views, Prospects and Key Amenity Routes' includes a map and table of key views and prospects, none of which extend towards or across the site of the proposed development.

4.34.10. Chapter 4.16 sets out 'Biodiversity and Landscape' Policies including:

- **Policy BLP-14**: It is Council policy to protect the county's designated peatland areas and landscapes, including any historical walkways through bogs and to conserve their ecological, archaeological and cultural heritage and to develop educational heritage.
- **Policy BLP-16:** …support the provision of outdoor pursuits, walking and cycling routes through the county's peatlands and network of industrial railways …

4.34.11. A number of waterways are located close to or within the site and the following 'Waterways, Lakes and Wetland Landscapes' policies are relevant:

- **BLP-20:** …preserve riparian buffer strips free from development by reserving a minimum of 10 metres either side of all watercourses …
- **BLP-23:** …consider the Waterways Corridor Study 2002 and protect the recreational, educational and amenity potential of navigational and non-navigational waterways within the county, such as the Grand Canal Corridor…

4.34.12. 'Green Infrastructure Strategy' policies include:

- **BLP-28:** ..protect existing, provide additional where possible and encourage green infrastructure to be spatially connected to facilitate the extension or establishment of ecological corridors.
- **BLP-30: …**integrate the provision of green infrastructure with infrastructure provision and replacement, including walking and cycling routes, as appropriate, while protecting natural heritage.

4.34.13. 'Landscape' policies include **BLP-38** (protect and enhance the landscape, by ensuring that development retains, protects and where necessary, enhances the appearance and character of existing landscape); **BLP-40** (ensure consideration of landscape sensitivity is an important factor in determining development uses; **BLP-41 (**require a LVIA to accompany significant proposals, within or adjacent to sensitive landscapes and include mitigation measures to address likely negative impacts).

4.34.14. Chapter 4.17 refers to Biodiversity and Landscape objective including those referenced in CAEP-3 and include:

- **Designated and Non-Designated Sites - BLO-01 to BLO-06**, which refer to Appropriate Assessment, and to the protection of European Sites, Natural Heritage Areas, Ramsar Sites and Nature Reserves.
- **Areas of High Amenity – BLO-22** ...ensure new development, whether individually or cumulatively, does not impinge in any significant way on the character, integrity and distinctiveness of or the scenic value of the Areas of High Amenity listed in Table 4.17. The nearest listed location is Croghan Hill, which is to the southwest, west and north west of the linear application site.
- **BLO-24: Landscape**… in the consideration of planning applications, have regard to the Landscape Sensitivity Areas in Tables 4.18, 4.19 and 4.20.

The county has three landscape sensitivity classes being High, Medium and Low as per Figure 4.22 of the plan.

Protection of Key Scenic Views, Prospects and Key Amenity Route –

- **BLO-26** - …protect Key Scenic Views and Key Prospects in Table 4.21, and Key Amenity Routes as listed in Table 4.22 from inappropriate development.
- **BLO-27** - …ensure proposed developments take into consideration their effects on views from Key Scenic Views and Prospects and Key Amenity Routes and are designed and located to minimise their impact on views and prospects.

4.34.15. Figure 4.13 identifies Offaly's Green Infrastructure at a strategic level and the 'Green Infrastructure Strategy' includes the Grand Canal and the extensive network of Bord na Móna railways including part of the route along which it is proposed to install the underground 220Kv electricity line.

4.34.16. Chapter 4.15 states that the industrial rail lines which cross some of the county's local roads afford scenic qualities and remnants of our past and while some continue to be utilised by Bord na Móna, consideration should be given to reserving the line of such railways / rights of way for possible future re-use.

4.34.17. 'Peatlands' objective **BLO-10:** …require preparation and submission of a Hydrological Report/Assessment for significant developments within and in close proximity to protected raised bogs and to take account of same in the assessment of impacts on the integrity of peatland ecosystems.

4.34.18. Waterways, Lakes and Wetland Landscapes objective BLO-12 is relevant:

- **BLO-12:** …maintain a riparian zone for larger and smaller river channels based on the Inland Fisheries Ireland updated guideline document…

4.34.19. Chapter 5 sets out the county's Economic Development Strategy and Section 5.7 the Rural Economic Strategy. It includes references to Peatlands and Antecedent Uses and states that Bord na Móna is the largest single landowner in Co. Offaly and owns approximately 27,650ha of the 32,400ha of peatland within the county. It recognises the transition that faces Bord na Móna considering the phased elimination of peat-fired electricity generation. It states the Council acknowledges and is in favour of the re-development and/or expansion of currently used and disused sites such as former ESB power station sites and Bord na Móna works.

4.34.20. The R400 that passes the Power Plant Area and 220kv Substation sites, is a Restricted Regional Road in Table 8.4, due to 'carrying capacity.

4.34.21. 'Roads' policies include **SMAP-23** (strictly control development, which could generate significant additional traffic, potentially compromising the capacity and efficiency of the national roads/restricted regional roads); **SMAP-24** (maintain and protect the safety, strategic transport function, capacity and efficiency of national roads, motorways and associated junctions); **SMAP-28** (ensure that developments which have the potential to generate significant traffic movement are subject to a Traffic and Transportation Assessment, Quality Audit and Road Safety Audit as appropriate).

4.34.22. Chapter 11 addressed 'Water Services and Environment' and includes policies in Section 11.6 relating to Water Quality (**ENVP 01-14**), Major Accidents Directive – Seveso II (**ENVP-16**), Air Quality (**ENVP 17-19**), Noise (**ENVP 20-22**), Light Pollution (**ENVP-23**), Human Health (**ENVP-24**) and Hazardous Waste (**ENVP-25**).

4.34.23. Section 11.7 sets out objectives in respect of Water Quality (**ENVO 01-03**), Waste Management (**ENVO 05-08**), Air Quality (**ENVO 09-12**) and Light Pollution (**ENVO-13**).

4.34.24. Chapter 13 Development Management Standards sets out the standards by which planning applications will be considered. Relevant parts include: **DMS-105:** requires 150m sight lines on Regional Roads; **DMS-105:** refer to circumstances where Traffic and Transport Assessments and Road Safety Audits are required for applications that will have a significant effect on travel demand and the capacity of surrounding transport links; **DMS-106:** Flood Risk Assessments Flood Zones and Appropriate Uses; **DMS-107:** Undergrounding of Services; **DMS-108:** Peatlands; **DMS-111:** Telecommunications; **DMS-114:** Construction and Demolition Waste Management Plan; **DMS-122:** Seveso Sites (Restrictions on Development).

4.34.25. Chapters 13.3 and 13.7 address Development Contributions and Bonds, while 13.8 refers to the requirements of Appropriate Assessment, Environmental Impact Assessment and Flood Risk assessment.

4.35. Offaly County Council – Climate Action Plan 2024-2029

4.35.1. Sets actions towards achieving a reduction in emission by 51% and an increase in energy efficiency to 50% and provides a mechanism for bringing together both adaptation and mitigation actions to help drive positive climate action and outcomes.

4.35.2. It notes that the local authority can directly influence greenhouse gas emissions through its planning function. The plan includes a 'Framework of Actions' and its vision is 'To achieve a Climate Resilient, Biodiversity Rich, Environmentally Sustainable and Climate Neutral Economy no later than 2050'. Action GI1.2 seeks to 'promote and support carbon adaptation and mitigation policies, objectives, and standards of the Offaly County Development Plan 2021-2027, having due regard to …European sites, biodiversity, air and water quality.

4.35.3. The section on 'Green Energy' notes that the commitment to decarbonisation, and the creation of cleaner and more sustainable energy forms has resulted in the cessation of peat harvesting for energy generation. It also states that the Midlands has been the first Irish region to experience the impact of the decarbonisation programme and the transitioning process to a zero-carbon economy and that Offaly has been particularly affected due to the links with fossil fuel energy generation.

4.35.4. The Rhode Green Energy Park, that is located close to the site, was funded under the Just Transition Fund and strategic opportunities have been identified including 'Energy decarbonisation/ innovation hub built around renewable energy, energy storage, hydrogen gas and electricity system integration'. It goes on to state that the strategic opportunities offer considerable potential for decarbonisation through:

- development of hybrid renewable energy facilities in co-location with industries and enterprise within the Rhode Green Energy Park and renewable energy developments in the surrounding rural area; and
- unlocking mutual benefits and efficiencies for energy producers and users by sharing outputs and by-products of their processes in a reliable, sustainable and cost competitive fashion and at the same time export renewable energy to the national grid to help transition to a low-carbon and climate resilient society.

4.35.5. It continues by stating that reflecting the emerging megatrend in energy decarbonisation, Offaly County Council have sought to investigate the potential of renewable hydrogen which has the potential to become a zero-carbon substitute for fossil fuels, enabling this transition as it does not emit carbon dioxide when used.

- Renewable/Green hydrogen can potentially integrate easily with fossil fuels and with the entire fossil fuel ecosystem.
- Offaly County Council led a collaboration between industry and academia to examine the feasibility of integrating hydrogen derived from renewable energy in the Midlands with the gas network. The outcome of this study provided a detailed roadmap for the delivery of a Hydrogen demonstration project, a high potential avenue of enquiry which may prove significant in advancing Offaly's decarbonisation journey.
- Offaly County Council will continue to explore the practical implementation of hydrogen, aligning with the National Hydrogen Strategy.

4.36. Westmeath County Development Plan 2021-2027

4.36.1. Section 10.29 'Non-Renewable Energy' states that that the Council will continue to support the infrastructural renewal and development of electricity and gas networks and the sustainable provision of energy networks is therefore encouraged, provided it can be demonstrated that:

- The development is required in order to facilitate the provision or retention of significant economic or social infrastructure.
- The route proposed has been identified with due consideration for social, economic, environmental and cultural impacts.
- Where impacts are inevitable, mitigation features have been included.
- The development is consistent with international best practice.

4.36.2. Section 10.29.2 addresses 'Natural Gas' and includes a series of Electricity/Gas Policy Objectives relating to the county, as well as the following regional CPO (council proposed policies):

- **CPO 10.175** - Support and facilitate the development of enhanced electricity and gas supplies, and associated networks, to serve the existing and future needs of the Region and facilitate new transmission infrastructure projects that might be brought forward in the lifetime of this Strategy including the delivery of the necessary integration of transmission network requirements to facilitate linkages of renewable energy proposals to the electricity and gas transmission grid in a

sustainable and timely manner subject to appropriate environmental assessment and the planning process.

4.36.3. Appendix 5 of the WCDP lists Protected Views which are categorised according to their significance at national, regional, county and local level. A number of these views are located within the 5km study area, however, relevant views facing in the direction of the Proposed Development and Overall Project include the following:

- **View 13:** "Panoramic views from Garrane Hill on the Regional road R-446. This is a panoramic view of the surrounding landscape from the highest point on the R-446 road when looking down the roads to the NE and SW". The WCDP states that the view has a significance at county level.
- **View 14:** "Views of Sculpture along the M6. The foreground focus of this view is the roadside sculpture by the motorway. Another important feature is the flatness of the open landscape off to the southwest (mostly bog) which allows for a distant horizon view that draw attention to dramatic skies. Croghan Hill can be seen in the distance on a clear day and is an important feature of the view.". The WCDP states that the view has a significance at county level.

Electricity / Power Provider Policy

4.37. Smart Grids and Smart Cities Action Plan (July 2013)

4.37.1. The vision set out for Ireland was to 1) Develop and apply intelligent flexible systems and components for real time end-to-end supply and demand management of electricity; 2) Enable achievement of renewable energy, energy efficiency and CO2 abatement targets to 2020 and beyond, and enable renewable energy export.

4.38. Long Term Resilience Study 2018

4.38.1. This study examined Ireland's resilience to a prolonged gas disruption and made recommendations on how Ireland can future-proof its gas supply and ensure it is resilient to periods of disruption. It noted that backup fuels such as oil are required to be held at large gas power stations, to provide the equivalent of 5 days continuous running at full output and are an effective means of mitigating power outages.

4.38.2. Regarding the electricity system, section 5.5 states that in 2040 there is no projected shortfall in the electricity system, as additional gas plant capacity is assumed, which will have additional back up fuels.

4.38.3. It examined a number of options which could improve Ireland's security of supply position, and referring to Biomethane, referenced a 2017 European Commission study that highlighted Ireland's potential to produce more renewable gas per capita than any other country within the EU by 2030. Biomethane is a key component of Gas Networks Ireland's growth strategy, through Anaerobic Digestion and injection points.

4.39. SEAI Energy Security in Ireland (September 2020)

4.39.1. Because of the level of change required, to align energy security with the Paris Agreement, future energy security cannot be evaluated by focussing solely on traditional supply chains and patterns of usage. The energy transition poses challenges and opportunities, while indigenous energy sources are generally more secure than imported energy.

4.39.2. All non-renewable electricity generation by 2030 will be from gas, and future gas supply would likely include biogas, while electrolyser technology is evolving rapidly and may offer a large-scale cost-effective and sustainable alternative means of producing hydrogen. Gas Networks Ireland (GNI) is investigating the potential to introduce hydrogen into the Irish network in the longer term and GNI's Vision 2050 presents a scenario whereby a 'net zero carbon gas network' could include 13% hydrogen, with the balance comprising biomethane (37%) and natural gas, abated with carbon capture and storage (50%). GNI was also assessing how hydrogen could be used in existing gas networks.

4.40. Eirgrid Group – Strategy 2020-2025: Transform the Power System for Future Generations

4.40.1. The government's response to climate change is to plan for the transition to a sustainable, low-carbon future, which will see renewable sources replace coal, peat and oil-based generation. The objective is to ensure the electricity system is stable and supply is secure, while the grid will also need to be stronger and more dynamic, responsive and flexible. The goal is to achieve the required increase in renewables, while minimising the addition of new infrastructure. The development of new grid infrastructure requires partnership with landowners and communities.

4.41. CRU Information Paper - Security of Electricity Supply – Programme of Actions (September 2021) and updated in March 2025

4.41.1. (2021 document) Section 3.3 ‘Programme of Actions to Ensure Security of Supply’ has at its core the procurement and delivery at least 2,000MW of additional flexible gas-fired generation capacity by 2030 at the latest and will be secured through a series of capacity auctions. It also notes that the last two capacity auctions failed to secure delivery of new capacity.

4.41.2. The CRU undertook actions in 2021, including at a policy level by clarifying ‘that additional gas-fired generation is vital for the successful delivery of Ireland’s 2030 renewable electricity and climate targets’ and stated that ‘policies to decarbonise the natural gas network through the injection of renewable natural gas, or in the future green hydrogen, will play a key role in delivering our net-zero legal obligation.

4.41.3. Section 3.4 states that ‘2000MW of flexible gas-fired plant, providing enduring and efficient market capacity, additional flexibility to support our 2030 renewable targets and ensuring security of supply in the medium to long term. Gas-fired generation will remain a critical enabler of the decarbonisation of the electricity system in 2030 and beyond, particularly as we accelerate the decarbonisation of the natural gas network’.

4.41.4. The March 2025 update reiterated the delivery of over 2,000 MW of enduring flexible gas-fired generation capacity by 2030 as a key action. Four Temporary Energy Generators with a combined 653MW of output are fully available to support the grid should the need arise for their use. Older generation units at Moneypoint are being retained until such time as new enduring capacity has been delivered to replace them. It also noted that in September 2024, An Bord Pleanála approved the conversion of the 820 MW rated capacity Moneypoint coal burning power station to heavy fuel oil (HFO) and states that the units will operate as a generator of last resort from June 2025 to end March 2029, and will provide a temporary conventionally powered back-up generator to the national electricity grid, making the most sustainable use of existing infrastructure and equipment.

4.41.5. Since the 2021 document was published new capacity has been delivered in the form of two and three hour battery storage with a combined 95.975MWd (where 1MWd is equal to 24,000 kWh). In addition, 171MWd of FlexGen capacity at

Poolbeg, Irishtown and Corduff have been delivered and Edenderry Power plant has been refurbished. It also notes that just over 2,058MWd of new capacity, net of any terminations (and over and above the capacity which has already delivered) is contracted for delivery in the coming years. Of this figure, around 898MWd was in construction as of March 2025.

4.42. Eirgrid/SONI – Shaping our Electricity Future 1.1 – Roadmap (July 2023)

4.42.1. Shaping Our Future (version 1.0) was published in 2021 and set a target of 70% renewable electricity for 2030. It was updated in July 2023 (version 1.1) to reflect the significant electricity policy developments at European and national level, and this resulted in a 80% renewable electricity target for 2030 and will require unprecedented grid changes.

4.42.2. The preparation for clean energy will require a great deal of new grid infrastructure – such as underground cables, pylons and substations and demand is expected to increase substantially to service increasing demand from high-demand users (pharmaceutical plants, high-tech manufacturing, data centres).

4.42.3. While renewable electricity will increasingly replace fossil fuels like coal and oil, to allow for variability in wind and sun dependent supply, natural gas is expected to still be used to generate some electricity as a backup.

4.42.4. Section 4.3 set out ambitions of how to achieve a 51% reduction in Ireland's overall Greenhouse Gas emissions by 2030 (from 2018) as set out in the Climate Action and Low Carbon Development (Amendment) Act 2021, including the provision of at least 2GW of electricity from new flexible gas plants.

4.42.5. Section 5.2 states that new Open Cycle Gas Turbines (OCGTs) coming through capacity auctions may be subject to annual run hour limitations due to restrictions outlined in their planning applications or environmental legislation.

4.42.6. Section 6.3.4 'Conventional Generation' states that it is expected that thermal electricity generation using coal, peat and oil as their primary fuel will decommission by 2030 and that this capacity, and the capacity from other plant expected to retire out to 2030, is expected to be replaced by new gas-fired generation, long duration energy storage, new interconnection capacity and demand side units.

4.42.7. Figure 17 identifies four Renewable Energy hubs, and the application site lies entirely within one of the hubs. The proposed renewable hubs would permit the gathering together of renewable projects in a geographic area, feed into a new collector substation and inject power into the grid where there is realisable capacity.

4.43. Tomorrow's Energy Scenario's – 2023 Consultation Report

4.43.1. This is a high-level exploration that looks at how much electricity Ireland might need and how it can be provided, beyond 2030, up to 2050. In it, gas evolution shows a net zero power system from 2045 and will included renewable gas including hydrogen. In a renewables-dominated power system, demand will need to be sufficiently flexible to account for fluctuations in renewable generation and measures to improve energy efficiency and demand flexibility will be vital to help manage peak loads on the power system. With respect to dispatchable capacity, it states that the acceleration of green fuels (hydrogen, biomass and biomethane) will offer reliability and flexibility to the power system.

4.44. (Eirgrid/SONI) All-island Resource Adequacy Assessment 2026-2035

4.44.1. This annual publication looks at the balance between electricity demand and supply on the island of Ireland for the following 10 years. It is an evolution of the Generation Capacity Statement (GCS) and implements an updated methodology, which is required to represent the evolving power system, where the mix of technologies on the system is becoming increasingly diverse, with increasing levels of renewable generation, energy storage, demand side flexibility and interconnection.

4.44.2. Electricity demand can be met via different sources including conventional generators, renewable energy sources, interconnectors, energy storage on the system and new technologies coming through capacity and renewable energy auctions.

4.44.3. The preface states that it is crucial that a balanced portfolio of new technologies is delivered, such as long duration energy storage, interconnection, demand-side flexibility and renewable-fuel-ready open cycle and combined cycle gas turbines.

4.44.4. Section 5.2.2 notes that delivering new capacity is a complex and often challenging process and 5.3 notes that the gas turbine category includes distillate and gas oil

fuelled power plant, along with combined and open cycle turbine plant configurations.

Other relevant policies and strategies

4.45. The National Peatlands Strategy 2015-2025 (DAHG, 2015)

4.45.1. Bord Na Móna is stated to own 57,000ha of industrial cutaway peatlands and a further 18,000ha composed mainly of rewetted cutaway and afforested bogs, with some parts in use for cultural or other commercial uses.

4.45.2. The Strategy provides a framework for determining and ensuring the most appropriate future use of cutover and cutaway bogs and states that environmentally, socially and economically viable options should be analysed to plan the future use of industrial cutaway peatlands, in conjunction with limiting factors as outlined in Bord na Móna's Strategic Framework for the Future Use of Peatlands. While referencing windfarms, it states that the appropriate development of such bogs may assist energy projects which will contribute to meeting our renewable energy targets and developing an export market for renewable electricity.

4.45.3. Section 5.3 proposes that the potential contribution of peatlands rehabilitation, restoration and enhancement to climate change mitigation and adaptation be fully explored, including considering their potential to contribute to a low carbon economy through use of sites for renewable energy.

4.45.4. Bord na Móna's stated that the future of their land bank lies in a wider mix of uses, with special regard to the role that peatlands can play in continuing to supply energy to the country, both through traditional fuels and renewables.

4.46. National Hydrogen Strategy (July 2023)

4.46.1. Decarbonised gases like renewable hydrogen can play an important role in ensuring the security of Ireland's energy supplies into the future and will have a key role to play in the transition to a greener future. It notes fossil fuels are used as a backup to the variability of renewable energy sources such as wind or solar, or the seasonality of demand patterns across the year, but renewable hydrogen could offer a zero-carbon alternative in the future. This would involve transitioning the gas network to

hydrogen over time, and the gas network has proven technical capability to transport hydrogen blends of up to 100%.

4.46.2. Action 12 requires the development of a plan to consider how existing end users can transition from natural gas to hydrogen.

4.46.3. Section 3.2 'Hydrogen End-Use Priorities' states that renewable hydrogen is well placed to meet the requirement to generate electricity from renewable dispatchable generation in gas turbines and that most existing gas turbine designs today can already handle hydrogen shares of 3–5% and some can handle shares of 30% or higher, while some are also capable of operating under varying hydrogen blends, depending on the turbine design. It continues that significant research is already underway by equipment manufacturers in respect to developing 100% pure hydrogen power turbines. EU Turbines, the association of European gas and steam turbine manufacturers, hold the position that the industry is confident that it will be able to provide standard turbines that are able to run entirely on hydrogen by 2030.

4.46.4. It notes Ireland must build 2 GW of new gas fired generation capacity by 2030, to ensure security of electricity supply.

4.46.5. It anticipates regional hydrogen demand clusters will develop in the early 2030's and it will be during the mid to late 2030s that the national hydrogen network begins to emerge. On this basis, hydrogen will not deliver significantly to Ireland's energy security needs in the short term. In the interim, natural gas will be required to ensure continued security and resilience of Ireland's energy.

4.47. Biomethane Energy Report - Gas Network Ireland - (September 2023)

4.47.1. It sets out the future infrastructure requirements for biomethane integration into Ireland's gas network and notes that gas is, and will remain, a key component of the energy mix, not least to balance the variable production of wind and solar energy. It is essential that the gas used is displaced by renewable gases and this is possible through a combination of biomethane and green hydrogen. Domestically produced biomethane was first introduced into Ireland's gas network in 2020, seamlessly replacing natural gas and is fully compatible with existing gas infrastructure, appliances and technology. The growing use of minimum carbon biomethane, and green hydrogen in the future, will help to significantly decarbonise the gas network

and enhance the security of supply of electricity, thereby contributing to the transition towards a future net zero energy system.

4.48. National Biomethane Strategy (May 2024)

4.48.1. Biogas is the main product of the Anaerobic Digestion (AD) of biological feedstocks including food waste, sewage sludge and agricultural feedstocks. Biogas can also be upgraded to sustainable biomethane to replace fossil gas. Ireland has only two operational biomethane facilities injecting biomethane into the gas grid, supplying the equivalent of 0.001% of Ireland's current gas demand. Biomethane would be used as a direct substitute for fossil gas in applications such as high-temperature heat, electricity generation and transport, reducing CO_2 and other greenhouse gas emissions.

4.49. Irelands 4th National Biodiversity Action Plan (NBAP) 2023-2030

4.49.1. The NBAP includes five strategic objectives aimed at addressing existing challenges and new and emerging issues associated with biodiversity loss. Section 59B(1) of the Wildlife (Amendment) Act 2000 (as amended) requires the Commission, as a public body, to have regard to the objectives and targets of the NBAP in the performance of its functions, to the extent that they may affect or relate to the functions of the Commission.

4.49.2. Chapter 3 noted a key achievement of the 3rd NBAP 2017-2021 was that Bord Na Móna was implementing restoration/rehabilitation plans for peatland habitats, and chapter 4 states that 14,344ha out of 30,000ha of peatlands that were previously harvested to generate electricity, had been rehabilitated by March 2023.

4.49.3. Chapter 8 sets out a list of targets in the context of the five objectives that lay out a clear framework for our national approach to biodiversity. With respect to Objective 2 'Meet Urgent Conservation and Restoration Needs', the stated targets are relevant to the proposed development (on Bord Na Móna owned lands), as the actions required to achieve the targets must be implemented by Bord Na Móna**,** including by the rehabilitation of 33,000 hectares of its peatlands by 2026 under the Enhanced Decommissioning, Restoration and Rehabilitation Scheme.

4.50. Guidelines for Planning Authorities on Telecommunications Antennae and Support Structures, 1996

4.50.1. The Guidelines set out government policy for the assessment of proposed new telecommunications structures and state that base station towers are an essential feature of all modern telecommunications networks.

4.50.2. Section 4.3 of the Guidelines states that visual impact will, by definition, vary with the general context of the proposed development and that in most cases, the applicant will only have limited flexibility as regards location, given the constraints arising from radio planning parameters and states that the support structure should be kept to the minimum height consistent with effective operation and should be a monopole (or poles) rather than a latticed tripod or square structure. It also notes that visual impact will, by definition, vary with the general context and location of the development.

4.50.3. Local factors will have to be taken into account in determining the extent to which an object is noticeable or intrusive.

4.50.4. They state that substations operated by the ESB may be suitable for the location of antennae support structures and that this possibly should also be investigated.

Circular Letter PL07/12

4.50.5. It revised elements of the 1996 Guidelines and advises Planning Authorities to:

- Cease attaching time limiting conditions or issuing temporary durations to telecommunications masts, except in exceptional circumstances.
- Omit conditions on permissions requiring security (i.e. bond/cash deposits).
- Do not include monitoring arrangements on health and safety or determine planning applications on health grounds.

4.51. Spatial Planning and National Roads Guidelines for Planning Authorities (2012)

4.51.1. Sets out planning policy considerations relating to development affecting national roads outside the 50/60 kmph speed limit zones for cities, towns and villages. Transport solutions for traffic/trip demand generated by development should be catered for in a manner that is complementary to and consistent with the strategic transport function of the national Road network.

4.52. National Landscape Strategy for Ireland, 2015-2025 (June 2015)

4.52.1. Its main actions include the development of a National Landscape Character Assessment, and Landscape Character Assessments for each local authority, that will inform and guide landscape policy, action plans and local authority development plans and provide a framework for the protection and management of change within the landscape in terms of its cultural, social, economic and environmental values. As of February 2026 it was under review with a view to being replaced.

4.53. HSA – Guidance on technical land-use planning advice (V.2 2023)

4.53.1. This advice document is for planning authorities and COMAH establishment operators and interprets Health and Safety Authority (HSA) policy on technical land-use planning (TLUP) advice under the Seveso-III Directive (Directive 2012/18/EU. It includes sections on liquefied natural gas, recovered natural gas and hydrogen.

4.53.2. It describes the general background, as well as the risk criteria for new establishments and the nature of the generic advice that will be provided by the HSA, to planning authorities, for developments in the vicinity of establishments and it explains how societal risk affects that technical advice.

4.53.3. It notes planning bodies are required to seek technical advice for any proposed development of the specified types within the consultation distance and that planning applicants for new establishments are expected to provide sufficient information to enable the CCA (Central Competent Authority) to apply the methods set out in this Guidance, so that the technical advice may be generated for planning authorities.

4.53.4. It notes that the competent authority's generic technical advice to planning authorities broadly takes the form of 'Advises against' (X) or 'Does not a advise against' (✓).

4.54. EPA (2019) Guidance on Soil and Stone By-products in the context of Article 27 of the European Communities (Waste Directive) Regulations 2011

4.54.1. The guidelines state uncontaminated soil and stone that is certain to be used in construction at the same project site from where it was excavated is not regulated as waste. It also states that excess uncontaminated soil and stone resulting from excavation works (the primary aim of which is not the production of soil and stone is a production residue and is regarded as a by-product only if all four by-product conditions are met:

a) further use of the soil and stone is certain;

b) the soil and stone can be used directly without any further processing other than normal industrial practice;

c) the soil and stone is produced as an integral part of a production process; and

d) further use is lawful in that the soil and stone fulfils all relevant product, environmental and health protection requirements for the specific use and will not lead to overall adverse environmental or human health impacts.

It is the responsibility of the person carrying out a development to notify the EPA that a substance is to be regarded as a by-product and the EPA may determine that a substance should be considered as waste and not as a by-product. The EPA determination shall be final.

4.55. Water Framework Directive (WFD)

4.55.1. The WFD establishes a framework for the protection of all inland surface waters, transitional waters, coastal waters and groundwaters. Ireland is required to comply with four main obligations under the environmental objects of Article 4 of the WFD::

- Prevent deterioration of the status of all bodies of surface water and groundwater.
- Protect, enhance and restore all bodies of surface water and groundwater with the aim of achieving at least good status by the end of 2027 at the latest.
- Protect and enhance all artificial and heavily modified bodies of water, with the aim of achieving at least good ecological potential and good surface water chemical status.
- Achieve compliance with the standards and requirements for designated protected areas.

4.55.2. Water bodies include rivers and canals. The application description states that drainage infrastructure will include a surface water attenuation tank and surface water discharge pipeline discharging to the Mongagh River, while treated process and wastewater will discharge to the Yellow River via c500m long pipeline. The Grand Canal is also located close to the southern end of the site.

4.56. Water Action Plan 2024 - A River Basin Management Plan for Ireland

4.56.1. The Water Action Plan 2024 is Ireland's third River Basin Management Plan (RBMP) and it outlines the measures the Government and other sectors are taking to improve water quality in Ireland's groundwater, rivers, lakes, estuarine and coastal waters, and provide sustainable management of our water resources.

4.56.2. It notes that ensuring consistent policy integration between the Water Action Plan 2024 and other national and local plans, including land use and spatial planning, is a continuous process as plans are developed, reviewed and revised. It also states that development plans are required to support the protection and enhancement of water quality, particularly with regard to securing the objectives of the RBMPs.

4.56.3. Guidance for planning authorities on physical planning and the Water Framework Directive is due to be published, but as of February 2026 was not yet published.

4.56.4. Table 13 sets out a series of measures aimed at addressing the most significant pressures/issues affecting waters, including under the heading of 'Land Use Planning', where the measure is to address potential impacts from future development, by ensuring that risk is avoided in the first instance and through the inclusion of appropriate conditions in planning permissions for new development.

4.57. 110 kV, 220 kV and 400 kV Underground Cable Functional Specification

CDS-GFS-00-001-R2 (updated the 3rd of March 2025)

4.57.1. This specification describes EirGrid requirements for underground cables and outlines the requirements for route selection, design and as-built records for 110 kV, 220 kV and 400 kV underground cables which will be connected to the 110 kV, 220 kV and 400 kV transmission system operated by EirGrid.

4.57.2. Peatland routes are described as non-standard and section 4.10 states that for environmental and engineering reasons the routing of underground cables through peatland shall be avoided if at all possible and that overhead lines are the preferred transmission infrastructure to be used for traversing peatland (both blanket and/or raised bogs).

4.57.3. Where is it proposed to route underground cables through peatland, it states EirGrid shall be consulted at the earliest available opportunity and should provide details of all constraints and geotechnical risks, a peat stability risk assessment/peat landslide hazard risk assessment and Materials Management Plan, a preliminary peat stability

mitigation plan and a demonstration that settlement or differential settlement of the cable shall not occur to the extent to which the cable's function or durability could be compromised over the design life. Flooding risk shall also be assessed.

4.57.4. Line / Cable interface tower locations shall be assessed in a similar manner, but shall also include access and egress routes.

4.57.5. It includes specific requirements on the design of any cable route through peatland.

4.58. Bord Na Móna Brown to Green Strategy

4.58.1. On 23 December 2023, Bord na Móna, completed its historic brown to green transition when it ended the use of peat at its Edenderry Power Station and invested €100 million in its decarbonisation and transition to 100% biomass.

4.59. Connecting People - Connecting Places - A Strategy for Walking and Cycling in Offaly (2015)

4.59.1. This document is referred to in section 6.5.7 'Greenways' in Chapter 6 of the Offaly County Development Plan. It states that it 'set the vision for County Offaly to connect to, embrace and build on the opportunities for walking and cycling in the county'.

4.59.2. TRO-14 of the development plan states that 'It is an objective of the Council to implement 'A Strategy for Walking and Cycling in Offaly; Connecting People Connecting Places' (2015)'. No further details of the strategy are provided.

4.60. Feasibility Study on the Development of a Major Cycling Destination in the Midlands of Ireland (2016)

4.60.1. Following from paragraph 4.59.1 above the Offaly County Development Plan states that following Connecting People – Connecting Places, that this document was published. Figure 6.13 of the development plan is from the document and indicates that a cycle path would run along the route of the proposed underground cable, would continue northwards along the western boundary of the cutaway bog and would also run along the approximate route of the underground pipe that is to run from the PPA to the Yellow River.

4.60.2. TRO-15 of the development plan also states that 'It is an objective of the Council to implement the 'Feasibility Study on the Development of a Major Cycling Destination in the Midlands of Ireland' (2016) in conjunction with Bord na Móna, Coillte,

Waterways Ireland, the Office of Public Works and the Product Development Group, in accordance with the Offaly Tourism Statement of Strategy 2017-2022.'

Documents relating to EIA and Appropriate Assessment

4.61. The following documents refer to the preparation of EIAR's and Appropriate Assessments and are referenced where relevant in the assessment:

- Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment (Dept. of Housing, Planning & Local Government, August 2018).
- Guidelines on the information to be contained in Environmental Impact Assessment Reports (EPA, May 2022).
- Appropriate Assessment of Plans and Projects in Ireland Guidance for Planning Authorities (revised February 2010).
- OPR Practice Note PN02 - Environmental Impact Assessment Screening (June 2021).

Legislation

4.62. European Union (Large Combustion Plants) Regulations 2012 (S.I. 566 of 2012)

4.62.1. These Regulations apply to combustion plants, the total rated thermal input of which is equal to or greater than 50 MW, irrespective of the type of fuel use, and the operation of the plant will be governed by these regulations.

5.0 Planning Authority Submission

Offaly County Council

5.1.1. The submission of Offaly County Council is set out in 19 sections.

5.1.2. **Sections 1-6** of the Chief Executive's Report to the Elected Members, describes the site location, sets out European and National energy policy, National, Regional and county level planning policy and site specific and relevant and proximate planning history. It also summarises the AA screening report and outlines the proposed water supply, foul and surface water proposals.

5.1.3. **Section 7** notes that a Site-Specific Flood Risk Assessment was undertaken and concluded that the proposed development has water compatible elements which are situated within Flood Zone A, a high risk flood zone, for present day and future flooding scenarios. However, all highly vulnerable elements of the development have been located outside of high flooding risk areas; therefore the overall risk of fluvial flooding is considered to be low.

5.1.4. A Water Framework Directive (WFD) Screening Assessment has been completed for all waterbodies (surface water and groundwater bodies) within the zone of influence (EIAR Appendix 12C). It notes that the screening concluded that the proposed development and overall project would: 1) Not cause a deterioration in the status of all surface and groundwater bodies assessed. 2) Not jeopardise the objectives to achieve 'Good' surface water/groundwater status. 3) Not jeopardise the attainment of 'Good' surface water/groundwater chemical status. 4) Not jeopardise the attainment of 'Good' surface water/groundwater quantity status. 5) Not permanently exclude or compromise the achievement of the objectives of the WFD in other waterbodies within the same river basin district.

5.1.5. **Section 8** gives the planning authorities views in relation to the adequacy of the EIAR, noting that the Commission is the competent authority in that regard. It that considers that the EIAR is set out in a clear format and the Non-Technical Summary (NTS) is considered generally adequate. It also states that each chapter outlines the existing environment providing a description of the context, character, significance and sensitivity of the receiving environment (baseline) in order to predict the likely significant effects of the project and the likely evolution of the environment in the absence of the project.

It then proceeded to provide a brief commentary on technical chapters 7-19 followed by conclusions or recommendations, which are set out below:

- Chapter 7 - Air Quality - Subject to the proposed mitigation measures being implemented, the Environment/Water Services Section of Offaly County Council have raised no concerns with the development from an Air Quality point of view.
- Chapter 8 – Cultural Heritage and Archaeology – A comprehensive review of the potential impacts on archaeology, architecture and cultural heritage has been

carried out. Subject to proposed mitigation measures being implemented, there are no concerns from a cultural heritage and archaeology point of view.

- Chapter 9 – Biodiversity – Notes seven bat species identified to the south of the PPA, that targeted badger surveys should be carried out in areas to be disturbed, while several areas were identified as being suitable habitat for marsh fritillary, but are under grazed. The Environment/Water Services Section have no concerns with the proposal from a biodiversity point of view subject to conditions.
- Chapter 10 – Landscape and Visual – Refers to the appended Photomontage Booklet and Landscape Mitigation Strategy. It cites an extract from the EIAR that states that the magnitude of cumulative landscape change is considered to be Low, the significance / quality would be Slight / Adverse and that visually, the cumulative effects would be mainly related to a combined visibility of industrial features in available views, particularly from elevated locations throughout the study area such a Croghan Hill and Knockdrin Hill or elevated sections of the R446. It concludes that visual impact is discussed further in Section 13 of the report.
- Chapter 11 – Noise and Vibration – No significant adverse construction noise and vibration effects are predicted, however, to ensure noise is kept to a minimum, it is recommended that a series of construction mitigation measures are implemented including good community relations, working hours, minimal use of diesel generators, acoustically screened loading and unloading areas, and the use of modern low noise plant. The operational phase would see the power plant comply with conditions of an Industrial Emissions Licence, while no non-standard mitigation is anticipated to be required for the operation of both the EGC and the GCC. OCC's Environment and Water Services Department have requested conditions be included in relation to noise emissions.
- Chapter 12 – Water Environment – The overall site is within the Boyne WFD Catchment, extends across nine WFD surface water bodies and process and foul water from the Power Plant Area, would discharge by pipe to the Yellow River. Surface / drainage water from the Power Plant Area, would discharge by pipe to the Mongagh River. The existing onsite groundwater abstraction borehole would supply the water requirements, while following implementation of the appropriate

mitigation measures outlined in the EIAR, no significant impacts on designated sites would occur. It noted that a Stage 2 Flood Risk Assessment was carried out and elements of the development considered highly vulnerable to flooding, are located in flood Zone C and are considered low risk in relation to fluvial flooding. OCC's Environment & Water Services requested further information (see 5.1.8).

- Chapter 13 – Soils and Geology – OCC Environment & Water Services consider that additional information should be requested regarding the excavated peat material & proposed peat deposition areas.
- Chapter 14 – Traffic and Transport – Both the Roads Design Section and the Edenderry Municipal District Office recommended comprehensive planning conditions in relation to mitigating traffic impacts.
- Chapter 15 – Population and Human Health – No specific mitigation measures are required other than those identified in the CEMP and CTMP as most mitigation measures are proposed in other chapters of the EIAR. The applicant will operate a 'Community Gain Fund' and refers to a 'Near Neighbour Scheme'. The development will employ 750 construction workers and 45-50 during its operational phase. No concerns were expressed.
- Chapter 16 – Material Assets – Addresses land use, electricity and gas supply, water and wastewater, telecommunications and waste management and concludes that any impacts arising from the construction and operation of the proposed development would not cause significant effects to any Material Assets or Waste and Resource Management receptors identified in the EIAR.
- Chapter 17 – Major Accidents and Disasters – This section considered hazardous substances, electrical hazards, general construction activities, natural hazards, identification of Potential Risk Events (PRE) and an assessment of Credible Risk Events (CRE), which include flood events, peat fires and accidental releases of leaks of hazardous substances that could result in fire or explosion. With mitigation, no likely significant effect were identified. The Chief Fire Office of Offaly County Council has indicated no objections to the proposed development.
- Chapter 18 – Climate – The Climate Change Risk (CCR) assessment identified: nine risks for the PPA, eight risks for the EGC, and six risks for the GCC. After

considering embedded mitigation measures, all CCRs are classified as 'Low' and effects are deemed not significant. Environment/Water Services have raised no concerns with the issues raised in Chapter 17 of the EIAR.

- Chapter 19 – Cumulative Effects and Interactions – Having assessed the interaction of likely effects during the construction, operational and decommissioning phases, it is concluded that the likely interactions are assessed as not likely to result in any effects that could magnify effects through the interaction or accumulation of effects.
- Chapter 20 – Schedule of Environmental Commitments – There are instances where the environmental effects may be of such a magnitude as to warrant mitigation measures. Embedded mitigation measures have been incorporated into the design of the proposed development throughout the design process. The environmental impact assessment of the proposed development facilitated the identification of additional mitigation and monitoring measures, which are summarised and presented in Tables 20.1 to 20.3 of EIAR Volume I Chapter 20.

5.1.6. **Section 9** refers to the carrying capacity and safety of the road network and refers to the Roads Design Section and Edenderry Municipal District Engineer reports in section 11 below.

5.1.7. **Section 10** addressed the carrying capacity of the subject site and surrounding area and refers the Commission to the comments in section 8 (EIAR).

5.1.8. **Section 11** addressed the reports of technical local authority departments.

- Edenderry Municipal District

  Recommend the attachment of 17 conditions related to traffic and haul routes, in addition to the proposed mitigation measures in the EIAR, to be agreed in writing with the Planning Authority, prior to commencement of the development. A number of the conditions are described in section 5.1.17.

- Road Design Section

  Recommends the attachment of 20 conditions if the Commission decide to grant permission. A number of the conditions are described in section 5.1.17 below.

- Environment and Water Services

Recommends further information in respect of drainage and waste management, but also attached 33 conditions, if the Commission decides to grant permission. A number of the conditions are described in section 5.1.17, while the further information issues are:

1 – An existing drainage layout indicating existing drainage, drains & watercourses is required.

2 - A proposed comprehensive drainage layout with a) 10M buffer zone either side of watercourses; b) SuDS compliant separate surface water collection / attenuation prior to discharging; c) pre-treatment of the run-off from the roads driveways, footpaths etc prior to discharge, to avoid contamination; d) separate foul water collection prior to discharging to the proposed wastewater treatment system and percolation area.

3 - Full details of the proposed 2 no. process water discharge & surface water discharge points addressing the full suite of water quality parameters.

4 - Submit an Article 11 declaration on waste authorisation to the Environmental Protection Agency and refer to the excavated peat material & proposed peat deposition areas.

- Chief Fire Officer

  A Fire Safety Certificate and a Disability Access Certificate will be required.

5.1.9. **Section 12** states that the planning authority did not receive copies of any third party submissions or referrals from prescribed bodies that may have been submitted.

5.1.10. **Section 13** contains the planning authorities assessment and views on the application. The principle of the proposed development in this area is considered acceptable, given that the development is in line with national and regional energy and climate action policies, and largely complies with the objectives and policies set out in the Offaly County Development Plan 2021 – 2027 (OCDP). A number of items require addressing in order to safeguard residential amenities of the area and general landscape amenities.

The views of the planning authority are addressed under the following headings:

Cumulative Visual Impact

- A total of 29 no. turbines would be located in the immediate locality as well as the proposed pylon towers (13 no. c. 44m high), strain pylon towers (6 no. c. 38m high); CCGT power plant with an 60m high emissions stack and OCGT power plant with an 45m high emissions stack.
- The photomontages indicate both the proposed development and the wind farm currently under construction, but additional viewpoints should be provided to assist in assessing cumulative visual impact of the proposal, including the proposed power plant at its most prominent.
- The applicant justifies the overhead line on the basis of EirGrid's Policy Document which states that cable trenching through peatland should be avoided if at all possible. Section 10.5.41 of the EIAR notes that the magnitude of landscape change associated with the proposed Electricity Grid Connection is considered to be high and given its location close to Croghan Hill (Area of High Amenity) will be a very prominent feature in the landscape. The EIAR provides no detailed discussion to justify the proposed above ground cabling and a robust justification should be provided why the entire cabling cannot be underground in the interests of proper planning.

Design

- The power plant is very exposed, and if constructed will be a very prominent feature in the landscape and will be an architectural symbol of 21st Century industrial design in County Offaly and perhaps even nationally. Additional details of external panelling are required in order to demonstrate a high standard of visual finishes as well as photomontages in close proximity, so as to illustrate the full visual impacts of the power plant and enable a more comprehensive assessment.

Cultural Heritage

- Summarises findings in the application documents and no concerns raised.

Noise

- No concerns raised regarding noise.

Transportation and Traffic

- The Road Design Department and the Edenderry Area Engineer set out the views of the authority in this regard and recommended conditions be attached.

Hydrology and Hydrogeology

- The Environment and Water Service Department has recommended that further information (See 5.1.8 above).

Appropriate Assessment under the Habitats Directive

- Sets out the conclusions of the Appropriate Assessment Screening Report and the NIS, which states that for each of the European sites screened in the NIS, it can be concluded that following implementation of mitigation measures, all aspects of the proposed development will have no adverse impact on the integrity of any European sites, either alone or in-combination with other plans or projects. No concerns raised.

5.1.11. Section 14 sets out the planning authorities view on Community Gain.

The applicants proposed Community Gain Scheme model would include five annual payments of €90,000. The Planning Authority have concerns that if too restrictive a geographic area is specified for the fund, then challenges will arise in finding suitable community projects.

As there are no dwellings located within 1km of the Plant Area, the OCC consider the 'Near Neighbour Scheme' should extend to 1km from the entire site area. It would involve an annual contribution towards their electricity usage.

The site contains 6km of the 'landscapes of power' cycling route, a product of a feasibility study in which Bord Na Mona was a stakeholder. The applicant needs to provide more information investigating the potential to construct amenity trails, within the subject site, as it would complement the objectives and the cycle routes identified in the 'Feasibility Study on the Development of a Major Cycling Destination in the Midlands of Ireland' document and 'Connecting People - Connecting Places - A Strategy for Walking and Cycling in Offaly' document.

The Commission should request further information in relation to the following topics:

- Additional photomontages showing cumulative visual impact of Yellow River Windfarm and the current proposal.

- Additional photomontages showing the full visual impact of the power station.
- Justification for the above ground cabling.
- Power plant external finishes.
- Issues raised in OCC Environmental and Water Services Report.
- Clarifying geographical area which will avail of near neighbour scheme.
- Requesting proposals to comply with Midlands Cycling Destination, Offaly Network Map.

5.1.12. Section 15 - Development contributions should be applied in accordance with the Offaly County Council Development Contribution Scheme 2021 – 2025.

5.1.13. Section 16 - An annual special development contribution is required in respect of road strengthening and upgrading of the R400.

5.1.14. Section 17 - Roads Design Section have recommended that a bond be attached.

5.1.15. Section 18 sets out the planning authorities view on conditions. The recommended conditions generally reflect those set out in the other technical reports, but included others in relation to a Badger survey and conditions relating to the provision of lands for cycleways on the applicant's landholding in accordance with the Midlands Cycling Destination, Offaly Network Map contained within the Offaly County Development Plan 2021-2027.

5.1.16. Section 19 contains the recommendation of the planning authority and states that notwithstanding the recommended conditions in section 18, the Planning Authority requests that further information be requested of the Applicant to address the points / concerns raised in Sections 11, 13 and 14 of its report before a decision is made.

5.1.17. Other Technical Reports

- These are addressed in Section 5.1.8 (above) and 5.1.18 (below)

5.1.18. Conditions

<u>Edenderry Municipal District Engineer</u>

- Pre and post development road and bridge condition surveys to be carried out and repairs given effect to, and haul route to be monitored during development and fixed as necessary.

- Serious capacity concerns regarding the use of the L-1010 for construction traffic in its current condition will be addressed by way of strengthening works for 3.1km west of Rhode, to consist of – Regulation Layer, 60mm of Asphalt Concrete Binder Course and 40mm of Polymer Modified Stone Mastic Asphalt surface course.
- Passing bays are required along the 3.1km section of the L-1010. Locations, size and proposed construction to be agreed.
- Liaison Engineer to be appointed by Offaly County Council for the duration of works at developers expense.

Road Design Section

- Provisions should be made for public lighting along the R400.
- Performance bond to be agreed with Offaly County Council Roads Department and shall be in place prior to the commencement of works.
- No services will be permitted to be laid within the R400 road.

Environment and Water Services

- A groundwater monitoring program shall be implemented for the operational phase in accordance with Chapter 12 of the EIAR & future EPA IPC licence.
- Provide details of how effluent will be collected & treated during construction.
- Integrated Pollution Control licence to be obtained from the EPA prior to any extraction/excavation of peat and any associated works such as drainage.
- Details regarding the origin/source of proposed soil & stone to be imported onto the site shall be submitted for the written agreement of the Planning authority.
- Construction phase working hours 7am - 6.30pm Monday to Friday and 8am to 1.30pm Saturday.
- An operational phase air quality monitoring program shall be implemented.

5.2. Meeting of Offaly County Council held on 15 April 2024 (Administrators record)

5.2.1. The minutes of a Council meeting was appended to the Council's submission. The matters addresses are:

- The acting Director of Services (DoS) described the proposed development.
- Cllr. L. Quinn outlined his submission on the application and requested that it be recorded as part of this process. He noted that this is one of the biggest infrastructure projects ever in the county and acknowledged that gas supply is in line with the national drive for clean fuel. He stated that the major visual impact on the surrounding countryside can be overcome by undergrounding the entire cable. (see his submission in section 8.3 below for more details).
- Cllr. N. Cribbin supported Cllr Quinns's submission and welcomed the investment and jobs that the project may provide.
- Cllr. R. McDermott queried the amount of €30k, recommended for a Special Contribution in respect of road strengthening and upgrading of the R400 as sections of the public road network may be damaged as a result of the transportation of materials to the site. A council official responded that the sum is for immediate works for general maintenance and that other conditions are suggested to the Commission, to require the developer to immediately repair the road network if a rapid road failure takes place as a result of construction traffic.
- The Acting DoS informed the elected members that the site boundary (including the cable route) coincides with approximately 6km of proposed greenway in the Midlands Cycling Destination – Offaly. He also stated that the visual quality of the structure is very important because it is an open landscape and also as it may be the first element of a larger Green Energy Park and other investments.
- The elected members resolved to adopt the Chief Executive's Report.
- The Acting DoS acknowledged there is a lot of correlation between Cllr. Quinn's submission and the Chief Executive's report and the submission can be attached as an addendum. The Elected Members voted to attach the Observation of Councillor Liam Quinn to its submission (see Section 8.3 below).

6.0 **Prescribed Bodies**

6.1. Of the prescribed bodies notified, submission have been received from the following:

- Transport Infrastructure Ireland (TII)

- Development Applications Unit of Department of Housing, Local Government and Housing.
- Commission for Regulation of Utilities, Water and Energy
- Health and Safety Authority (HSA) (3 submissions)
- Environmental Protection Agency (Environmental Licencing Programme)

6.1.1. A summary of the submissions is outlined below.

6.2. Transport Infrastructure Ireland (TII)

- Requests official policy in relation to developments on or affecting national roads is applied in line with Spatial Planning and National Roads Guidelines for Planning Authorities (2012).
- Where the national road network forms part of the construction traffic haul routing, a number of operational issues require to be resolved, as part of the Construction Traffic Management Plan, including:
  - Consult with all PPP companies, contractors and road authorities to establish any requirements in terms of the haul route, to ensure strategic function of national road network is maintained.
  - Any works to the National Road network shall comply with TII requirements, including Road Safety Audit as appropriate.
  - TII to be referred to on all matters relating to national roads, and mitigation measures identified by the applicant to be included as conditions in any decision to grant permission.
  - Any damage to the existing national road network shall be rectified as agreed with the road authority.

6.3. Development Applications Unit of Department of Housing, Local Government and Heritage

- The Department observations relate to archaeology.
- The Department has reviewed the EIAR and is broadly in agreement with the findings in relation to archaeology and cultural heritage, which includes results of

archaeological monitoring of geotechnical investigations and a field survey of the proposed peat deposition areas.

- Conditions are recommended for inclusion in any decision to grant, which align with sample conditions C3, C5 and C6 set out in OPR Practises Note PN03: Planning Conditions (2022) and have been appropriately adapted to be site-specific based on the proposed development and findings of the EIAR. The conditions state:

  1 All mitigation measures in Chapter 8 of the EIAR to be implemented in full.

  2 Suitably qualified archaeologist to carry out pre-development testing and submit an Archaeological Assessment Report to the planning authority.

  3 Construction Environmental Management Plan to include location of all archaeological and cultural heritage constraints.

  4 A final report to be submitted to the planning authority and department (DAU).

6.4. Commission for Regulation of Utilities, Water and Energy

- In September 2021, the CRU published an Information Paper titled 'Security of Electricity Supply – Programme of Actions' to address concerns about security of electricity supply as a result of the projected shortfall in generation capacity to meet future demand. The Governments Energy Security in Ireland to 2030 Package, published in November 2023, commits to the implementation of the programme of actions.
- The proposed development is in line with Action 1 of the programme which seeks to deliver at least 2,000MW of additional gas-fired generation capacity by 2030.
- The programme is also submitted to be in line with the government's policy on security of electricity supply, which included conventional generation of electricity by gas as a national priority to ensure security of electricity supply and to support the growth of renewable electricity generation.
- The project is also compliant with the draft Climate Action Plan 2024, which seeks to install 2GW of new flexible gas-fired generation as part of its 2030 Key Performance Indicators for accelerating flexibility.

6.5. Environmental Protection Agency (Environmental Licencing Programme)

- The development boundary overlaps with the licence boundary for EPA IPPC Licence. Reg: P0501-01 which was issued to Bord Na Móna Energy Limited on 26th April 2020 for 'Class 1.4 - Extraction of peat for area exceeding 50ha'.
- The proposed development is a licensable activity under Class '2.1 Combustion of fuels in installations with a total rated thermal input of 50 MW'
- The existing licence may need to be reviewed or amended to accommodate the changes proposed.
- As part of its consideration of any licence application / review application addressing the changes proposed, the EPA shall ensure that the application is subject to EIAR in respect to the matters that come within its functions in accordance with EPA Act.
- As part of its consultations, the Commission will be requested to provide the EIA carried out in respect of this proposed development.
- All matters to do with emissions to the environment will be considered and addressed by the EPA.
- The agency may decide that a licence cannot be granted or where there is a decision to grant the licence, conditions will be incorporated.
- A licence cannot issue until a planning decision has been made.

7.0 Technical Advice

7.1. Health and Safety Authority (HSA)

7.1.1. The Commission requested technical advice from the HSA and its response from 29th of May 2024 noted that the HSA is the Central Competent Authority under the Chemicals Act (Control of Major Accident Hazard Involving Dangerous Substances) Regulations 2015 (S.I. 209 of 2015) and confirmed that the development would constitute a new lower tier COMAH establishment. The response then went on to state that clarifications are required before the authority can provide technical advice.

7.1.2. The applicant's response to the HSA submission was received by the Commission on the 5th of July 2024 and included a technical response to all 28 items of further information, and an updated Land Use Planning Assessment report of major

accident hazards (Technical Appendix 17A to Chapter 17 of the EIAR 'Major Accidents and Directives'). It noted that Chapter 17 and Land Use Conclusions have not changed significantly as a result of the requested changes.

7.1.3. The HSA's second response was received by the Commission on the 12th of September 2024 and addressed thirteen separate items and again stated that further clarifications are required before the authority can provide technical advice.

7.1.4. The applicant responded to the HSA's second submission on the 7th of November 2024. It included individual responses to the 13 items of clarification sought by the HSA and further amendments to Technical Appendix 17A.

7.1.5. The Commission referred the applicant's second response to the HSA in May 2025 and in a response received in July 2025, the HSA stated that the Authority does not advise against granting planning permission and makes no further observations at this stage. The HSA response included a note that the Authority did not receive a revised TLUP risk assessment report, only the summary report issued in response to its letter of September 2024 and the Authority has based its advice on the information given in the received summary report and not the full revised TLUP report.

8.0 Third Party Observations

Submissions/Observations were received from four no. third parties and the issues raised are summarised below:

8.1. Kim and Jason Henry

- As 40% of construction traffic is proposed to use the L1010 road, this route must be upgraded to accommodate construction traffic, including the narrow bottleneck near Rhode GAA pitch.
- The Bord Na Móna loco route (route of underground cable) should be preserved as a walkway for local residents to continue to enjoy.
- The proposed Community Benefit Fund should be extended beyond the proposed 5-year agreement.

- To mitigate the construction impacts on the daily lives of locals, including the observers, who live within 200m of the proposed underground line, Bord Na Móna are urged to consider a ‘Near Neighbour Scheme’ providing support and compensation to affected residents.
- The visual impact of the proposed development will irreversibly alter the landscape and heritage of Croghan Hill and the surrounding scenic peatlands.
- Strongly opposed to any development that compromises the integrity of the local environment and heritage.

8.2. Daniel Reid

- Concerns over proximity to and impact of the proposed development on both the value and future viability of his lands for agricultural use or habitation, including access and use.
- The development will impact the desirability of the land as a future site for housing for Mr Reid's children.
- A map shows that his land is located immediately north of the site of the proposed substation area at the southern end of the application site.

8.3. Cllr Liam Quinn

- Offaly County Development Plan includes policies noting the sensitive nature of Croghan Hill and its surrounding landscape. The major visual impact of the proposed cableway can be overcome by undergrounding it.
- The road network in the area is in poor condition due to peat foundations and needs to be upgraded. The submitted EIAR refers to a pavement assessment included in Appendix 14A, but no such assessment was included.
- Junction upgrades were sought by the planning authority on 2 applications on the R400, one for a quarry and one for a waste management facility (then on appeal ABP-318566-23) on the R400 at Derrygreenagh Hill. The proposed development will also utilise this junction and the upgrades should be completed prior to construction.
- The L1010 is narrow and in poor condition, where two vehicles cannot pass. It needs to be resurfaced prior to construction.

- A condition should be included requiring that a footpath be constructed from Priory Lawns to the GAA field to ensure safe pedestrian access.
- The Community Benefit funds should be index linked, larger, and run for the lifetime of the development. The proposed amount does not reflect the contribution of other developments in the area, which produce less power. (Yellow River wind farm).
- Houses located within 1km of the development boundary, not just the proposed Power Plant should be included in a 'Near Neighbour Scheme' as no houses are located within 1km of the power plant buildings.
- The cable way (disused rail line) associated with the proposed development should provide for a Greenway route to extend to Croghan Hill and Westmeath.
- The historic Lough Na Shade lake, which is noted for its archaeological features and was drained in the 1950's, should be reflooded/reinstated as a biodiversity / amenity area and would act as a significant buffer to protect views from Croghan Hill.
- An Oral Hearing should be held to allow local residents the opportunity to discuss concerns.

8.4. Adele Kierans

- No overhead wires and pylons should be permitted and should be underground to preserve the sensitive nature of Croghan Hill that is recognised in the development plan.
- The local road network that is built over peat is in very poor condition due to ongoing construction works, with further damage done due to the closure of the R400 in 2023 to replace a failed bridge. The applicant states a pavement assessment is included in Appendix 14A of the EIAR, but it is not included. A pavement / structural survey of the road network should be carried out in advance of construction.
- The R400 at Derrygreenagh Hill is narrow and requires widening and a number of junctions require widening prior to construction.

- The L1010 requires significant upgrading and widening and a condition should be included requiring that a footpath be constructed from Priory Lawns to the football field from Rhode Village as 40% of construction traffic will use this route.
- The Community Benefit Fund, which is a goodwill gesture rather than a requirement, should be index linked, larger and run for the lifetime of the development. Yellow River Windfarm has an annual fund of €595,000 per annum but would produce 6 times less power than the proposed development.
- The route of the disused light rail line, which is to be used as the route of the cable way should provide for a greenway route as part of post-construction remediation.
- An oral hearing should be held to allow local residents the opportunity to expand upon the concerns expressed in their submissions.

9.0 Oral Hearing Request

9.1.1. Two of the third parties requested that an oral hearing be held. Following the completion of an inspector's assessment in relation to the requests, the Commission notified all parties on the 19th of July 2024 that it had decided to determine the application without an oral hearing and that the case could be dealt with adequately through written procedures.

10.0 Applicants response to Submissions and Observations

10.1. The applicant submitted a single consolidated response to all submissions of the prescribed bodies, members of the public and the local authority report on the 7th of June 2024 and a separate response to the EPA submission on the 20th of June 2024. The response of the 7th of June 2024 includes a cover letter and a series of responses under 18 separate headings.

10.2. Cover Letter

10.2.1. Notes the Council sought clarification and/or additional detail on the following points:

- Cumulative Visual Impact
- Additional photomontages showing the cumulative visual impact of the Yellow River Wind Farm and the proposed development should be provided.

- Visual Impact of Power Plant Area
- Materials and finishes of the Power Plant Area
- Requirement for above-ground grid connection
- Drainage Design
- Waste Management
- Community Benefit
- Compliance with 'Midlands Cycling Destination, Offaly Network Map'

10.3. Individual topic responses

10.3.1. The applicant states that much of the response relates to the detail of proposed planning conditions and that 'prior to commencement' planning conditions should be worded to facilitate discharge in Parts/Phases as appropriate, in accordance with the guidance on planning conditions issued by the OPR. The response also included a Landscape and Visual Addendum, Including an updated booklet of photomontages.

10.3.2. Principle of Development

- Offaly County Council considers that the principle of the development is acceptable from an energy policy perspective, and largely complies with the objectives and policies of the Development Plan.
- The need to develop new gas-fired power generation plants, such as is proposed, has been made abundantly clear in national policy and sectoral strategy documents, as noted by the Commission for Regulation of Utilities (CRU).
- CRU noted the proposals compliance with climate action policies and CAP 24.

10.3.3. Cumulative Visual Impact

- OCC noted the photomontages did not included the Yellow River Wind Farm, the construction of which was ongoing at the time and had altered the baseline described in Chapter 10 'Landscape and Visual'. A landscape and visual impact addendum and new photomontages are submitted reflecting the completed wind farm, but using the same viewpoints as in the original chapter 10, as they are publicly accessible locations, in the 5km study area and allow conclusions to be drawn on landscape and visual effects in isolation and cumulatively.

10.3.4. Visual Impact of Power Plant Area

- OCC considered that the power plant area is very exposed and prominent and photomontages would be beneficial.
- The applicant does not consider additional viewpoints were necessary and referred to the original Chapter 10, to the addendum and to a number of the viewpoints/photomontages, which highlight the visibility of the Power Plant Area at various distances, elevations, and receptor locations and consider that this all contains a comprehensive range of representative views.
- The visibility and impact of the power plant area must be considered in the context of the updated photomontages showing the proposed development in conjunction with the fully constructed Yellow River Wind Farm.

10.3.5. Materials and Finishes of Power Plant Area

- OCC sought additional details of external panelling on the power plant as it would be a symbol of 21st Century industrial design.
- The external façade panelling is set out in chapter 5 (proposed development) and chapter 10 (landscape and visual), in particular 10.6 'Façade Colour Scheme for the Proposed Development', with the colour scheme selected to minimise the visual impact and allow buildings to be unobtrusive against their background.
- Samples of material finishes may be submitted for agreement prior to development commencing.

10.3.6. Visual Impact of Grid Connection

- A number of submissions expressed concern that the grid connection would be a very prominent feature in the landscape and noted the proximity to Croghan Hill.
- The site is not located in a CDP area of 'High Landscape Sensitivity'.
- The LVIA included viewpoints showing the proposed Overhead Line, while it also assessed Key Scenic Views from the development plan.
- Croghan Hill, the closest high landscape sensitivity area is c5.5 km to the south of the Power Plant Area. Views from Croghan Hill are not designated as Key Scenic Views, but viewpoints 12 and 13 from Croghan Hill have been included in the EIAR and addendum.

- The LVIA acknowledges that the OHL will introduce a noticeable industrial feature to the landscape, but will only be one component of many in available views and will be seen mostly against the land.
- The lattice towers will be muted mid grey, will blend into the landscape and while still clearly recognisable, will not become prominent features.
- The addendum has considered the OHL together with the Yellow River Wind Farm and while the OHL will increase the combined visibility of industrial features, the prominence of the wind turbines will reduce the perception of the OHL as the wind farm will remain the main focus in panoramic views, particularly from Croghan Hill.

10.3.7. Requirement for Above-Ground Grid Connection

- OCC required a robust justification as to why the entire line could not be placed underground, and individual submission raised the same query.
- The constructed line will be transferred to ESB Networks and Eirgrid.
- EirGrid's functional specifications for the building of transmission systems states that 'for environmental and engineering reasons the routing of underground cables through peatland shall be avoided if at all possible' and 'overhead lines are the preferred transmission infrastructure to be used for traversing peatland'
- Concerns also exist regarding the function and durability of an underground cable being compromised over time as a result of differential settlement or lateral movement owing to peat instability.
- They have only included underground cabling where ground conditions permit.

10.3.8. Cultural Heritage and Archaeology

- The applicant notes the recommendation of the Department of Housing, Local Government and Heritage (DHLGH), that all proposed mitigation measures be implemented in full, other than as per suggested conditions.
- The applicant will proactively engage with a suitability qualified archaeologist as part of the development including pre construction works, as they have done during the course of peat extraction.

- The CEMP will be updated and agreed with the planning authority prior to commencement of development, and will be a live document to be reviewed and updated as constraints arise on site.
- A final archaeological report describing the results of all archaeological monitoring and any archaeological investigative work/excavation will be submitted to the department and the planning authority.

10.3.9. Noise and Dust

- The Environment and Water Services Department recommended a number of conditions for noise and dust. In response, the applicant stated all noise emissions shall comply with the recommendations set out in chapter 11 of the EIAR and/or EPA IPC licence requirements, and that all mitigation measures outlined in the submitted Construction and Environmental Management Plan (CEMP) shall be implemented by the applicant/developer in the Contractor's CEMP.

10.3.10. Lough na Shade

- Cllr. Quinn has stated that a historic lake, "Lough na Shade", should be reinstated and reflooded as a biodiversity/amenity area.
- In response, the applicant noted that the area in question was drained in the 1950s, is outside of the development footprint and the submitted application does not propose any reinstatement of the feature.

10.3.11. Transport and Traffic

- The Road Design Department recommended a number of planning conditions, and the applicant noted the 14 proposed pre-commencement conditions, and stated all matters to be agreed, will be agreed, prior to commencement including:
  - Traffic management has been addressed in Chapter 14 of the EIAR and a CEMP and CTMP are included. Both will be updated and agreed.
  - Temporary traffic arrangements/controls, road tie-ins, haul routes to be agreed in parts/phases due to the various aspects/scales/locations of development.
  - Details of phasing and mitigation for deposition / spillage of site materials onto public road(s) during construction can be added to the CEMP / CTMP.

- A stage 1/2 Road Safety Audit did not identify any issues in achieving sightlines and the 400kV substation does not require a new entrance.

- In response to concerns regarding the use of the L-1010 for construction traffic in its current condition, the applicant stated that a full Traffic and Transport Assessment was carried out and forms part of chapter 14 of the EIAR. It concludes that traffic volumes and movements associated with the construction and operational phases of the proposed development can be accommodated on the existing road network, but also states that a survey of roads and bridges can be carried out and a schedule of any required works will be prepared on foot of same for agreement.

Conditions recommended by the Edenderry Municipal District Engineer

- The developer will obtain a road opening licence and will liaise with the council liaison engineer, as is recommended.
- Should the Commission consider a Special Contributions necessary for road strengthening and upgrading of the R400 in the sum of €100,000 spread out over 3 years, it is reminded the Offaly Development Contribution Scheme (DCS) 2021-2025 is already allocating significant funding for the R400. The sum can be agreed in advance of development commencing.

Road Design Conditions

- A Traffic and Transport Assessment has been carried out in accordance with the TII guidelines and is included at Chapter 14 of the EIAR.
- A Stage 1/2 Road Safety Audit (that considered proposed access points on to the public road from the PPA and the 220kV substation) has been carried out.
- €1 million has been allocated in the DCS for the Regional Road R400 Rochfortbridge to Rhode Business Park.
- The Road Safety Audit (Appendix 14I) did not identify that right turn lanes would be required.
- 6 electric vehicle charging points will be provided along with a minimum of 4 no. accessible parking spaces.

- Separate Traffic Management Plans could be conditioned to be agreed in advance of construction for the Power Plant Area, Electricity Grid Connection OHL, Electricity Grid Connection U/G Cable and Substation Areas.
- With respect to a proposed condition regarding public lighting along the R400, no new permanent lighting is required along the R400. Some temporary lighting may be required during construction.
- Roadside drainage shall be carried out so as to not affect existing drainage.
- A cash deposit or bond will be used to secure reinstatement of damaged roads.
- Road cleaning is addressed in the CEMP.
- Responding to the statement that the R400 is not a viable option for the laying of any services relating to this site and in this regard no services will be permitted within the Road Structure, the applicant stated that 'the R400 is identified by Gas Networks Ireland (GNI) as being the preferred option for a portion of the gas pipeline route. The gas pipeline connection will be subject to a separate consent by GNI under Section 39A of the Gas Act and does not form part of this planning application'.

TII Submission

- The traffic volumes and movements associated with the construction and operational phases of the proposed development can be accommodated on the existing national road network and is addressed in Chapter 14 and the CTMP.
- TII shall be advised of all proposals agreed between the appointed contractor and the relevant stakeholders.
- Pre and post construction road and bridge surveys will be carried out including the national road and a schedule of repair works will be agreed.

Cllr. Quinn and other individuals

- The observers requested that a pavement/structural survey of the R400 and L1010 be carried out and works completed in advance of any construction taking place, as the R440 is in poor condition and a bridge over the Yellow River failed in 2023. Cllr Quinn also stated that no pavement assessment was included in Appendix 14A, as is stated in Chapter 14. The applicant responded by stating that

it is not standard practice to include these surveys as part of a planning application, but pre and post construction surveys will be carried out so that they are not outdated.

- The observers state that the R400 at Derrygreenagh Hill should be widened and upgraded. In response, the applicant state that the current road width of the R400 is capable of accommodating all traffic, including abnormal loads.
- Cllr. Quinn also states that the southern approach to the proposal on the R400 should be upgraded prior to construction and in line with the requirements of planning applications PL2/21/247 and PL2/22/490 (ABP Ref. 318566). The applicant responded that specific upgrade works were conditioned in order to satisfy the requirements of the submitted Stage 2 RSAs on those applications.
- The observers stated that the L1010 (Rhode Village - Taylors Cross) should be widened where feasible and overlaid with a new surface in advance of construction. In response, the applicant stated that the road will be surveyed and a schedule will be prepared of any required works to roads, bridges or any other public infrastructure to enable / upgrade the haul route(s) to be used by construction related traffic. It is not proposed to widen the road, as it is already used by commercial vehicles and has passing bays.

10.3.12. Footpath Request

- Cllr Quinn and other individuals requested a condition requiring the applicant to construct ‘a Footpath from Priory Lawns to the Football Field’ before construction commences. The applicant noted that the area is not within the site boundary and was not considered in the EIAR, nor is it objective of the Offaly Development Plan, but its funding would be considered suitable under the proposed Community Benefit Fund.

10.3.13. Hydrology and Hydrogeology (including Drainage)

The Environment and Water Service Department considered that additional detail is required in relation to a number of areas and the applicant responded as follows:

- The applicant lists the places in Chapter 4, 9 and 12 of the EIAR where the relevant information regarding existing drainage layouts can be found.

- A 10m buffer zone either side of the Yellow River and Mongagh River is maintained in line with BLP-20 of the County Development Plan 2021-2027, except as required for the final drainage connections to be made to the watercourses.
- It lists the drawings which contain details of separate surface water collection/attenuation prior to being discharged to the surface water system.
- Pre-treatment of the run-off prior to discharge, including SuDS, is addressed in the drainage system drawings and engineering reports and in the Water Framework Directive Report (Appendix 12C).
- Details of the proposed foul drainage system is found in the Drainage Engineering Assessment Report.
- The discharges from the process water discharge & surface water discharge points will be operated and controlled under a new IE Licence, which will be issued by the EPA. Details of both are in the application drawings and Chapter 12 and its appendices. As noted in paragraph 1.9 of Appendix 12F, ELVs (Emission Limit Values) have not been calculated for surface water discharges because these do not normally contain significant quantities of limited pollutants. The attenuated discharge rate for the surface water is to be limited to greenfield run-off rate. The IE Licence for the Proposed Development will set the ELV and monitoring requirements.

General Conditions - OCC's Environment and Water Services Department (EWSD)

- The applicant will implement all mitigation measures outlined in the EIAR, Construction and Environmental Management Plan (CEMP), Flood Risk Assessment, Invasive Species Management Plan (ISMP), Appropriate Assessment Screening Report and Natura Impact Statement for the relevant construction or operation phases or both.
- Due to the multi element and multi locational aspect of the development, the applicant has requested that detail on welfare facilities are provided prior to commencement of the relevant part/stage of the proposed development.
- The proposed development comprises a number of parts, including the PPA and EGC. All statutory consents and licences required to commence a particular stage

of the works shall be obtained prior to that works stage commencing, as required, including a new Industrial Emissions (IE) Licence for the proposed process water discharge to Yellow River / Castlejordon_020, and for the proposed surface water discharge to Mongagh River / Castlejordon_020.

Conditions from EWSD concerning Groundwater Monitoring

- Groundwater Monitoring will be determined by the EPA and the nature and frequency of same will be set out in the IE Licence.

Conditions from EWSD concerning Surface Water Drainage

- Surface water runoff from roofs, roads and hardstanding areas will be collected in an attenuation tank with outflow limited to the greenfield run-off rate.
- Surface water run-off will not be allowed to flow onto the public roadway or other adjoining properties.
- Surface water discharges will be controlled under a new IE Licence

Conditions from EWSD concerning Foul Sewerage

- Details relating to effluent collection and treatment are addressed in section 3.4.5 of the Construction and Environmental Management Plan (CEMP) and specific details will be included in the Contractor's CEMP, while the applicant notes the requirement that the wastewater treatment system and percolation area would be designed, installed and operated in accordance with the EPA IPC Licence and where foul waste is to be removed regularly from site, it must be transported to an Authorised Waste Facility.

10.3.14. Waste Management

- The applicant notes the requirement of OCC Environment and Water Service Department to submit an Article 11 declaration on waste authorisation to the EPA, regarding excavated peat material and the proposed peat deposition areas.
- Management of waste is addressed in the EIAR and all mitigation in the CEMP and Resource Waste Management Plan (RWMP) shall be implemented by the applicant/developer in the Contractor's CEMP.
- The applicant has an existing IPC licence for peat extraction and will comply with same in respect to the excavation and movement of peat.

- Materials to be imported onto the site will be registered with the EPA prior to the commencement of each part of the proposed development.
- The applicant will agree the source of all stone and soil to be imported onto the site with the planning authority.
- All mitigation measures outlined in the submitted Resource and Waste Management Plan (RWMP) shall be implemented via the Contractor's RWMP.

10.3.15. Community Benefit (including reference to Midlands Cycling Destination)

- Responding to concerns about the geographical area that would benefit from the Community Benefit Fund, the application envisages that the fund will operate in a similar manner to other Bord na Móna Community Benefit Fund models currently in operation.
- While the Council, Cllr Quinn and one of the observers noted a reference in the application to a proposed 'Near Neighbour Scheme', the applicant responded that this was included in the submitted soft copy of the planning application, due to a clerical error. No 'Near Neighbour Scheme' is proposed.
- The observations referred to linking the Grand Canal, Croghan Hill and other walkways in Westmeath along the grid route. The applicant responded that a cycleway/greenway is not included as part of the planning application and was not assessed as part of the EIAR. It also states that Bord na Móna is working with OCC, community groups and other local authorities with respect to the provision of amenity across its land bank and will facilitate such links where feasible.
- Responding to submission that the Community Benefit Fund should be index-linked to output, as is currently best practice for Wind/Solar developments under the current RESS Guidelines (Currently €2/MWh) and that the fund should be larger and run for the lifetime of the development, the applicant reiterated that the commitment is five annual payments of €90,000 beginning on commencement of construction, as this is not a renewable energy generation project and the Community Benefit Fund should not be mandated at €2 per Megawatt hour of generation. The applicant will also provide development contributions in accordance with the Offaly County Council Development Contributions Scheme (2021-2025).

10.3.16. Development Contributions

- Regarding OCC's note that contributions should be applied under the Offaly Development contribution scheme 2021-2025, the applicant states that the R400 is allocated significant funding under the Offaly County Council Development Contribution Scheme 2021 – 2025).
- Regarding OCC's proposal for a special development contribution being required in respect of road strengthening and upgrading of the R400, the applicant states that the 'Regional Road R400 Rochfortbridge to Rhode Business Park' is among the list of capital and other projects to be funded from the Development Contribution Scheme 2021 – 2025 and funding of €1,000,000 has been allocated to the R400 under the Scheme.

10.3.17. Fire Safety

- The applicant agrees with Offaly County Council's Fire Safety Officer that a Fire Safety Certificate and a Disability Access Certificate are to be obtained, and that a Commencement Notice is to be lodged.

10.3.18. Adjoining Land Ownership

- Observer Daniel Reid expressed concern about the proximity of the (400kv) substation to his lands and its impact on the "access, usage and value" of the land and the desirability of the land as a future site for housing. In response, the application stated that a proposed peat or soil deposition area will border sections of the southern boundary of the observers folio, but will not exceed 1m above the existing ground level, and the substation building itself is located approximately 300m from the land boundary at its closest point. They do not agree that Mr Reid's land will impacted negatively in terms of 'access, usage and value' or in terms of its 'desirability' as a future site for housing. Nevertheless, landscape mitigation by way of additional woodland planting is proposed and set out in Appendix 10B of the EIAR.

10.3.19. Oral Hearing

- Cllr. Quinn and one other individual submission requested that an Oral Hearing be held. The applicant stated that they had undertaken extensive community consultation prior to the submission of the application, with the evidence of same

in Appendix 6E of the EIAR. It is the applicant's opinion that an Oral Hearing is not appropriate or required in this case.

10.3.20. Response to the EPA

- The response to the EPA, which was in the form of a separate document noted the EPA comments and that they had entered into discussions with the EPA regarding licencing requirements for the proposed development, and that they would adhere to the requirements of the EPA as set out in its submission.

11.0 Planning Assessment

11.1. Introduction

11.1.1. I have read and examined all documentation on file in full, including the submissions from Offaly County Council, prescribed bodies, and members of the public, as well as all of the applicant's responses in respect of these submissions. I have also inspected the site and surrounding areas and have had regard to and seriously considered relevant International, European, National, Regional and Local policy as well as relevant guidance, relevant to the proposed development, which consists of multiple elements.

11.1.2. Following from my assessment below, I also undertake an Environmental Impact Assessment (EIA) in sections 12 to 26, carry out a Screening for Appropriate Assessment (AA) in Appendix 2 and an AA and AA Determination in Appendix 3 to this report. The conclusions of Appendices 2 and 3 are set out in Section 29 below. I have also carried out a WFD (Water Framework Directive) Assessment, which is set out in Appendix 4 and its conclusions in Section 28.

11.1.3. Where matters addressed in my assessment in this section are also of relevance to EIA or Screening for AA I have cross referenced them below. Many of the submissions/observations in respect of the application specifically concern EIA or AA matters and as such are addressed in those sections of this report, including in relation to population human health, traffic and transport, visual amenity and cultural heritage. I consider that the remaining planning issues to be considered by the Commission can be addressed under the following headings:

- Scope of the project being assessed

- Principle of Development and Land Use
- Development Contributions
- IAA Observation
- Water
- Conditions
- Other Matter Arising

11.2. Scope of project being assessed

11.2.1. The proposed development that is the subject of this application consists of two separate elements. They are described in detail in section 2.2 of this report and can be summarised as including:

1 Demolition of existing structures on site of Derrygreenagh Works and construction of all buildings in the Power Plant Area (PPA) including a Combined Cycle Gas turbine (CCGT – 570MW) and Open Cycle Gas turbine (OCGT – 140MW), 45m and 60m high emissions stacks, site access and peat and spoil deposition area.

2 Electricity Grid Connection (EGC) including the 220kv substation, overhead line and associated pylons, underground line and 400kv substation, two telecommunications masts, two peat deposition areas and tree replanting.

11.2.2. A third element of the overall project is considered in the EIAR and WFD, will be the subject of a separate consent process at a later stage, would consist of:

3 The Gas Connection Corridor (GCC) running north from the site into County Westmeath.

11.2.3. I have also noted in section 2.2.3 of this report that a number of other consents will be necessary in respect of the proposed development including that the proposed CCGT and OCGT Power Plant would fall within the remit of the Industrial Emissions Directive (2010/75/EU) and the applicant/developer would be required to obtain an IEL (Industrial Emission Licence) from the EPA.

11.2.4. Following from the above, Section 37G(4) of the Planning and Development Act 2000 (as amended) provides that (4) Where an application under section 37E relates

to proposed development which comprises or is for the purposes of an activity for which an integrated pollution control licence or a waste licence is required, the Commission shall not, where it decides to grant permission, subject that permission to conditions which are for the purposes of —

(*a*) controlling emissions from the operation of the activity, including the prevention, limitation, elimination, abatement or reduction of those emissions, or

(*b*) controlling emissions related to or following the cessation of the operation or the activity.

11.2.5. Section 37G (4)(A) states that 'Where an application under section 37E relates to proposed development which comprises or is for the purposes of an activity for which an abstraction licence is required, the Commission shall not, where it decides to grant permission, subject that permission to conditions which are for the purposes of controlling the abstraction related to the operation of the activity'.

11.2.6. Section 37G (5) states that 'Where an application under section 37E relates to proposed development which comprises or is for the purposes of an activity for which an integrated pollution control licence, an abstraction licence or a waste licence is required, the Commission may, in respect of that development, decide to refuse a grant of permission under this section, where the Commission considers that the development, notwithstanding the licensing of the activity, is unacceptable on environmental grounds, having regard to the proper planning and sustainable development of the area in which the development will be situated.

11.2.7. Therefore, if the Commission decides to grant permission it shall not attach conditions in respect of the abstraction of water or in respect of emissions to air, water, land, or noise and waste in respect of that part of the site that would be subject to the IE licence. Those matters would be addressed by the EPA through an IEL licence which would be applied for by the applicant/developer following a decision being issuing in respect of this application

11.2.8. However, outside of the boundary of the IPC licensable area, which is indicated by the applicant to be exclusively on the western side of the R400, generally in the area where the current Derrygreenagh Works are located and where the proposed PPA would be sited, matters relating to air, water, land, or noise and waste, fall under the

control of the Commission, in relation to the application of appropriate planning conditions, should the Commission be minded to grant permission.

11.3. Principle of Development and land use

11.3.1. The proposed development includes elements of demolition and construction, which I have considered separately.

Demolition of existing Derrygreenagh works structures on site of the proposed Power Plant area

11.3.1. The existing Derrygreenagh works site accommodated a range of buildings, including a single storey office building; Boiler house; Workshops; Water Tank; and Storage Unit. The locations of the structures are identified on the 'Existing Site Plan (Sheet 1 of 8). The existing buildings have a stated combined floor area of 5,450sqm as per question 11 of the planning application form, which is one third of the proposed floor area of 16,365sqm for the new buildings. Outside of the PPA there are no other structures that require demolition as part of the proposed development.

11.3.2. The existing structures are of no particular architectural merit and have previously been the subject of a grant of permission for their demolition under Commission Reg. Ref. 19.PA0011, which was granted by the Commission on the 12th of April 2010. The grant of permission was extended and expired on the 11th of April 2025. It included for the demolition of all structures, the clearance of the site and the construction of a Combined Cycle Gas Turbine unit (CCGT) of c.430 megawatts MW and a Reserve/peaking open cycle gas turbine unit (OCGT) of c.170MW.

11.3.3. The existing structures on site are not protected structures and are not located in a conservation area, while the Offaly or Westmeath Development Plans do not indicate that there are any protected landscapes or views in the vicinity.

11.3.4. A number of structures to be demolished host bat roosts and this is addressed in Section 16 below (Biodiversity). The applicant has been issued with a Bat Derogation Licence from the NPWS to permit disturbance of the bat roosts as part of the demolition of the buildings. I am satisfied that the existing structures have no features that are worthy of retaining and I am further satisfied that it would not be possible or feasible to incorporate the existing structures into the proposed

development. I have no objection to the demolition of the existing structures on the site.

Land Use

11.3.5. In section 1.3 of this report I described the overall site including the PPA, ECG and the gas connection corridor, to provide context. I then continue with descriptions of the site of the Power Plant Area, which accommodate the existing Derrygreenagh works and consists mostly of locally elevated made ground, the 220kv Substation site which would be located partly on cutaway bog and partly on made ground, the overhead section of the Electricity Grid connection to the interface compound, which would run entirely over cutaway bog, as would the underground section of the 220kv line to the point where it would enter the site of the proposed 400kv substation, which is the only part of the site that is in agricultural use. I refer the Commission to section 1.3 of my report for more detail.

Proposed Plans

11.3.6. I refer the Commission to section 2 of my report which sets out a detailed description of the proposed development and to the comprehensive drawings of all aspects of the proposed development including plans, elevations and sections of each of the proposed building at each of the individual sites as well as pipe routes and road construction methods. Each of the buildings within the PPA has also been identified on an overall site layout plan. Plans, elevations and sections of the pylons, telecommunications masts and the substations have also been provided and include dimensions and precise locations for each structure. The architectural and engineering plans are supplemented by a series of photomontages that show the proposed development in context of the surrounding landscape, including the recently completed Yellow River Windfarm. I am satisfied that the applicant has provide sufficient plans and particulars of all proposed structures, both individually and collectively to enable a thorough assessment of the nature and extent of the proposed development and to formulate definitive findings in respect of their impacts.

The landscape and visual impacts of the proposed development are considered in section 17 below, that assessed the ‘Landscape and Visual’ chapter of the EIAR.

Policy Context

11.3.7. Section 4 of this report sets out a comprehensive policy background to the proposed development and in paragraphs 25.8.11-40 below, as part of the assessment of the climate chapter of the EIAR I have set out a comprehensive policy background and then assess it in paragraphs 25.8.41 to 25.8.49. It demonstrates that there is significant policy support at European, national and county level in both Offaly and Westmeath for the entirety of the proposed development and I refer the Commission to that section of my report.

11.3.8. To summarise my assessment in section 25 below, I conclude that European, National and Regional and county level policy clearly supports the provision of the proposed CCGT and OCGT power plant, overhead and underground 220kV lines, the 220kV and 400kV substations and all supporting infrastructure, subject to detailed and application specific assessments being carried out.

11.3.9. Following from the above, and by reference to sections 4 and 25 of this report, I am satisfied that the proposed development would be consistent with European, national, regional and county level planning policy and would facilitate the development of a key element of nationally identified priority infrastructure.

11.3.10. In sections 25.8.50 to 25.8.59 below, I also examine the consistency of the proposed development with Section 15(1) of the Climate Action and Low Carbon Development Act (as amended). I note that while the proposed development would emit Greenhouse gasses, it would facilitate the delivery of increased levels of renewable energy generation infrastructure primarily in the form of solar farms and windfarms, by ensuring delivery or security of electricity supply, which in combination would help to reduce the overall level of greenhouse gas emissions from electricity generation in line with legally binding greenhouse gas reductions targets set out in European and national legislation and supporting documentation. I conclude that taking the overall level of greenhouse gas emissions that are proposed to be emitted both during the construction and operational phases of the proposed Power Plant are acceptable and I am satisfied that the proposed development and overall project is acceptable.

11.3.11. I am satisfied that the principle of the proposed development would be acceptable, from a policy perspective, in what is historically an industrialised landscape, which has is identified as a suitable location for and continues to host

energy generation facilities, including a recently completed windfarm in close proximity to the PPA and EGC, as well as a solar farm under construction and a CO_2 capture facility also permitted in close proximity to the EGC site.

11.4. Development Contributions

Section 48 - Standard Contribution

11.4.1. In Section 15 of its submission on the application, Offaly County Council stated that Development contributions should be applied in accordance with the Offaly County Council Development Contribution Scheme 2021 – 2025.

11.4.2. Table 1a: 'Level of Contribution – Residential & Industrial / Commercial Development in all other areas' from the current DCS requires the imposition of a roads contribution of €10 per square metre of industrial floor space, and I am satisfied that such a contribution would apply to the applicable elements of the proposed development.

11.4.3. I consider that it is appropriate and correct that a condition would be attached to any grant of permission issued, requiring the payment of a standard Section 48 development contribution.

Section 48 – Special Contribution

11.4.4. Section 16 of its submission states that an annual special development contribution is required in respect of road strengthening and upgrading of the R400 and the recommended conditions included a Special Contribution in three annual instalments of €30,333.33 for road strengthening and upgrading of the R400.

11.4.5. Section 48(1)(c) of the Planning and Development Act 2000 (as amended) provides that: 'A planning authority may, in addition to the terms of a scheme, require the payment of a special contribution in respect of a particular development where specific exceptional costs not covered by a scheme are incurred by any local authority in respect of public infrastructure and facilities which benefit the proposed development'.

11.4.6. A table appended to the Edenderry Municipal District report on the application sets out the basis for calculating the special contribution, which is that the expected life of the road is three years, that the proposed development would reduce the life of the road by one year and that the minimum length of road permissible by the

Department of Transport is 1000m, at a cost of €28 per square metre and the road being 6.5m wide, giving a total of €182,000.00.

11.4.7. The applicant responded by stating that should the Commission consider a Special Contributions of €100,000 necessary (€33,333.33 x 3 years), that the sum can be agreed in advance of development commencing. However, they also stated that 'Regional Road R400 Rochfortbridge to Rhode Business Park' is among the list of capital and other projects to be funded from the Development Contribution Scheme 2021 – 2025 and funding of €1,000,000 has been allocated to the R400 under the Scheme. I have examined the DCS and I agree with the findings of the applicant, where the specific reference to the R400 is set out in Appendix 1 'List of Capital (Transport and Infrastructure) and Other Projects in County Offaly to be funded from the 2021 – 2025 Scheme & other funding sources'. I will address to the words 'other funding sources below'.

11.4.8. As of the time of completing this report, the R400 has been closed for a period of time for reconstruction works, which were described on the etender.gov.ie website as 'The full depth reconstruction of approx. 1900m of pavement which is built over peat and all associated drainage and accommodation works along the R400 Regional Road at Knockdrin and Derryiron Td's Co Offaly towards the Westmeath border'.

11.4.9. The road upgrade works area are also referred to as the 'R400 Peat Pilot Project Rhode, County Offaly' and are partly funded by the Department of Transport as well as from the resources of Offaly County Council generated from its Development Contribution Scheme according to a presentation given by Offaly County Council https://lasntg.ie/wp-content/uploads/2025/05/Roads-Over-Peat-Pilot-Project.pdf and the works are also funded from the annual roads budgets of Offaly County Council from TII and the Department of Transport. The 2024 annual Offaly budget refers to €1,000,000 being allocated from these other funding sources in both 2023 and 2024 for 'Pilot Scheme Testing on roads over peat' https://www.offaly.ie/app/uploads/Roads-programme-2024-website.pdf

11.4.10. The pilot project started with geotechnical investigations in 2019 and 2020 and saw 600m of road replaced in 2023, between the power plant area and Rhode.

The objective of the pilot scheme is to increase the life or roads across bogs from 3 to 10 years.

11.4.11. I consider that the works that are ongoing at present to upgrade the R400 are part of a much larger national pilot project that is being largely funded from central government resources and I am not satisfied that Offaly County Council has demonstrated that any exceptional circumstances exist, to warrant attachment of the special development contribution, over and above that the proposed development would have direct access onto the R400. Particularly when the project to which the proposed special contribution applies, is included in the existing Offaly Development Contribution Scheme 2021-2025 and it is evident that the project is being supplemented by other funding sources from the Department of Transport and TII.

11.4.12. I note a recent grant of permission for 2 dome structures to capture CO_2, that would also use the R400 road as its means of access (P.A. Reg. Ref. 24/60289), did not include a condition requiring a special contribution to be paid in respect of works to the R400. The grant of permission did however attach a condition requiring that pre and post construction road surveys be carried out and that any damage caused to the road would be repaired. Such a condition is already proposed in this application and I would consider it appropriate that such a condition is attached to a grant of permission, if the Commission is minded to grant permission, so that if any damage is caused to the upgraded road as a result of the proposed development, that the road is restored at the applicant/developer's expense.

11.4.13. At the time of completing this report, the Offaly Development Contribution Scheme 2011-2025 was still in force and would be applicable to decisions taken. I also note that submissions on the Draft Development Contribution Scheme 2026-2032 were invited up until the 19th of January 2026, so the Commission is advised that a new DCS may be in place at the time a decision is made in respect of this application.

11.5. IAA Observation

11.5.1. In Appendix 6C, the comments of the IAA were noted wherein they stated that:

In the event of a formal planning application being progressed, it is likely that the Authority will furnish the following general observations: "In the event of planning consent being granted, the applicant should be conditioned to contact the IAA to

agree an aeronautical obstacle warning light specification for the flue stacks and notify the Authority of intention to commence crane operations with at least 30 days prior notification of their erection."

11.5.2. While the IAA was notified of the application, it did not make an observation of the application. However, I note that in the 'Telecommunications Impact Study (Appendix 16A), the applicant proposed that aviation warning lights would to be affixed to the structures will be agreed with the Authority in advance of development commencing.

11.5.3. I am satisfied that should be Commission be minded to grant permission, that this matter can be addressed by way of a condition.

11.6. Water

11.6.1. I am satisfied that the applicant has demonstrated that there is sufficient water available to serve the proposed PPA, by way of abstraction from ground and that there would be sufficient recharge to ensure a consistent supply to the plant. The abstraction of water would be subject to an abstraction licence (a separate application to the EPA), if permission is granted, and a condition controlling abstraction shall not be imposed to a grant of permission, if issued, by the Commission.

11.6.2. With respect to the water supplies to the two substations, the applicant has not provided details of water supplies that would serve their limited requirements, as they would not be permanently occupied. I am however satisfied that this can be addressed by way of a condition, if the Commission is minded to grant permission.

11.7. Conditions

11.7.1. In Section 18 of its Chief Executive's Report. Offaly County Council suggested a number of conditions relating to access, traffic and transport; water and drainage; bonds and contributions; sources of construction materials; mitigation measures from the NIS, EIAR and CEMP, Flood Risk Assessment and Invasive Species Management Plan; Biodiversity and Landscape; Noise; Aircraft navigational safety; timescales; archaeology; badger survey; community gain; external finishes; and cycleways. Many of the proposed conditions proposed are standard conditions and would be captured in standard planning conditions and I have already addressed some of these conditions, such as development contributions and aeronautical

warning lights, in the preceding paragraphs. Other proposed conditions are addressed in my assessment of the individual technical chapters of the EIAR such as community gain and external finished to buildings. Most of the other matters that arose would be covered in the proposed mitigation measures set out in the EIAR, the NIS and other technical documents such as the CEMP and CTMP. I have highlighted key proposed conditions in Section 5.1.18 of this report. as number of other proposed conditions are addressed below

Environment & Water Services

11.7.2. The Environment & Water Services section recommended the attachment of a number of conditions relating to waste management and requiring the applicant to apply for Integrated Pollution Control licence, to comply with Article 27 of the European Communities (Waste Directive) Regulations 2011, S.I. No. 126 of 2011. These are matters that are outside of the planning code and a grant of permission on its own does not permit an applicant to carry out development in the absence of all other necessary consents. I do not consider that is it necessary to attach conditions in respect of these matters.

Liaison Engineer

11.7.3. The submission of Offaly County Council recommends the attachment of a condition requiring that 'a dedicated Liaison Engineer shall be appointed by Offaly County Council for the duration of this development. All costs associated with this appointment shall be incurred at the developer's expense for the duration of the construction period. The stated reason is the interest of clarity, road safety and orderly development.

11.7.4. The proposed development is no doubt a significant development and I consider it important that Offaly County Council would be fully aware of many of the activities occurring at the site. However, I do not consider that it would be appropriate that a condition would be attached permitting Offaly County Council to appoint an engineer at the applicant/developers expense without agreement being reached between the parties. For that reason I would recommend that an adapted form of the proposed condition be imposed, should the Commission be minded to grant permission.

Public lighting along R400

11.7.5. Offaly County Council has suggested that a condition be imposed requiring public lighting to along the R400, in accordance with the details submitted as part of the planning application. The applicant responded that no permanent lighting was required or proposed along the R400. I am not satisfied that there is requirement for public lighting along the public road and do not consider a condition that effect is necessary.

11.8. Other Matters Arising

11.8.1. All other issues including those raised in the submissions on the application related to Air Quality; Cultural Heritage & Archaeology, Biodiversity, Landscape and Visual; Noise and Vibration; Water Environment; Land, Soils and Geology; Traffic and Transport; Population & Human Health; Material Assets; Major Accidents and/ Disasters and Climate are addressed in Sections 15.0 to 26 of this report (EIAR technical chapters).

12.0 Environmental Impact Assessment (Sections 12-26)

12.1. Statutory Provisions

12.1.1. The application comprises a 10-year planning permission for a development, the key elements of which can be summarised as Combined Cycle Gas Turbine ('CCGT') (570MW) and Open Cycle Gas Turbine ('OCGT') (140MW) Thermal Power Plant, and an Electricity Grid Connection including 2 no. substations (1 no. 220kV and 1 no. 400kV), c.5km of overhead lines, an interface station and c3.4km of underground cable connections between the substations, 3 no. permanent Peat Deposition Areas (225,000sqm, 50,200sqm and 75,300sqm), Tree Replanting Areas (c.17.5 ha.), associated buildings, plant, site works, services and ancillary development. The full description of the proposed development is set out in Section 2.2 of this report.

12.1.2. Part 1 of Class 2 of Schedule 5 to the Planning and Development Regulations 2001 (as amended), requires EIA for 'A thermal power station or other combustion installation with a total energy output of 300 megawatts or more'. The proposed development therefore requires EIA and the applicant has prepared an EIAR.

12.2. EIA Structure

12.2.1. Sections 12 to 27 of this report comprises the environmental impact assessment of the proposed development in accordance with Planning and Development Act 2000 (as amended) and the associated Regulations, which incorporate the European Directives on Environmental Impact Assessment (Directive 2011/92/EU as amended by 2014/52/EU). Section 171A of the Planning and Development Act, 2000 (as amended) defines EIA as a process:

> a. consisting of the preparation of an EIAR by the applicant, the carrying out of consultations, the examination by the Commission of the EIAR and relevant supplementary information from the applicant or through consultations, the reasoned conclusions of the Commission on the significant effects on the environment of the proposed development and the integration of the reasoned conclusion into the decision of the Commission, and
>
> b. includes an examination, analysis and evaluation, by the Commission, that identifies, describes and assesses the expected direct and indirect significant effects of the proposed development on defined environmental factors (see paragraph 13.1.1 below) and the interaction of these factors, and which includes significant direct and indirect effects derived from the vulnerability of the proposed development to risks of major accidents and/or disasters.

12.2.2. Article 94 of the Planning and Development Regulations, 2001 and associated Schedule 6 set out requirements on the contents of an EIAR.

12.2.3. The EIA sections of this report is divided into a number of sections running from section 12 (this section) to Section 27. This section assesses the EIAR;s compliance with the requirements of Article 94 and Schedule 6 of the Planning and Development Regulations 2001 (as amended). Sections 13-26 assess the technical chapters while section 27 sets out the reasons conclusions on the significant effects on the environment.

12.3. Issues Raised in Respect of EIA

12.3.1. Issues raised in submissions on the application, in respect of EIA, are set out at the start of each section from section 14-26 below.

12.4. Compliance with the Requirements of Article 94 and Schedule 6 of the Planning and Development Regulations 2001 (as amended)

Article 94 (a) Information to be contained in an EIAR (Schedule 6, paragraph 1)

A description of the proposed development comprising information on the site, design, size and other relevant features of the proposed development (including the additional information referred to under section 94(b).

Chapter 4 of Volume 1 of the EIAR provides a description of the 'Existing site and Conditions'. The chapter includes a description of the site location, its setting and the surrounding area, site specific planning history, as well as potential environmental sensitivities and receptors. It describes the route of the proposed electricity line, as well as the sites of the Power Plant, 220kv substation, 400kV substation and the corridor/route of the proposed gas pipeline.

A detailed description of the proposed development is contained in Chapter 5 'Proposed Development and Overall Project' of Volume 1 of the EIAR. It includes a description of key terminology, before describing the nature of how the OCTG and CCGT processes work. It lists the component elements/buildings proposed for 1) the power plant area; 2) the grid connection, including the substations, and 3) the gas connection, including temporary construction phase works for each element.

It then describes each of the individual elements of the proposed development by reference to architectural drawings, including dimensions and heights for the main structures. It also includes details of the proposed demolition elements and the peat and soil deposition areas.
It describes the construction phase methodology in detail, including the type of machinery and materials to be used, traffic and waste management, as well as the duration of each of the separate elements of construction.

The operational and decommissioning phases of the project are also detailed while the hours of operation during the construction, commissioning, operational and decommissioning phases are set out.

Details of expected staffing levels are provided as are details of a proposed Community Benefit Fund.

Chapter 5 also includes details of other elements of the proposed development such a water supply, wastewater treatment, surface water drainage and attenuation, firefighting systems and external lighting.

I am satisfied that the description of the proposed development and the overall project is adequate to enable decision making.

A description of the likely significant effects on the environment of the proposed development (including the additional information referred to under section 94(b).

Chapters 7 to 18 of the EIAR describe the likely effects including likely significant effects on the environment, under a number of headings which are as follow:

Table 12.1 – Summary Table of Adequacy of Information on Likely Significant Impacts

Technical Chapter	Description of Likely Significant Impacts	Adequacy of Information (Y/N)
Chapter 7 – **Air Quality**	Predicted Impacts – Section (S.) 7.5 Mitigation and Enhancement Measures – S. 7.6 Residual Effects – Section 7.7	Y

	Cumulative Effects – Section 7.8	
Chapter 8 – Cultural Heritage and Archaeology	Predicted Impacts – Section 8.5 Mitigation Measures – Section 8.6 Residual Effects – Section 8.7 Cumulative Effects – Section 8.8	Y
Chapter 9 – Biodiversity	Predicted Impacts and assessment of associated effects – Section 9.5 Mitigation and Enhancement Measures – S. 9.6 Residual Effects – Section 9.7 Cumulative Effects – Section 9.8	Y
Chapter 10 – Landscape and Visual	Predicted Impacts – Section 10.5 Mitigation and Enhancement Measures Embedded Mitigation by Design – S10.6 Residual Effects – Section 10.7 Cumulative Effects – Section 10.8	Y
Chapter 11 – Noise and Vibration	Predicted Impacts – Section 11.5 Mitigation and Enhancement Measures – S. 11.6 Residual Effects – Section 11.7 Cumulative Effects – Section 11.8	Y
Chapter 12 – Water Environment	Predicted Impacts – Section 12.5 Mitigation and Enhancement Measures – S. 12.6 Residual Effects – Section 12.7 Cumulative Effects – Section 12.8	Y
Chapter 13 – Land, Soils and Geology	Predicted Impacts – Section 13.5 Mitigation and Enhancement Measures – S. 13.6 Residual Effects – Section 13.7 No specific section on Cumulative Effects	Y
Chapter 14 – Traffic and Transport	Predicted Impacts – Section 14.5 Cumulative Effects – Section 14.6 Mitigation and Enhancement Measures – S. 14.7 Residual Effects – Section 14.8	Y
Chapter 15 – Population and Human Health	Predicted Impacts – Section 15.5 Mitigation and Enhancement Measures – S. 15.6 Residual Effects – Section 15.7 Cumulative Effects – Section 15.8	Y
Chapter 16 – Material Assets	Predicted Impacts – Section 16.5 Mitigation and Enhancement Measures – S. 16.6 Residual Effects – Section 16.7 Cumulative Effects – Section 16.8	Y
Chapter 17 – Major Accidents and Disasters	Predicted Impacts – Section 17.5 Mitigation Measures – Section 17.6 Residual Effects – Section 17.7 Cumulative Effects – Section 17.8	Y
Chapter 18 – Climate	Predicted Impacts – Section 18.5 Mitigation and Enhancement Measures – S. 18.6 Residual Effects – Section 18.7 Cumulative Effects – Section 18.8	Y

The cumulative interactions of the topics addressed in chapters 7-18 of the EIAR are considered in Chapter 19 of the EIAR, while a comprehensive Schedule of Environmental Commitments (mitigation measures) for the Proposed Development and Overall Project is set out in Chapter 20 and is effectively a compendium of the mitigation measures set out in chapter 5 and chapters 7-18 of the EIAR.

As described above, an assessment of the likely significant direct, indirect and cumulative effects of the proposed development is carried out for each of the technical chapters of the EIAR. I am satisfied that the assessment of significant effects is comprehensive and robust in respect of each of the technical factors, set out in Chapters 7-18 of the EIAR and enables informed decision making.

A description of the features, if any, of the proposed development and the measures, if any, envisaged to avoid, prevent or reduce and, if possible, offset likely significant adverse effects on the environment of the development (including the additional information referred to under section 94(b).

The EIAR includes designed in mitigation measures and measures to address potential adverse effects in a series of technical studies and report. (see Table 12.1) which indicates the location of Mitigation Measures in each of the technical EIAR Chapters. These 'Environmental Commitments/mitigation measures' are also stated in a slightly different format in Chapter 20 'Schedule of Environmental Commitments'. These, and arrangements for monitoring, are detailed in:

- Tables 20.1 to 20.3 of Chapter 20 – Schedule of Environmental Commitments (Mitigation Measures)
- Appendix 5A – CEMP (Construction Environmental Management Plan)
- Appendix 5B – Peat and Spoil Management Plan
- Appendix 7A – Air Quality Impact Assessment
- Appendix 8B – Archaeological Report for Site Investigations
- Appendix 8B – Archaeological Report for Peat Deposition Areas
- Appendix 9C – Bat Survey Reports
- Appendix 9D – Aquatic Survey Reports
- Appendix 9E – Badger Survey Report
- Appendix 9F – Breeding Birds Survey Report
- Appendix 9G – Wintering Birds Survey Report
- Appendix 9G – Smooth Newt eDNA Analysis Report
- Appendix 9J – Bord Na Móna Rehabilitation Plans
- Appendix 9K – Habitat Management Plan
- Appendix 10B – Landscape Mitigation Strategy
- Appendix 11B – Site, Receptor and Monitoring Locations (Noise)
- Appendix 11C – Baseline Sound Level Monitoring
- Appendix 11D – Acoustic Modelling Details

- Appendix 12A – Flood Risk Assessment
- Appendix 12C – Water Framework Directive Screening Assessment
- Appendix 13B – Generic Quantitative Risk Assessment
- Appendix 14B – Abnormal Loads Report
- Appendix 14F – Cumulative Development (Traffic)
- Appendix 14H – Construction Traffic Management Plan (CTMP)
- Appendix 16A – Telecommunications Impact Study
- Appendix 17A – TULP and MATTE Assessment
- Appendix 18A – Risk Framework
- Appendix 18B – Climate Change Risk Register

I am satisfied that mitigation measures to offset significant adverse effects have been identified in the EIAR, including measures incorporated into the design.

A description of the reasonable alternatives studied by the person or persons who prepared the EIAR, which are relevant to the proposed development and its specific characteristics, and an indication of the main reasons for the option chosen, taking into account the effects of the proposed development on the environment (including the additional information referred to under section 94(b).

A description of the reasonable alternatives considered is contained in Chapter 3 of the EIAR (Need and Alternatives). The alternatives considered were 1) the 'Do Nothing' Scenario; 2) Alternative Site Locations; 3) Alternative Technical Solutions; 4) Alternative Layouts and Designs.

<u>Alternative Locations</u>

The main reason for opting for the proposed location is the availability of the land within the existing Bord Na Móna bog complex. None of the 312ha site lies within the 33,000 hectares on 82 Bord na Móna bogs, that are being rehabilitated under the 'Enhanced Decommissioning, Rehabilitation and Restoration Scheme (EDRRS)' that is funded under the EU's Recovery and Resilience Facility, through the National Recovery and Resilience Programme, where up to €108 million is being invested.

The Bord na Móna Derrygreenagh Bog Group is well connected and proximate to national infrastructure including major road, fibre, gas and grid networks and is the subject of numerous post peat extraction activities including quarrying, commercial forestry and biomass storage and chipping. The predominantly brownfield industrial site is considered suitable for redevelopment (the 400Kv substation is the only part of the proposed development not on brownfield land).

The relative equidistance from the Power Plant Area to key primary infrastructure requirements (gas supply to the north) and electrical connection for power export to the south at the 400kV substation) as well as Bord na Móna landownership are key considerations as is a previous grant of permission for a gas fired thermal plant, that established the principle of a power plant development on the site.

The 220kV substation is required to be located in close proximity to the power plant site, while factors which influenced the grid connection route included

technical, economic and environmental considerations. It was deemed necessary to facilitate this type of large power output development and it was necessary to connect into the 400kV Oldstreet-Woodland power line. The R400 Regional road was not deemed to have sufficient capacity for a second underground 220kV line as one is already permitted on this route, so Bord Na Móna lands were the only suitable route to a grid connection.

While an indicative Gas Connection Corridor has been determined as the preferred route, this will be applied for by Gas Networks Ireland (GNI) under separate consenting processes.

Alternative Technical Solutions

The availability of rapidly dispatchable generation can only be achieved, at a large scale, using a thermal plant as is proposed, while the 400kV substation would greatly enhance electricity grid infrastructure to meet future electricity needs.

The selection of a mix of a CCGT and OCGT gas fired technology over CCGT or OCGT only solutions give the proposed development maximum flexibility in operation to respond to generation capacity required to support renewable electricity generation.

The selected technology would support transitioning to zero carbon emission by 2050 by having capability to operate with a minimum of 5% hydrogen blended into the natural gas supply. The system would have capacity to operate on a greater percentage of hydrogen as supply chains improve, thus improving sustainability.

An Air-Cooled Condenser (ACC) is required, as water cooling and wet or hybrid cooling towers are not feasible due to a lack of a proximate and suitable watercourse.

Overhead lines are Eirgrid's preferred transmission infrastructure to be used for traversing peatland, but the type and nature of the electricity grid connection (part overhead and part underground) was selected from a balance of considerations including available area, visual impact, ground conditions, local watercourses, access to the site, environmental constraints, efficiency of operation, maintenance, cost and cumulative developments.

A double circuit connection was selected ahead of a single circuit option as the two circuits run independent of each other and is more reliable.

The overhead line towers would be a mix of suspension towers and strain towers to ensure that adequate clearance is provided from wind turbines in the Yellow River wind farm. Eirgrid policy is to avoid the undergrounding of cables through peatland if possible. The underground section is cognisance of the nearest sensitive receptors and crossing utilities and will run along the route of the existing railway line and machine pass infrastructure.

For the substations a 1) gas insulated switchgear (GIS) substation; 2) an air insulated switchgear (AIS) substation and 3) a hybrid switchgear model that combines components of both were considered. A GIS type substation has a much smaller compound footprint and has a non-descript industrial building type appearance whereas the AIS type substation has a larger footprint with components out in the open giving it a very distinctive substation appearance. The proposed 220kV substation would be a hybrid GIS-AIS design for ease of

maintenance, while the 400kV substation would be a GIS station due to nearby sensitive receptors and proximity to the Grand Canal.

Though not part of this application, the gas pipeline would likely be constructed from carbon steel pipe capable of transporting hydrogen or hydrogen / natural gas blends, with thickness and design to be determined by Gas Networks Ireland.

Alternative Layouts
The alternative options took into consideration the availability of land at the existing Derrygreenagh works and existing constraints, and included proximity to receptors, value engineering, future use of the site and visual impact.

The power plant location was predetermined by reason of a previous grant of permission, made ground and a lack of deep peat at the Derrygreenagh works.

The previously permitted layout from 2010 was deemed not appropriate in light of BAT (Best Available Technology). The chosen layout reflects the typical layout of such facilities and the preferred route to site for the gas connection is wide enough to facilitate a connection. The surface water attenuation tank is close to the discharge route to the north and the Open Cycle Gas turbine (OCGT) has moved south to reduce the cable run to the 220kV substation. Overall, the site is more compact than the previously permitted site layout, while the relocation of the site entrance provides better sight lines along the R400.

The 220kV substation is required to be close to the Power Plant and utilises an existing vehicular entrance and an underpass of the R400.

An overhead grid connection was selected for part of the line taking known constraints into account, in particular water and the potential for flooding along the route, which have also been factors in selecting the tower locations, which require special foundations.

The location of the cable compound (the Line-Cable Interface Compound) has been proposed due to proximity to a nearby rail access track in the ownership of Bord na Móna and proximity to an existing tree line to its south, that would reduce its visibility from nearby dwellings.

Running the underground grid connection cable along the route of the disused railway line/machine pass including beneath the bridge over the L1010 road would ensure minimal disruption to nearby sensitive receptors.

Ecological constraints meant the 400kV substation could not be located on Bord Na Móna lands. The use of a GIS substation (mostly indoor) rather than a AIS substation (mostly outdoor) with mitigation measures implemented is considered to be very effective at reducing the potential for significant visual impacts to occur.

The gas pipeline route, which does not form part of the application, but is assessed in the EIAR, is relatively direct and would be relatively unconstrained and run through mainly agricultural land. It will include a trenchless crossing of the M6. Gas Networks Ireland will determine the final route, so no alternative corridors were considered in the EIAR.

Temporary construction compounds
Will be appropriately sized, located in close proximity to each element of the development and located to facilitate ease of access from public roads.

Environmental Effects
Section 3.7 sets out a comparison of key considerations and relevant environmental effects between reasonable alternatives studied. Table 3.1 addresses 'Layout Design – Key considerations'. Table 3.2 reviews options for the Power Plant Area (2010 and current proposed layout) against the environmental topics set out in sections 14-25 of this report, while Table 3.3 reviews three options for the 400kv substation against the same environmental criteria.

Conclusion
I am satisfied, therefore, that the applicant has studied reasonable alternatives in assessing the proposed development and overall project and has outlined the main reasons for opting for the current proposal before the Commission, which were based on minimising environmental effects, and in doing so the applicant has taken into account the potential impacts on the environment.

Article 94(b) Additional information, relevant to the specific characteristics of the development and to the environmental features likely to be affected (Schedule 6, Paragraph 2).

A description of the baseline environment and likely evolution in the absence of the development.

A detailed description of the site location is contained within Chapter 4. It describes 1) The Power Plant Area; 2) The Electricity Grid Connection and 2 no. substations, and; 3) The Gas Connection Corridor which will be part of a separate consenting process.

A description of the 'baseline environmental conditions and constraints' is contained in each technical chapter of the EIAR as follows:
Sections 7.4 (Air Quality); 8.4 (Cultural Heritage and Archaeology); 9.4 (Biodiversity); 10.4 (Landscape and Visual – called 'Receiving Environment'); 11.4 (Noise & Vibration); 12.4 (Water Environment); 13.4 (Land, Soils and Geology); 14.4 (Traffic and Transport); 15.4 (Population and Human Health); 16.4 (Material Assets); 17.4 (Major Accidents and Disasters) and 18.4 (Climate).

The likely evolution in the absence of the development, is effectively the 'Do-Nothing' Scenario and is found in each of the Sections as follows, under the section heading of 'Predicted Impacts', unless stated:
Sections 7.5 (Air Quality); 8.5 (Cultural Heritage and Archaeology); 9.5 (Biodiversity - 'Predicted Impacts and Assessment of Associated Effects'); 10.5 (Landscape and Visual); 11.5 (Noise & Vibration); 12.5 (Water Environment); 13.5 (Land, Soils and Geology); 14.5 (Traffic and Transport); 15.5 (Population and Human Health); 16.4 (Material Assets); 17.5 (Major Accidents and Disasters) and; 18.5 (Climate).

A description of the forecasting methods or evidence used to identify and assess the significant effects on the environment, including details of difficulties (for example technical deficiencies or lack of knowledge) encountered compiling the required information, and the main uncertainties involved.

The methodology employed in preparing the EIAR including the forecasting methods is set out in Table 1.3 of Chapter 1 'Introduction' and is also set out in more detail in each of the individual technical chapters that assess the environmental effects of the proposed development.

Chapter 1 also indicates that there were no significant difficulties encountered during the preparation of this EIAR, however, where difficulties were encountered for the specialist EIAR chapters, they have been identified and discussed in the relevant chapters. I make comment on these where necessary in the assessment. I am satisfied that forecasting methods and evidence used to inform the technical chapters is adequate in respect of the assessment of likely significant effects on the environment.
A description of the expected significant adverse effects on the environment of the proposed development deriving from its vulnerability to risks of major accidents and/or disasters which are relevant to it.
This matter is specifically dealt with in EIAR Chapter 17 'Major Accidents and Disasters' and its appendices. Specific risks have been identified in relation to 1) Do-nothing scenario; 2) Construction Phase; 3) Operational Phase and 4) Decommissioning Phase for each of the 1) Power Plant Area; 2) Electricity Grid Connection and 3) Gas Connection Corridor elements of the proposed development. It included an assessment of hazardous substances, general construction activities, electrical hazards and natural hazards. These risks are reasonable and are assessed in section 24 of my report.
Article 94 (c) A summary of the information in non-technical language.
A non-technical summary of the EIAR has been submitted as a stand-alone document. I have read the document and I am satisfied that it is concise and is written in a language that is comprehensible and would be easily understood by a non-technically trained lay member of the public.
Article 94 (d) Sources used for the description and the assessments used in the report
The sources used to inform the description and the assessment of potential environmental effects/impacts are set out in the 'References' section of each of the technical chapters and in appendices. I am satisfied that the sources relied upon are generally appropriate and sufficient to enable an informed decision to be made.
Article 94 (e) A list of the experts who contributed to the preparation of the report
Table 1.1 of Appendix 1B – 'EIAR Technical Team Details' in Volume II of the EIAR lists the names of the lead experts who contributed to each individual chapter, while Table 1.2 provides a summary of the experience of the Assessment Team and provides their technical role and qualifications. In addition to Appendix 1B, the individual chapters also contain additional names of persons who contributed to the chapters, including qualifications and experiences of the named individuals, all of which demonstrates the competence of the persons in preparation of the individual chapters within the EIAR. I am satisfied that the EIAR has been prepared by experts with competency in the technical subject areas.

Consultations

12.4.1. The application has been submitted in accordance with the requirements of the Planning and Development Act 2000 (as amended) and the Planning and Development Regulations 2001 (as amended) in respect of public notices.

12.4.2. In addition, the applicant has carried out pre-application public consultation as described in Chapter 6 of the EIAR. The public were consulted through an online website and three community consultation events, while local and national politicians and 65 statutory and non-statutory bodies were also consulted including Offaly County Council, the HSA and the EPA. Details of the consultations and responses are set out in Appendices 6A (An Bord Pleanála Pre-Application SID Determination); 6B (EIAR Consultation Letter); 6C (EIAR Consultation Responses – Summary Tracker); 6D (EIAR Consultation Responses); and 6E (Derrygreenagh Power Community Engagement Report).

12.4.3. Submissions have also been received from statutory bodies and third parties as part of the application process and are considered in the preparation of this assessment.

12.4.4. I am satisfied, therefore, that appropriate consultations have been carried out and that all parties have had the opportunity to comment on the proposed development in advance of decision making.

12.5. Conclusion on Compliance with the requirements of Article 94 and Schedule 6 of the Planning and Development Regulations 2001 (as amended)

12.5.1. Having regard to the foregoing, I am satisfied that the information contained in the EIAR, and supplementary information provided by the applicant is sufficient to comply with article 94 of the Planning and Development Regulations, 2001 (as amended). Matters of detail are considered in my assessment of likely significant effects, below.

13.0 Assessment of Likely Significant Effects

13.1.1. Sections 14-26 below provides out an assessment of the likely environmental effects of the proposed development under the following headings, as set out Section 171A of the Planning and Development Act 2000 (as amended):

- Population and human health.
- Biodiversity, with particular attention to the species and habitats protected under the Habitats and Birds Directives (Directive 92/43/EEC and Directive 2009/147/EC respectively).
- Land, soil, water, air and climate.

- Material assets, cultural heritage and the landscape.
- The interaction between these factors.
- The vulnerability of the proposed development to risks of major accidents and/or disasters.

13.1.2. In accordance with section 171A of the Act, which defines EIA, this assessment includes an examination, analysis and evaluation of the application documents, including the EIAR and submissions received and identifies, describes and assesses the likely direct and indirect significant effects (including cumulative effects) of the development on these environmental parameters and the interaction of these. Each topic section is therefore structured around the following headings:

- Issues raised (in the application).
- Examination of the EIAR.
- Analysis, Evaluation and Assessment: Direct and indirect effects.
- Conclusion: Direct and indirect effects.

13.1.3. While it does not form part of the planning application, the gas connection corridor has been considered as part of this impact assessment.

14.0 Air Quality

14.1. Issues Raised

- The planning authority has no concerns provided all proposed mitigation measures are implemented.
- The EPA stated that it would consider and address all matters to do with emissions to the environment as matters that come within its functions under the EPA Act and that an emissions licence cannot issue until a planning decision has been made.

14.2. Examination of the EIAR

14.2.1. Context

The potential Impacts of the proposed development on Air Quality are addressed in Chapter 7 of Volume 1 of the EIAR, and in Appendix 7A 'Air Quality Impact Assessment' in Volume II.

The chapter was prepared with reference to the Environmental Protection Agency's (EPA) 'Guidelines on the information to be contained in environmental impact assessment reports' (EPA, 2022) but relies on professional judgement as receptor sensitivity to air quality impacts does not have a graded scale, and instead, receptors are considered either sensitive to air quality impacts or not sensitive.

14.2.2. While there are no statutory Irish or EU standards relating to the assessment or control of dust, the EIAR notes that the air quality assessment relating to construction dust impacts is consistent with the framework approach developed by the Institute of Air Quality Management's (IAQM) 'Guidance on the assessment of dust from demolition and construction' (IAQM, 2023). The potential impacts extend up to 250m beyond the development boundary and hard surfaced roads from the site entrances as well as 50m from the construction traffic route.

14.2.3. The assessment of emissions to air from construction road traffic follows the guidance set out within TII's (formerly NRA) document 'Air Quality Assessment of Specified Infrastructure Projects – Overarching Technical Document', 2022 'TII Guidance' and an assessment was deemed to be required along the R400 between Rochfortbridge and Rhode and on the L1010, to the west of Rhode, as the number of HDV's (heavy duty vehicles) per day would exceed 200. The assessment uses 'ADMS-Roads' (v5.0) dispersion modelling software. Traffic flows, composition (percentage HDV) and speed have been used in modelling of emissions from road traffic during the construction phase, but a decommissioning baseline has not been assessed due to a lack of future traffic projections.

14.2.4. An assessment of Operational Phase emissions from the Power Plant stacks has been undertaken with reference to the EPA's 'Air Dispersion Modelling from Industrial Installations Guidance Note (AG4)' (EPA, 2020), referred to as "EPA AG4 Guidance and based on the ADMS 6 (Advanced Dispersion Model Software), which is EPA authorised. There would be no operational emissions from the Electricity Grid Connection or the Gas Connection Corridor.

14.2.5. The chapter focusses on the full load continuous scenario using natural gas fuel, as it represents the majority of operational conditions at the PPA, but also considers the scenarios of 1) Backup, running on backup fuel (emergency full load operation); and 2) Low Load, running on natural gas fuel, in order to provide a full assessment.

Cumulative modelling has been carried out to include the Castlelost OCGT, which has a 220Kv GIS substation and is located c4.1km north west of the proposed PPA.

14.2.6. Air quality impacts on the most sensitive ecological receptors, being nearby habitats, have been assessed by reference to Critical Loads and Critical Levels for nitrogen and acidity, as published by the Air Pollution Information System (APIS) (Centre for Ecology and Hydrology and APIS, 2020).

14.2.7. The EPA's descriptors of 'very significant' and 'profound' are not used in this assessment for effects on human health, as the proposed development is physically incapable of causing air quality effects at those scales.

14.2.8. In terms of the significance of the effects (consequences) of any impacts, an effect is reported as being either 'not significant' or as being 'significant'. If the overall effect of the development on local air quality or on amenity is found to be 'moderate' or 'major' this is deemed to be 'significant' for assessment purposes. Effects found to be 'minor' or 'negligible' are considered to be 'not significant'.

14.2.9. Relevant national air quality standards are derived from the Air Quality Standards Regulations 2011 (S.I. No.180 of 2011), that implemented the European Clean Air Directive 2008/50/EC. The EU's Industrial Emissions Directive (IED) (2010/75/EU) also applies, as the thermal capacity of the combustion plant element of the proposed development would exceed 50MW. The EPA is the statutory body responsible for issuing and enforcing Industrial Emissions Licences (IELs). The operator will be required to obtain an IEL from the EPA for the proposed power plant.

14.3. Baseline

14.3.1. The baseline assessed the entire development site together.

Construction dust

14.3.2. There are no human health or amenity receptors falling into the screening distances of 250m from the Power Plant site or 50m from access points, so no further consideration has been given to fugitive dust and particulate matter emissions from construction operations on human health and amenity. There are some residential properties within 50m of the underground cable route, while some residential properties are within 250m of the centre line of Gas Connection Corridor.

Operation

14.3.3. The sensitive human receptors include 14 residential properties and 6 schools closest to the haul routes (construction) and combustion plant (operational phase). Ecological receptors within 15km form internationally designated sites and 2km for locally important sites were selected, with 11 receptor locations selected for 5 different SAC's.

Existing Air Quality

14.3.4. The 2022 EPA Air Quality Report indicates the site is located in Zone D 'remaining areas of Ireland'. The recorded NO_2, NOx, PM10, PM2.5 and CO levels for the years 2018-2021 were all well below relevant limit values and neither human nor ecological receptors are expected to be affected by pollutants associated with the proposed development.

AECOM Project Specific Monitoring

14.3.5. A project specific diffusion tube survey was carried out at 13 different locations from Rhode to Rochfortbridge, along the R400 and along the M6 as well as one location several kilometers to the east of the site, to attain details on the variation in background NO_2 concentrations. The NO_2 measurement results are all well below the annual mean NO_2 objectives with concentrations at DT1 adjacent to the site entrance and at DT11 in Rochfortbridge being low, at one third or less of the air quality standard value.

Baseline

14.3.6. Baseline annual mean concentrations of NO_2, PM_{10} and $PM_{2.5}$ are provided for Receptors 1, 2, 3, 4, 5, 6 and 14 for both base years 2022 and 2025. During both years, it is expected that the 24-hour 50µg/m^3 PM10 air quality objectives would be exceeded on one day per annum at each location. The evolution of the baseline indicates that pollutant concentrations would remain well below the relevant air quality standards and that air quality would continue to be of a good standard.

14.4. Predicted Impacts (Potential Effects)

The EIAR identifies the potential for a range of environmental effects on Air Quality. The likely effects of the development, as identified in the EIAR, are summarised in Tables 14.1, 14.2, 14.3 and 14.4 below. The focus of the assessment will be on the Significant and Negative/Adverse effects of the development, while Minor effect,

which are deemed to be Imperceptible, Not Significant, Slight or Moderate, have been identified, but will not be assessed in the analysis and conclusion section below, unless there are identified significant impact interactions, cumulative effects or where concerns have been expressed by parties to the application.

Table 14.1: Summary of Potential Effects

Project Phase	Potential Direct, Indirect and Cumulative Effects
Do Nothing	• There would be no change to air quality. • Environmental monitoring and site management would continue, as required under the conditions of the exiting IPC Licence (P0501-01) • The opportunity to contribute to the transition to net zero would be lost. • The requirement to replace conventional and aging generation plant with higher efficiency, flexible, lower carbon technology and the opportunity to generate associated local employment and investment and diversify the local economy would be lost.

Table 14.2: Summary of Potential Effects (Power Plant Area)

Project Phase	Potential Direct, Indirect and Cumulative Effects
Construction	• Impacts on amenity are unlikely, but should they occur would be brief, infrequent, and reversible. • Significant dust emissions are unlikely but should they occur would be brief, infrequent, and reversible. • A change in pollution concentrations due to traffic is assessed to have an imperceptible unlikely effect as the long-term averaging concentrations at all receptors are less than 75% of the Standard. This effect would be short-term.
Operation	• Emissions would comply with the requirements of an IEL from the EPA. Human Beings • The change in annual mean concentrations of NO_2 would be of a low magnitude and would have an imperceptible effect. • The effect on NO_2, of operating on natural gas, would be not significant at points where there are no receptors and the predicted change in 1 hour NO_2 concentration would be with imperceptible. • Using backup fuel, the predicted change in 1 hour NO_2 concentrations would be slight at the most impacted receptor and imperceptible, further from the boundary. • The 8-hour rolling CO concentration effects would be imperceptible. • The modelled results for 90.71st percentile 24-hour PM10 concentrations would have an imperceptible effect.

	• Given the worst case assumptions used in the modelling, it is considered unlikely that the PPA would interfere with plans and policies to achieve air quality standards. Ecological Receptors • Impacts are addressed in Chapter 9 biodiversity. It concludes that the air quality effects on sensitive habitats within local SPA, SAC and Ramsar sites and NHA's would be not significant.
Decommissioning	• Impacts would be comparable to or less than the impacts for construction and would be not significant.

14.4.1. Table 14.3: Summary of Potential Effects (Electricity Grid Connection)

Project Phase	Potential Direct, Indirect and Cumulative Effects
Construction	• A detailed assessment of construction dust on ecological receptors is not required, due to distance. • Potential dust impacts have been assessed as 'low' for all activities (pre construction, earthworks, construction, trackout) and 'low' sensitivity for human health impacts from PM_{10} releases from all activities, on account of the distance from the activity source to the receptors.
Operation	• Emissions to air would be minimal and the effect would be imperceptible.
Decommissioning	• Not envisage and not assessed.

Table 14.4: Summary of Potential Effects (Gas Connection Corridor)

Project Phase	Potential Direct, Indirect and Cumulative Effects
Construction	• A detailed assessment of construction dust on ecological receptors is not required, due to distance. • Potential dust impacts have been assessed as 'low' for all activities (pre construction, earthworks, construction, trackout) and 'low' sensitivity for human health impacts from PM_{10} releases from all activities, on account of the distance from the activity source to the receptors.
Operation	• Emissions to air would be minimal and the effect would be imperceptible.
Decommissioning	• Not envisage and not assessed.

14.5. Mitigation

14.5.1. Power Plant Area

Construction

- There are no human health, amenity or ecological receptors falling into the screening distances of less than 250 m from the Power Plant Area site or 50m

from the access points, so standard mitigation measures would be employed for this low risk site including: Storage of sand and aggregates in bunded areas and cement in silos, use of water suppression systems and wheel wash, cover vehicles leaving site that carry construction waste, minimise storage duration of spoil, prohibit open fires, minimise plant and machinery idling and site static plant as far as possible from sensitive boundaries and receptors.

Operation

- While assessed as not significant, air quality emissions levels are expected to be set out under an Industrial Emissions Licence to meet the requirements of the Industrial Emissions Directive.
- Effects on human health, and ecological receptors are deemed to be not significant and no specific mitigation measures have been identified.

Decommissioning

- The mitigation measures outlined for the construction phase would be suitable for the decommissioning phase.

14.5.2. Electricity Grid Connection

Construction

- Same mitigation measures as for the Power Plant Area.

Operation

- No emissions to air, so no mitigation measures proposed.

Decommissioning

- Decommissioning not envisaged, so no mitigation measures proposed.

14.5.3. Gas Connection Corridor

Construction

- Same mitigation measures as for the Power Plant Area.

Operation

- Minimal emissions to air, so no mitigation measures proposed.

Decommissioning

- Decommissioning not envisaged, so no mitigation measures proposed.

14.6. Residual Effects

14.6.1. With the implementation of mitigation measures, which are standard good practice measures that are routinely applied across construction sites and are incorporated into the design, no significant residual effects have been identified for the construction, operational or decommissioning phases for the Power Plant Area, Electricity Grid Connection or the Gas Connection Corridor (Chapter 7.7 of EIAR).

14.6.2. The Power Plant would operate in accordance with the requirements of the European Union (Large Combustion Plants) Regulations 2012 S. I. No. 566 of 2012 under an Industrial Emissions (IE) Licence (which is to be applied for) so that any impacts of emissions to air, soil, surface and groundwater, and effects on the environment and human health, would be minimised and avoided where possible.

14.6.3. Decommissioning of the Electricity Grid Connection and the Gas Connection have not been considered in the EIAR, as they would be vested in Eirgrid and Gas Networks Ireland and would form part of the national Electricity and Gas networks.

14.7. Cumulative Effects

Cumulative In-Combination Effects

14.7.1. There is potential for cumulative air quality effects between the individual elements of the overall project and with other permitted or proposed developments in the area.

Construction Phase

14.7.2. Dust emissions from other committed development are not close enough to generate cumulative impacts, so no additional effects than those described in Tables 14.1-14.4 above are envisaged.

Operational Phase

14.7.3. The overall effect of changes in NO_2 and CO concentrations due to emissions from the proposed development is considered to be imperceptible. Cumulative effects on air quality are expected to be imperceptible.

14.8. Analysis, Evaluation and Assessment: Direct and Indirect Effects

14.8.1. No concerns were raised by Offaly County Council, prescribed bodies or other observers on the application in respect of emissions to air.

14.8.2. I have examined, analysed and evaluated Chapter 7 of the EIAR and all of the associated documents and submission on the file in respect of Air Quality. I am satisfied that the baseline environment presented by the applicant is comprehensive and that the key impacts in respect of Air Quality as a consequence of the development have been identified.

14.8.3. The applicant has identified that no significant potential effects would arise for air pollution from the construction, operation or decommissioning phases of development, and I am satisfied by reference to the nature of potential emissions and the separation distance between the site and sensitive receptors, that neither human nor ecological receptors would be significantly impacted as a result of the proposed development.

14.8.4. I also note that emissions from the proposed power plant area would be controlled by emissions set out in an Industrial Emissions Licence (IEL) that will be issued by the EPA and will require adherence to the limits set out in the Industrial Emissions Directive.

14.9. Conclusion: Direct and Indirect Effects

Having regard to the examination of environmental information set out in chapter 7 of the EIAR as set out above, it is considered that by virtue of the distance of the proposed development from sensitive receptors, emissions to air from the proposed development would be well within guideline limits and as a consequence, I am satisfied that there is no potential for any significant direct, indirect, residual or cumulative effects on Air Quality as a result of the proposed development.

15.0 Cultural Heritage and Archaeology

15.1. Issues Raised

- Offaly County Council has no concerns, subject to proposed mitigation measures.
- The Development Applications Unit of the Department of Housing, Local Government and Heritage have no concerns subject to conditions.
- An observer raised concerns about the visual impact of the development on the heritage of Croghan Hill. It is addressed in detail in chapter 16 (Landscape and Visual) but is also addressed in this section.

15.2. Examination of the EIAR

15.2.1. Context

Impacts of the proposed development on Cultural Heritage and Archaeology are addressed in Chapter 8 of the EIAR. The methodology used includes a desk based assessment of various sources, walkover site visits and archaeological excavations. The study area chosen for the assessment extends to 1km from all elements of the project other than the underground 220kV cable route where a 0.5km study area was selected. For designated heritage assets a study area of 3km was selected. The assessment in the EIAR chapter is supported by three appendices.

- Appendix 8A – Is a 'Gazetteer of Cultural Heritage Assets and Site Visit Photographs'. It contains details of all Recorded Monuments and Protected Structures in the area, as well as their descriptions, the period in which they were built, their importance and condition.

- Appendix 8B – Is an Archaeology Report for Site Investigations from 2023 covering the results of 83 trial pits mechanically excavated in the area of the three bogs through which the proposed development site runs. The pits were generally 1m in width, 2-3m in length and dug to different depths. They were dug within the site of the proposed power plant, the adjacent bog, the sites of the proposed substations and the overhead and underground cable routes. The results from the trial pits generally found nothing of archaeological interest. Some of the findings do not indicate in situ archaeological features, but rather demonstrate the archaeological potential of some areas and informed the recommended mitigation measures in the EIAR. Percolation / infiltration pits were also excavated at the Power Plant Area and adjacent to the proposed substations, but no finds of archaeological significance were recorded.

- Appendix 8C – Is an Archaeology Report for the Peat Deposition Areas (2023) and contains the results of a walkover archaeological field survey in four areas in the bogs of Drumman, Derryarkin and Ballybeg. A limitation was identified in that sections in areas 1-3 of the proposed peat deposition areas were inaccessible due to dense vegetation and/or flooding and it is possible that hitherto unrecorded archaeological features and/or finds still survive in these areas. These limitations also informed the mitigation measures set out in the EIAR.

A constant limitation in all sections is that the final route of the gas pipeline, which is considered in as much detail as is possible in the EIAR, has not yet determined and is a matter for Gas Networks Ireland, through a separate consent process.

15.3. Baseline

15.3.1. Power Plant Area

- The site is largely made land, with some areas of cutover bog at the peripheries. While there are no recorded archaeological assets within the PPA and historic maps do not indicate the presence of any archaeological remains on the site, trackways crossing the bog may extend into the proposed peat and spoil deposition area and there is potential for unknown sub-surface archaeology to exist within the PPA and the discharge pipeline route to the north. Site investigations on the site included the excavation of 39 trial pits, which uncovered a linear feature associated with a 19th century settlement on the site. A timber was recorded in the proposed peat deposition area to the southeast of the PPA and it was recommended that pre-development testing be carried out in this area in order to ascertain the nature and extent of the possible archaeological feature. There are no protected structures or NIAH buildings within 1km of the site, while the setting of three protected structures of regional importance, located between 1km and 3km from the site, were considered to be potentially sensitive to change, but upon examination were deemed not to be affected by the proposed development due to vegetation, topography and the intervening distance.

15.3.2. Electricity Grid Connection

- This part of the site consists of cutover/cutaway bog, with no recorded archaeological assets within the site footprint, but 108 are located within 1km. A Togher (ancient road) located to the west of the site could run under the route of the process water discharge pipe, while 86 are located to the east of the northern end of the proposed 220kV underground cable. The setting of Croghan Hill, located over 4km from the site would not be affected by the proposed development. Archaeological investigations were carried out at the locations of the proposed towers, underground cable, 400kv substation and borrow pit, with nothing of archaeological significance uncovered except for two plank fragments that had been deposited there from elsewhere.

Eight protected structures, one national monument and 114 recorded monuments were assessed, with eight protected structures, one national monument and one recorded monuments considered to be potentially sensitive to change from the proposed development. While the overhead power line and pylons would be visible between the national monument at Clonin Hill and Croghan Hill, they will be below the line of sight and would not obstruct views. Intervening vegetation, topography and distance screen the proposed development from all other monuments and structures.

15.3.3. Gas Connection Corridor

- Sixteen archaeological sites are located within 1km of the 1km wide Gas Connection Corridor. They include a standing stone, cropmark, four ringforts, a motte and bailey castle, two enclosures, two barrows and a burial site.
- There are ten protected structures within the gas connection corridor, all of which are deemed to be of regional importance. Seven are located in Rochfortbridge, with two houses, a farmyard complex and a forge in the open countryside. Several non-protected structures that are on the NIAH are also within the corridor.
- Many of the archaeological sites and protected structures are evident of the first edition OS map from 1838, with others evident on the second edition from 1912.
- Previous archaeological investigations have taken place in five of the six townlands through which the gas corridor passes, with the only finds being a small pit with evidence of in-situ burning and a former field boundary.

15.4. Predicted Impacts (Potential Effects)

The EIAR identifies the potential for a range of environmental effects on Cultural Heritage and Archaeology. The likely effects of the development, as identified in the EIAR, are summarised in Tables 15.1, 15.2, 15.3 and 15.4 below. The focus of the assessment will be on the Significant and Negative/Adverse effects of the development, while Minor effect, which are deemed to be Imperceptible, Not Significant, Slight or Moderate, have been identified, but will not be assessed in the analysis and conclusion section below, unless there are identified significant impact interactions, cumulative effects or where concerns have been expressed by parties to the application.

Table 15.1: Summary of Potential Effects

Project Phase	Potential Direct and Indirect Effects
Do Nothing	Would not result in any significant changes to the cultural heritage baseline. Environmental monitoring and site management would continue as is required by the conditions or the existing IPC Licence (P0501-01), including rewetting and rehabilitation of the peatlands in compliance with condition 10 of the IPC licence, as set out in Appendix 9J of the EIAR. Rehabilitation does not involve excavation so impacts to sub-surface archaeological features would be limited.

Table 15.2: Summary of Potential Effects (Power Plant Area)

Project Phase	Potential Direct and Indirect Effects
Construction	• Partial or total removal or compaction of previously unrecorded sub-surface heritage assets, particularly at less disturbed peripheries of the site, which are likely to be of local interest and of low heritage value. The magnitude of the impact would be high and the significance of effect would be **significant**, permanent and adverse. • No impact on protected structures in the 3km study area. • Other impacts could affect landscaping setting from spoil and peat deposition, visual impact and traffic noise intrusion, severance or dereliction due to construction works, damage from vibration, changes in air quality or ground water levels due to abstraction.
Operation	• No additional effects above those from construction phase.
Decommissioning	• Would be subject to a Decommissioning Plan (including a Closure Remediation and Aftercare Management Plan), agreed with the EPA as part of the Industrial Emissions Licence (IEL) • Similar effects to construction phase.

Table 15.3: Summary of Potential Effects (Electricity Grid Connection)

Project Phase	Potential Direct and Indirect Effects
Construction	• Partial or total removal or compaction of previously unrecorded sub-surface heritage assets, throughout the site, which are likely to be of local interest and of low heritage value. The magnitude of the impact would be high and the significance of effect would be **significant,** permanent and adverse. • No impact on protected structures in the 3km study area. • The overhead line would run between national monuments on Clonin Hill and Croghan Hill and the impact on the barrow on Clonin Hill is assesses as Low, Moderate, Long-Term and adverse, while the impact on the Bowl Barrow on Croghan Hill is assessed as Low, Slight, Long-Term and adverse.
Operation	• No additional effects above those from construction phase.

Decommissioning	• No additional effects above those from construction phase. • Upon decommissioning of the Power Plant Area, the 220kV substation and 400kV substation and associated transmission infrastructure would remain in situ and form part of the national grid infrastructure, so decommissioning has not been considered.

Table 15.4: Summary of Potential Effects (Gas Connection Corridor)

Project Phase	Potential Direct and Indirect Effects
Construction	• The route would run through the planned landscape associated with the former rectory Glebe House (NIAH 4237). The land is now farmed and not recognisable as a heritage asset. The ground would be reinstated after the pipe is laid. The impact would be Low, Slight, Short-term and Adverse. • Partial or total removal or compaction of previously unrecorded sub-surface heritage assets, throughout the site, which are likely to be of local interest and of low heritage value. The magnitude of the impact would be **high** and the significance of effect would be **moderate, adverse**.
Operation	• No additional effects above those from construction phase.
Decommissioning	• No additional effects above those from construction phase. • Upon decommissioning of the Power Plant Area, the gas connection corridor would remain in situ and form part of the national gas infrastructure, so decommissioning has not been considered.

15.5. Mitigation

15.5.1. Impacts on Cultural Heritage relating to visual intrusion and noise impacts on heritage assets are addressed in Chapter 9 (Noise and Vibration), Chapter 10 (Landscape and Visual) and Chapter 14 (Traffic and Transport) and where required, the related mitigation measures are dealt with in the corresponding chapters of the EIAR, so are not referenced further in this section. In addition, embedded mitigation measures are included within the scheme design.

Specific measures referenced in the EIAR are set out below.

15.5.2. Power Plant Area

Construction

- A suitably qualified archaeologist would be appointed as the Project Archaeologist to oversee the construction phase activities and would prepare an Overarching Method Statement for Archaeological Works to be agreed with the NMS.

- Fully supervised and monitored pre-development archaeological testing in the form of mechanically excavated test trenches, would be carried out at the peripheral areas around the site, with further investigation if necessary and appropriate mitigate measures determined, including preservation in situ or by record or construction supervision.
- An unexpected finds procedure would be included in the Overarching Method Statement for Archaeological Works.
- Measures in the CEMP to reduce the impact of noise, dust, and vibration.

Operation

- All impacts would occur during construction, so no mitigation required.

Decommissioning

- A Decommissioning Plan would be produced and agreed with EPA as part of the Industrial Emissions Licence.
- Temporary effects would be similar to effects arising from the construction phase.

15.5.3. Electricity Grid Connection

Construction

- The same mitigation measures as for the power plant area, but focussed on substation areas, construction compounds, hardstandings, pylon bases, underground cable and new access tracks.

Operation

- All impacts would occur during construction, so no mitigation required.

Decommissioning

- The grid connection would be managed by Eirgrid and it is not envisaged that it would be decommissioned. No mitigation measures proposed.

15.5.4. Gas Connection Corridor

Construction

- GNI would appoint a suitably qualified archaeologist as Project Archaeologist and archaeological testing would be carried out at the pre-construction phase.

- Procedures would be adopted to reduce noise, dust, and vibration.

Operation

- No mitigation required.

Decommissioning

- The gas connection corridor would be managed by Gas Networks Ireland and it is not envisaged it would be decommissioned. No mitigation measures proposed.

15.6. Residual Effects

15.6.1. With the implementation of mitigation measures, residual effects are addressed in section 8.7 of the EIAR. No significant residual effects have been identified for the construction, operational or decommissioning phases for the Power Plant Area, Electricity Grid Connection or the Gas Connection Corridor.

15.7. Cumulative Effects

Various elements of overall project

- Reference is made in paragraphs 8.8.1 and 8.8.2 to climate and climate change, which is assumed to be typographical error.

Power Plant Area, Electricity Grid Connection and Gas Connection Corridor

- While there is potential for cumulative impacts due to overlapping construction phases, creating cumulative dust, vibration and noise impacts as well as a visual impact to the setting of heritage assets, no cumulative effects are expected between the three elements of the development on recorded heritage assets due to the distance between the different elements of the works and the heritage assets.

Cumulative in-combination effects - other nearby projects.

- The cumulative assessment includes a list of projects located between 180m and 1.48km from the site, which were either granted permission or were awaiting decisions at the time that EIAR was prepared. These are the nearest projects to the application site. It states that the projects chosen for cumulative impact purposes are some of the projects described in chapter 4 of the EIAR. The list includes proposed and planned solar, waste, quarry and renewables related

projects. Potential impacts on sub-surface archaeology, would be addressed though conditions imposed on the individual applications including appropriate mitigation measures, such that there is no potential for cumulative impact to surface or sub-surface archaeological features.

- No significant cumulative impacts on cultural heritage are anticipated during the construction, operation or decommissioning phase, following successful implementation of the mitigation measures outlined in Section 8.6 of the EIAR.

15.8. Analysis, Evaluation and Assessment: Direct and Indirect Effects

15.8.1. I have examined, analysed and evaluated Chapter 8 of the EIAR and all of the associated documents and submission on the file in respect of Cultural Heritage and Archaeology. I am satisfied that the baseline environment presented by the applicant is comprehensive and that the key impacts in respect of Cultural Heritage and Archaeology as a consequence of the development have been identified.

Previously unrecorded sub-surface heritage assets

15.8.2. The applicant has identified that significant potential effects could arise through the removal of or damage to previously unrecorded sub-surface heritage assets. In that respect, the overall site is predominantly a brownfield site. The existing Derrygreenagh Works are located where the proposed power plant area would be located, while the grid connection would be constructed on cutover industrial peatlands. The 400kv substation is proposed to be constructed on existing agricultural/grazing land. I agree with the conclusions set out in the EIAR in respect of addressing archaeology and I am satisfied, that should the Commission be minded to grant permission, that the imposition of an appropriate condition addressing the mitigation measures proposed in the EIAR and the recommended condition from the Development Applications Unit of the Department of Housing, Local Government and Heritage, would be sufficient to avoid, prevent or reduce and offset likely significant adverse effects and that there would be no significant direct, indirect and cumulative effects on cultural heritage and archaeology.

15.8.3. With respect to the nature of the proposed condition, I note that in its submission, the DAU broadly agreed with the EIAR findings in respect of the desk based archaeological assessment, archaeological monitoring result and the field study of

the proposed peat deposition areas at Barrybrook and Derrygreenagh. It recommended the following conditions:

1 All mitigation measures in Chapter 8 to be implemented except as per proposed conditions 2-4.

2 Engage a suitably qualified archaeologist to carry out pre development archaeological testing and submit an Archaeological Impact Assessment for agreement with the PA following consultation with the department.

3 The CEMP shall include the location of the any and all archaeological or cultural constraints.

4 The Planning authority and department shall be furnished with a copy of the final archaeological report detailing all archaeological monitoring investigations, with all costs to be borne by the developer.

15.8.4. I have considered the matters proposed in the four proposed conditions and I am satisfied that the matters set out proposed condition No 2 are covered in Section 8.6 'Mitigation measures' albeit with different wording. I am satisfied that there no requirement to include the DAU's proposed condition 2, as it would be captured in a general condition requiring all mitigation measures from the EIAR to be implemented and as the recommendations are slightly different as they would apply to the different aspects of the project I consider that it would be more appropriate to rely upon the specific aspects of Section 8.6 of the EIAR which refers to the attainment of relevant licences from the Department for Housing, Local Government and Heritage (DoHLGH)/NMS and the National Museum of Ireland (NMI) for all archaeological works

15.8.5. I would recommend that proposed conditions No's 3 and 4 are attached.

Submission

15.8.6. An observer raised concerns about the visual impact of the development on the heritage of Croghan Hill. The applicant has address this matter in the EIAR and I note that the overhead line and pylons would run between the two national monuments on Clonin Hill and Croghan Hill, the impacts of which were assessed by the applicant to be Low, Moderate, Long Term and Adverse for Clonin Hill and Low, Slight, Long Term and Adverse from Croghan Hill. The interface compound would be

located just north of the direct line view between the two hills. The nearest pylon to the two hills would be adjacent to the interface compound.

15.8.7. As part of the baseline, which is summarily described in Section 15.2.2 above, the applicant had stated that while the overhead line and pylons would be visible slightly south of a direct line view between the two national monuments, they would be below the line of sight and would not obstruct views between the two monuments. I note that Croghan Hill has an elevation of 234m, while Clonin Hill has an elevation of 136m AOD. They respectively lie c2.6km west and c2km east of the proposed interface compound. The ground level at the location of the proposed compound is c77m AOD and the proposed pylon would have a height of 38.7m, giving it a maximum height of 115.7m which is, as stated by the applicant, below the direct line of vison. I also note that a line of trees runs to the immediate south of the interface compound that would reduce the visual impact of the proposed pylon and interface compound, while as part of the landscaping proposal showing in Drawing No S7060-8050-0055-6 (Proposed Development – Overview Plan Sheet 6 of 8) a new area of tree planting is proposed to the west of the interface compound that would have a footprint of c252m north to south and 315m east to west. I am satisfied that taking into consideration the height of the proposed interface compound, as well existing trees and proposed planting, that there is no potential for any significant direct, indirect or cumulative effects on either or both of Croghan Hill or Clonin Hill a result of the proposed development.

15.8.8. I also note that a solar farm is under construction adjacent to Clonin Hill directly between the two hills, while permission has been granted under planning reg. ref. 24/60289 for two dome structures on a site c250m north of the direct line view between Croghan Hill or Clonin Hill. The domes measure 500m long, 120m wide and 34m in height and while significant structures, would sit as a similar elevation to the proposed overhead line and interface compound and have been demonstrated in the photomontages submitted with 24/60289, that they would not have a direct impact on views between the two hills.

15.9. Conclusion: Direct and Indirect Effects

15.9.1. Both the planning authority and the Development Applications Unit (DAU) of the Department of Housing, Local Government and Heritage, are satisfied with the

proposed development, subject to proposed mitigation measures and I have addressed the issue raised by an observer to the application in respect of Cultural Heritage in paragraph 15.3 above. I have examined Chapter 8 of the EIAR which deals with this topic. Having regard to the location of the site in a brownfield and agricultural rural environment, the absence of known cultural heritage that would be impacted by the proposed development, proposed mitigation in the form of the supervision of all stages of the development works by a suitably qualified Archaeologist, and standard arrangements for the management of pre and during development archaeological testing and excavations, if necessary, I am satisfied that there is no potential for any significant direct, indirect or cumulative effects on Cultural Heritage and Archaeology as a result of the proposed development.

16.0 **Biodiversity**

16.1. Issues Raised

- No issues raised in respect of Biodiversity.

16.2. Examination of the EIAR

16.2.1. Context

Impacts of the proposed development on Biodiversity are addressed in Chapter 9 of the EIAR. Taking into account different ecological receptors, and using the source-pathway-receptor model, the zone of influence for sites, habitats, and species is a minimum of 15 kilometre from the site and also includes habitats downstream of the site within its catchment.

16.2.2. The baseline was informed by both desk and field studies. The desk surveys using a wide range of online data sources. International and national conservation designations where identified, as were potential species and habitats, while previous ecological surveys carried out on Bord Na Mona lands also identified potential ecological constraints. The field surveys included an initial constraint survey, including a preliminary bat roost assessment (Appendix 9B), as well as breeding birds (Appendix 9F), wintering bird (Appendix 9G) and aquatic surveys (Appendix 9D). This was followed by surveys of habitat and flora (Appendix 9B), bat roost and activity (Appendix 9B and 9C), otter (Appendix 9D), badger (Appendix 9E), Amphibian habitat assessment / frogspawn (in EIAR chapter), Marsh Fritillary

(Appendix 9B) and Smooth newt eDNA surveys (Appendix 9I). The surveys were all carried out in the appropriate season, during suitable weather conditions and at suitable times of day/evening.

16.2.3. The surveys followed the following guidance:

- Habitats and flora – A guide to Habitats in Ireland (Fossitt, 2000);
- Bats – BCT Guidelines (Collins 2016);
- Otter – Chani, 2003; Liles, 2003; NRA, 2009a;
- Amphibians – NRA 2009a; English Nature, 2001 and Natural England, 2015;
- Breeding Birds – Transect surveys following Bibby et al., (2000), and vantage point surveys in accordance with the Scottish Natural Heritage (SNH) guidance document 'Assessment and mitigation of impacts of power lines and guyed meteorological masts on birds' (SNH, 2016). The survey methods for birds have all complied with the SNH guidance document, Survey Methods for Use in Assessing the Impacts of Onshore Wind Farms on Bird Communities (SNH, 2017).
- Wintering Birds – As above, while focussing primarily on wetland birds.
- Aquatic – Instream and riparian habitat sampling surveys included fisheries assessment, white-clawed crayfish survey, macrophyte and aquatic bryophyte survey and biological water quality sampling, following the Environment Agency's River Habitat Survey in Britain and Ireland Field Survey Guidance Manual 2003 (Environment Agency, 2003) and Fossitt (2000).
- Marsh Fritillary – NBDC methods (NDBC) National Biodiversity Data Centre.

16.2.4. The impact assessment on ecological features follows CIEEM Guidelines for Ecological Impact Assessment in the UK and Ireland (CIEEM, 2022), the EPA (2022), and guidance issued by TII (NRA, 2009b).

16.2.5. The importance of ecological features is set out at a geographical scale as per the CIEEM Guidance (2022), being International (very high), National (high), County (medium), Local (higher) and Site Local (lower).

16.2.6. The description of significance of effects follows the EPA 2022 guidance and the significance of an effect should be qualified with reference to an appropriate

geographical scale, as the significance of an effect may not be the same as the geographical context in which the feature is considered important.

Limitations and assumptions

16.2.7. A lack of records for a particular habitat or species does not necessarily mean that the habitat or species does not occur in the study area, while the presence of records for particular habitats and species does not automatically mean that these still occur within the area of interest, or are relevant in the context of the proposed development and overall project. Biological records can be received from a wide variety of sources and may or may not be comprehensive and from an accurate or reliable surveyor. Cited habitat areas are based on maps and photographs and should be measured in the field. A further limitation is that the GCC has not been subject to any field survey, as it shall be subject to a separate consent process.

16.3. Baseline

16.3.1. Power Plant Area

Habitats

16.3.2. There are six SAC's and two SPAs within the ZOI (zone of influence) of the PPA. Two of the SAC's are also Ramsar site. Six of the European sites are within the ZoI due to their sensitivity to air pollution with Lough Ennell SAC also connected due to mobile SCI species. They range from 7.1km to 15km from the PPA. The River Boyne and River Blackwater SAC and SPA are 16.6km from the PPA and hydrologically connected >25km downstream of the PPA. There are also ten NHA's or pNHAs within the ZOI, due to their sensitivity to air pollution at distances of 5.4km to 14.4km from the PPA. No long established or ancient woodlands are within the ZOI.

Species Recorded

16.3.3. Forty two species were returned by the NBDC within two kilometres of the PPA including badger (14 records), Otter (3), Pine marten (1), soprano pipistrelle (1), Daubenton's bat (1), red squirrel (1), hedgehog (3), stoat (3) and Irish hare (3). Twenty six notable bird species were returned including two Annex 1, the Kingfisher and Whooper Swan, seven Red-listed and 17 Amber-listed birds. Bord Na Mona surveys of Drumman bog noted several bird species, while four records of the protected species white-clawed crayfish were also returned. The NBDC also

returned records of high impact invasive mammals being American Mink, brown rat and fallow deer, as well as one record of the medium impact Jenkins' spire snail.

Field Survey

Habitats

16.3.4. The PPA site contains the following habitats, which are described in the EIAR by reference to the Habitats Survey presented in Appendix 9B and Fossitt (2020). They are: Acid oligotrophic lake (FL2); Lowland depositing river (FW2); Drainage ditches (FW4); Reed and large sedge swamps (FS1); Amenity grassland (GA2); Dry meadows and grassy verges (GS2); Marsh (GM1); Cutover bog (PB4); Recolonising bare ground (ED3); Buildings and artificial surfaces (BL3); Bog woodland (WN7); Mixed broadleaf/conifer woodland (WD2); Scrub (WS1); Immature woodland (WS2); Scrub and immature woodland mosaic (W); Hedgerows (WL1); and Treelines (WL2).

16.3.5. The cutover bog is being recolonised by native species and is at various stages of ecological succession. The mapping distinguishing between mainly bare peat (PB4a) and cutover areas which are partly colonised by vegetation (PB4b).

16.3.6. No protected notable plants or invasive species were identified within the site.

Bats

16.3.7. Following the initial suitability assessment of six buildings, a bridge and trees, a number of roosts in buildings within and adjacent to the site were identified. Five trees with low suitability were not considered further, while the surrounding habitats ranged from low to moderate suitability for commuting and foraging bats.

16.3.8. A further field survey confirmed eight bat roosts roost in five buildings / structures within the PPA site and two just outside. The confirmed roosts were two soprano pipistrelle maternity roosts, a single nattrerer's bat maternity roost, while day roosts for soprano pipistrelle, brown long-eared bats and common pipistrelle were also confirmed. No bats were observed at two buildings but they are assumed to be night feeding perches. Twenty six soprano pipistrelle were observed emerging from the bridge carrying the now redundant Bord Na Mona rail line under the R400.

16.3.9. Static detectors were set up in two locations for 1-2 nights monthly between June and August 2023 and recorded 319 registrations from five species, as well as one unidentified species at SD01 and 954 registrations from six species and an

unidentified Myotis species at SD02. Species recorded were soprano pipistrelle (597 total registrations), common pipistrelle (369), whiskered bat (114), Myotis sp. (62 no.), Leisler's bat (108 no. registrations), Daubenton's bat (3) Natterer's bat (16) and brown long-eared bat (4).

Badger

16.3.10. Two outlier setts and evidence of badger presence identified 150m from the PPA.

Otter

16.3.11. While there is suitable terrestrial habitat within the PPA, the nearest signs are 900m northwest. Nearby quarries may limit their presence. Spraints were recorded beside the process water pipe outfall to the Yellow River, but it is canalised at this point and not suitable as otter habitat.

Other protected mammals

16.3.12. Pine marten droppings were noted within 100m of the PPA and there is suitable habitat in the PPA site for them, including during breeding season, but there was no evidence that they use any of the buildings as dens.

Marsh Fritillary

16.3.13. No larval webs or adult butterflies were recorded in the PPA but suitable habitat was identified, including in the area to be used as the permanent peat deposition area for the PPA.

Amphibians

16.3.14. eDNA testing of water confirmed the presence of smooth newt in two ponds in the PPA site area. Common frog was also recorded on the site.

Breeding Birds

16.3.15. A suite of breeding bird surveys was carried out within an area comprising the bogs surrounding the PPA in the 2021 and 2022 survey seasons. In 2022, two little egret, a pair of sparrowhawk, three buzzards and a group of seven lesser black-headed gull were spotted flying over the PPA. In 2021, one male kestrel, one male peregrine, one female sparrowhawk, six mute swan, five juvenile mute swans and a

party of three buzzards were recorded within 100m of the PPA. However, there was no indication that any of these species were breeding within or adjacent to the PPA.

Wintering Birds

16.3.16. A suite of wintering bird surveys was carried out within the bogs surrounding the Power Plant Area, (Derryarkin Bog and Drumman Bog) in the 2021-2022 and 2022-2023 wintering periods. The most common recorded bird on Derryarkin bog to the immediate south west of the PPA, was the wintering whooper swan, and its primary commuting route was southwest, away from the PPA. At its peak, in winter 2021-2022, the area held 138 birds or more than 1% of the national population.

16.3.17. Drumman Bog is located within and to the east of the PPA. It accommodated a substantial flock of 80 mute swans in winter 2021-2022 and 106 in October 2022. It also hosted large populations of wintering golden plover in both years, ranging from 400 to 560. Low levels of lapwing were recorded two, while hen harriers roosted there in January and February 2023, 500m from the PPA.

Fisheries and Aquatics

16.3.18. Salmonids and lamprey were recorded at various sampling points in the Mongagh and Castlejordan Rivers, while evidence of white-clawed crayfish, which appear to use streams in the area, was evident in otter spraints.

Other protected and notable species

16.3.19. The site contains suitable habitat for cryptic wood white (butterfly), but it is not subject to legal protection and is not considered further, while there is no suitable habitat for common lizard and none were recorded during walkover surveys.

Summary of Significant Ecological Features

16.3.20. Both European and national designated sites contain significant ecological features and are deemed to be at risk of significant effects.

16.3.21. Sixteen of seventeen habitats or flora in the ZOI are deemed to be at risk of significant effects, while thirteen have significant ecological features.

16.3.22. Fourteen protected and notable species in the ZOI are deemed to be at risk of significant effects, while thirteen have significant ecological features.

16.3.23. Electricity Grid Connection

16.3.24. There are two SAC's and one SPAs within the ZOI (zone of influence) between 11.1km and 17.3km from the EGC. Lough Ennell SPA is also a Ramsar site, while the River Boyne and River Blackwater SAC and SPA are the other two sites. Two NHA's or pNHAs are with the ZOI including the Grand Canal pNHA, located 65m south of the site.

16.3.25. No long established or ancient woodlands are within the ZOI.

Species Recorded

16.3.26. Records of twenty one species were returned by the NBDC within 2km: Badger (21), Otter (14), Pine marten (5), soprano pipistrelle (1), Daubenton's bat (1), red squirrel (3), hedgehog (3), stoat (1), Irish hare (1), smooth newt (1) and common lizard (1). The NBDC also returned records of high impact invasive mammals being American Mink (3), brown rat (1) and grey squirrel (1), fallow deer (2) and rabbit (6).

16.3.27. Records of twenty nine notable bird species were returned, including one Annex I bird, the Whooper Swan, nine Red-listed and seventeen Amber-listed birds. The NBDC also returned records of high impact invasive mammals being American Mink (3), brown rat (1), grey squirrel (1), fallow deer (2) and rabbit (6).

Field Survey

Habitats

16.3.28. The PPA site contains the following habitats, which are described in the EIAR by reference to the Habitats Survey presented in Appendix 9B and Fossitt (2020): Acid oligotrophic lake (FL2); Lowland depositing river (FW2); Drainage ditches (FW4); Improved grassland (GA1); Amenity grassland (GA2); Dry meadows and grassy verges (GS2); Raised bog (PB1); Cutover bog (PB4); Spoil and bare ground (ED2); Bog woodland (WN7); Mixed broadleaf/conifer woodland (WD2); Immature woodland (WS2); Scrub (WS1); Hedgerows (WL1) and Treelines (WL2).

16.3.29. No protected, notable plants or invasive species were identified within the EGC or its zone of influence. Two third Schedule invasive species (EC Birds and Natural Habitats Regulations) were recorded in the Grand Canal, to the south of the site being Nuttall's pondweed and New Zealand pigmyweed.

Bats

16.3.30. Initial surveys determined the EGC site is predominantly cutover bog habitat, which is of Negligible to Low foraging / commuting suitability for bats and was not of sufficient quality to warrant a bat survey. Small areas of hedgerow and trees at the south of the site have Low to Moderate suitability for commuting and foraging bats.

16.3.31. A single soprano pipistrelle bat was recorded emerging from a building to the north east of the EGC. The building is outside of the site boundary and located between the proposed 200kV substation and the R400.

16.3.32. Bat activity surveys (June-August 2023) indicated low bat numbers in the ECG, with 199 common pipistrelle, 42 soprano pipistrelle and 2 Leisler's bat recorded and concentrated on the hedgerow corridors at the south of the EGC site.

Badger

16.3.33. Three badger setts were identified within the ZoI. A subsidiary sett (BA03) and an outliner sett were identified approximately 6m north and 46m west of the 400kV substation and another 50m southwest of the proposed 220kv substation compound, while other evidence of their presence was also evident at each sett. Cutover bog is considered unsuitable habitat, but parcels of woodland throughout the EGC and field boundary hedgerows in agricultural fields could provide suitable habitat.

Otter

16.3.34. A potential but inactive holt was identified just 9m outside the EGC, at a culvert on the Coolcor stream, while spraint was recorded at a culvert crossing the Yellow River within the EGC. No other evidence of otter was identified within 150m of the EGC, although several areas would be suitable for commuting and foraging.

Other protected mammals

16.3.35. While other mammals have been recorded in the area and may be present, the only live siting during field work was of a pine marten.

Marsh Fritillary

16.3.36. Small areas were deemed good habitat (0.54ha) and very good habitat (0.1ha) and larval web searches identified larvae at some locations.

Amphibians

16.3.37. eDNA testing of water confirmed the presence of smooth newt in a pond within the EGC, while on a precautionary basis other waterbodies are likely to contain smooth newt. Common frog was also recorded on the site.

Breeding Birds

16.3.38. Monthly breeding bird surveys were carried out on Derryarkin and Ballybeg bogs in April-September 2021 and 2022, on four survey days each month. The bog contains extensive suitable habitat for breeding birds, with wetland habitats, regenerating bog, and developing scrub present. A pair of Coot bred successfully in 2021 and 2022, as did a pair of mute swan in both years. Tufted duck were present in both years, but there were no signs of breeding. 17 non-breeding mute swans were also present on four occasions in 2022, but were only closer than 100m from the EGC on two occasions. One whooper swan spent the summer of 2022 in the Derryarkin quarry pond, but not near the EGC. Other species noted closer than 10m from the EGC over the two years are in 2022 - little egret (5 times), sparrowhawk (3), buzzard (5), peregrine (1), kestrel (4), and lapwing (3), while in 2021 one sparrowhawk (3), kestrel (4), buzzard (3), peregrine (2), little egret (6), groups of three and five mute swan, and lapwing (three groups of 40-50+).

Wintering Birds

16.3.39. Wintering bird surveys were carried out within Derryarkin Bog and Ballybeg Bog, within which most of the EGC would be built, during the 2021-2022 and 2022-2023 wintering periods. Whooper swan is the main feature on Derryarkin bog at the north of the EGC and its main movement from the bog is in a southwest direction. Peak numbers recorded were 102 in January 2022 and 225 in January 2023.

16.3.40. Both whooper swan (once north to south and three time south to north, with a maximum of twelve) and mute swan (flying north south and east west, with a maximum of four birds) were recorded passing over Ballybeg bog at the south of the EGC. A single egret and flocks of 200+ golden plover and lapwing were also recorded, with occasional visits from snipe and birds of prey such as peregrine.

16.3.41. Birds recorded within 100m of the entire overhead line route of the EGC in winter 2021-2022 include buzzard (four times), flocks of golden plover (ranging 28 to 400+), hen harrier (1), kestrel (2), flocks of lapwing (18 to 200+), little egret (3 passes of 1-2), mute swan (one movement of a group of seven west to east), peregrine

falcon (three passes of 1-2), sparrowhawk (three passes of 1-2), whooper swans (five flocks of 7-34).

Fisheries and Aquatics

16.3.42. Two sampling points in the Grand Canal to south of the EGC, show that the canal contains red listed European eel.

Other protected and notable species

16.3.43. There is no suitable habitat for common lizard and none were recorded during walkover surveys. No other protected or notable species were noted.

Summary of Significant Ecological Features

16.3.44. Both European and national designated sites are deemed to be at risk of significant effects and contain significant ecological features.

16.3.45. All nine habitats or flora in the ZOI are deemed to be at risk of significant effects, while seven have significant ecological features.

16.3.46. Thirteen protected and notable species in the ZOI are deemed to be at risk of significant effects, and all are deemed to have significant ecological features.

Gas Connection Corridor

Habitats

16.3.47. There are five SAC's and four SPAs within the ZOI. The closest are Lough Ennell SAC 1.8km northwest (3.1km downstream hydrologically (DH)) and Lough Ennell SPA 2.5km northwest (3.8km DH). The River Boyne and River Blackwater SAC and SPA are 16.5km (29km DH) from the site. One pNHA is with the ZOI being the Lough Ennell pNHA, 1.8km northwest (3.1km DH). Other hydrologically linked sites listed are the River Shannon Callows SAC and Middle Shannon Callows SPA (both 70.6km), Lough Derg North-east Shore SAC (98.8km); Lough Derg (Shannon) SAC 96.8km and Lower River Shannon SAC (132.7km).

16.3.48. No long established or ancient woodlands are within the ZOI.

Species Records

16.3.49. The NBDC records comprise 1,494 records and 117 species within 2km of the GCC including badger (20 records), Otter (9), Pine Marten (5), Soprano Pipistrelle

(2), Daubenton's Bat (1), Red Squirrel (1), Hedgehog (5), Stoat (4), Irish hare (4), Marsh Fritillary (17), White-Clawed Crayfish (4) and Common Frog (12).

16.3.50. Records of seventy two notable bird species were returned by the NBDC and all but three are Red of Amber-listed birds. Eleven are on Annex I of the Birds Directive being, whooper swan, kingfisher, peregrine, merlin, little egret, Greenland white-fronted goose, gadwell, nightjar, dunlin, corncrake, and common tern.

16.3.51. The NBDC returned records of high impact invasive mammals the American Mink, brown rat and grey squirrel, as well as lesser impact species, fallow dear, rabbit and greater white-toothed shrew. One record of the medium impact invasive reptile the Cumberland slider (turtle) was returned from 2016 and four records of invasive molluscs, with the most recent the Jenkins Spire snail from 2012.

Field Survey

Otter

16.3.52. Aquatic surveys at four points in the streams in the GCC did not identify any holts or layups, but one regular sprainting site was noted. No other signs evident.

Fisheries and Aquatics

16.3.53. While several samples were taken, the full extent and distribution of aquatic habitats within the GCC is unknown. A low abundance of brown trout was found at two sampling points.

16.3.54. No white-clawed crayfish, rare or protected macrophytes, aquatic bryophytes, or macro-invertebrates were recorded at the sampling sites within the boundary.

16.4. Predicted Impacts (Potential Effects)

The EIAR identifies the potential for a range of environmental effects on Biodiversity The likely effects of the development, as identified in the EIAR, are summarised in Tables 16.1, 16.2, 16.3 and 16.4 below. The focus of the assessment will be on the Significant and Negative/Adverse effects of the development, while Minor effect, which are deemed to be Imperceptible, Not Significant, Slight or Moderate, have been identified, but will not be assessed in the analysis and conclusion section below, unless there are identified significant impact interactions, cumulative effects or where concerns have been expressed by parties to the application.

Table 16.1: Summary of Potential Effects

Project Phase	Potential Direct, Indirect and Cumulative Effects
Do Nothing	If the proposed development and the overall project were not to proceed, environmental monitoring and site management would continue, as is required under the conditions of IPC Licence (P0501-01). This would include the implementation of rehabilitation plans (Appendix 9J), the aim of which is the environmental stabilisation of the former peat production areas, putting the bogs on a trajectory towards becoming naturally functioning peatland systems over a period of 30-50 years, through a combination of rehabilitation, rewetting measures and natural colonisation.

Table 16.2: Summary of Potential Effects (Power Plant Area)

Project Phase	Potential Direct, and Indirect Effects
Construction	(effects are local level unless stated – applies to Tables 16.2. 16.3 and 16.4)
European Sites	• Potential water-based pollution impacts to mobile species of the River Boyne and River Blackwater SAC would be Negative, **Significant** and Short-Term, at an International level**.**
	• The spread of invasive species in the River Boyne and River Blackwater SAC and SPA would be Negative, **Significant** and Short-Term during construction, but could have medium to long-term effects at an International level on the European sites.
Habitats	• There would be no loss of any EU Annex I habitat as a result of the construction of the PPA. However, the effect on the existing habitats within the site would be locally Negative, **Significant** and Short-Term to Permanent**.**
	• Pollution and Sedimentation impacts from construction traffic and plant movement, accidental spillages, deposition and runoff, as well as the installation of pipes to the Mongagh and Yellow River would have Negative, **Significant** and Temporary effects.
	• The spread of invasive species would be Negative, **Significant** and Short-Term, during construction, with further spreading having medium to long-term effects.
Bats	• Bat roosts would be lost in two of eight identified buildings due to demolition, while two more would be affected by construction if carried out during the spring/summer roosting season. The effects would be Negative**, Significant** and Permanent at a county level.
	• The risk of mortality or injury to bats within roosts and disturbance or displacement due to artificial lighting noise and vibration would be Negative, **Significant** and short-term at a county level.
Badger	• The loss of setts would be Negative, **Significant** and Permanent.
	• Physical damage and or disturbance to setts would be Negative, **Significant** and Short-Term.
	• The risk of mortality or injury to badgers in setts or in construction areas as well as disruption and/or displacement of badger by

	increased human presence, artificial lighting, noise, vibrations and fencing associated with site compounds and working areas would be Negative, **Significant** and Short-Term.
Otter	• The risk of mortality or injury to otter in construction areas, damage to habitat through water pollution and disruption and/or displacement of otter by increased human presence, artificial lighting, noise, vibrations and fencing would have Negative, Moderate and Short-Term effect.
Other protected mammals	• Effects on other mammals, the Irish Hare and Pine Marten as well as other potentially present mammals red squirrel, hedgehog, and stoat would be Negative, **Significant** and Short-Term to Permanent as a result of a loss of breeding or resting sites, habitat loss, and disruption and/or displacement.
Marsh Fritillary	• The effect of habitat loss would be Negative, **Significant** and Permanent at a county level.
	• Mortality or injury to eggs, larvae and adult butterflies would have a Negative, **Significant** and short-term county level effect.
Amphibians	• County level effects on Smooth Newt and Common Frog would be Negative, **Significant** and Permanent due to loss of a breeding waterbody, as a pond would be removed; and habitat loss and fragmentation of terrestrial habitat.
	• Damage to breeding waterbodies due to water pollution would be Negative, Slight to **Significant** and short-term county level effects.
Breeding Birds	• **Negative**, Moderate and Permanent effects on loss of breeding habitat at county to local level.
	• **Negative**, Moderate and Short-Term county to local effects relating to mortality risk and injury to nesting birds and disturbance to adults and their eggs, young and nests and displacement following removal of nests.
Wintering Birds	• **Negative**, Slight and Short-Term effect due to disturbance / displacement due to construction noise.
Fisheries and Aquatics	• Short term obstruction to fish passes or pollution/sedimentation coinciding with upstream migration and spawning, or smolt downstream migration, leading to mortality and injury would have Short-Term, **Significant** and Negative effects.
Operation	
European Sites and National Habitats	• No operational phase impacts.
Habitats	• Neutral, Not significant and Long-Term Airborne pollution impact.
	• Negative, Moderate and Temporary to Long-Term impacts from Waterborne pollution.
Bats	• Disturbance / displacement of bat roosts due to artificial lighting and noise and disturbance / displacement of foraging and commuting bats due to artificial lighting would have Negative, Moderate and Long-Term effects.

Badger **Otter** **Other protected mammals** **Marsh Fritillary** **Amphibians** **Breeding Birds** **Wintering Birds** **Fisheries and Aquatics**	• Negative, Slight and Long-Term effect due to disturbance / displacement from increased human presence, traffic and new artificial lighting. • Negative, Slight and Long-Term effect due to disturbance / displacement from increased human presence, traffic and new artificial lighting. • Negative, Moderate and Long-Term effects due to water pollution. • Negative, Slight and Long-Term effect due to disturbance / displacement from increased human presence, traffic and new artificial lighting. • Neutral, Imperceptible and Long-Term effects from airborne pollution. • Negative, Slight and Temporary effect from waterborne pollution. • Neutral, Imperceptible and Long-Term effect from airborne pollution. • Negative, Slight and Long-Term effect from new artificial lighting. • Negative, Not Significant and Long-Term disturbance / displacement due to noise, visual disturbance and vibration. • Negative, Not Significant and Long-Term disturbance / displacement due to new artificial lighting. • Negative, **Significant** and Temporary effect due to pollution / sedimentation.
Decommissioning	• Effects arising from the process of decommissioning of the Power Plant Area are considered to be of a similar nature and duration to those arising from the construction process on a precautionary basis. • A Decommissioning Plan (including a Decommissioning Environmental Management Plan and potentially a Closure, Restoration and Aftercare Management Plan (CRAMP) would be prepared and agreed with the relevant authority.

Table 16.3: Summary of Potential Effects (Electricity Grid Connection)

Project Phase	Potential Direct, Indirect and Cumulative Effects
Construction **European Sites**	• Potential water-based pollution impacts to mobile species of the River Boyne and River Blackwater SAC would be Negative, **Significant** and Temporary, at an International level**.** • Potential Short-Term, Negative and Slight disturbance effect on Otter due to artificial lighting, noise, and/or the increased presence of personnel, plant, and machinery outside the SAC boundary. • The spread of invasive species in the River Boyne and River Blackwater SAC and SPA would be Negative, **Significant** and

National sites	Short-Term during construction, but could have medium to long-term effects at an International level on the European sites. • Negative, Slight and Short-Term national level effects from air pollution.
Habitats	• Negative, Moderate and Short-Term national level effects from habitat pollution or sedimentation. • Negative, **Significant** and Short-Term to permanent local effects from habitat loss and damage. • Negative, Slight and Temporary national level effects from air pollution impacts to Annex I habitat. • Negative, **Significant** and Temporary national to local level effects to habitats from pollution and sedimentation.
Bats	• Negative, **Significant** and Short-term to Long-term effects from spread of invasive species. • Disturbance/displacement of bat roosts due to artificial lighting, noise and vibrations would have Negative, **Significant** and Short-Term effects. • Disturbance/displacement of foraging / commuting bats, due to artificial lighting, noise and vibrations would have Negative, Slight and Short-Term effects.
Badger	• Loss of Setts and loss and/or fragmentation of foraging and commuting habitat would have Negative, **Significant** and Permanent effects. • Physical damage and/or disturbance to Setts; Mortality risk or injury of badger in setts and in construction areas; disturbance / displacement due to increased human presence, artificial lighting, noise, vibrations and fencing would have Negative, **Significant** and Short-Term effects.
Otter	• The loss of a breeding / resting site would have a Negative, **Significant** and Permanent effect. • Mortality risk or injury to otter within a breeding / resting site or in construction areas; disturbance / displacement due to increased human presence, artificial lighting, noise, vibrations and fencing; and damage to otter habitat due to water pollution, would have Negative, **Significant** and Short-Term effects.
Other protected mammals	• Loss of habitat and breeding and resting sites would have Negative, **Significant** and Permanent local effects. • Disturbance / displacement due to increased human presence, artificial lighting, noise, vibrations and fencing; and mortality risk or injury in construction areas, would have a Negative, **Significant** and Short-Term local effect.
Marsh Fritillary	• The effect of habitat loss including breeding habitat would be Negative, **Significant** and Permanent at a county level.

Amphibians	• Mortality or injury to eggs, larvae and adult butterflies would have a Negative, **Significant** and short-term effect at a county level. • Effects would be Negative, **Significant** and Permanent due to loss of a breeding waterbody as a pond would be removed; and habitat loss and fragmentation of terrestrial habitat, at a county level. • Damage to breeding waterbodies due to water pollution would be Negative, **Significant** and short-term, at a county level. • Negative, Moderate and Short Term effects from mortality risk or injury in waterbodies and terrestrial habitat and mortality risk and injury in construction areas, at a county level.
Breeding Birds	• Negative, Slight and Short-Term effects at county level due to disturbance / displacement from waterbodies due to artificial lighting. • Negative, Moderate and Permanent effects from loss of breeding habitat at a local to county level.
Wintering Birds	• Negative, Moderate and Short-Term local to county level effects relating to mortality risk and injury to nesting birds; and disturbance to adults and their eggs, young and nests and displacement following removal of nests.
Fisheries and Aquatics	• Negative, Slight and Short-Term effect due to disturbance / displacement due to construction noise, visual disturbance, and artificial lighting. • Negative, **Significant** and Temporary effects from temporary obstruction to fish passes; and pollution/sedimentation of habitats at national to local level.
Operation	
European Sites	• No operational phase impacts.
National Habitats	• Negative, Moderate and Temporary from waterborne pollution.
Habitats	• Neutral, Imperceptible and Permanent airborne pollution effects. • Negative, Moderate and Temporary effects from waterborne pollution.
Bats	• Disturbance / displacement of bat roosts due to artificial lighting and noise and disturbance / displacement of foraging and commuting bats due to artificial lighting would have Negative, Moderate and Permanent effects.
Badger	• Negative, Slight and Permanent effects due to disturbance / displacement due to increased human presence, traffic and new artificial lighting.
Otter	• Negative, Slight and Permanent effects due to disturbance / displacement from increased human presence, traffic; new artificial lighting; and damage to habitat due to water pollution.

Other protected mammals	• Negative, Slight and Permanent effects due to disturbance / displacement from increased human presence, traffic and new artificial lighting.
Marsh Fritillary	• Neutral, Imperceptible and Permanent from airborne pollution.
Amphibians	• Negative, Moderate and Temporary effects from waterborne pollution. • Neutral, Imperceptible and Permanent from airborne pollution. • Negative, Slight and Permanent from new artificial lighting.
Breeding Birds and Wintering Birds	• Negative, **Significant** and Permanent effects at a local to county level, due to mortality risk and injury through collision with overhead lines and pylons. • Negative, Slight and Permanent effects from displacement / habitat fragmentation due to presence of overhead lines or pylons at a local to county level.
Fisheries and Aquatics	• Negative, **Significant** and Temporary effect due to pollution / sedimentation.
Decommissioning	• The EGC would be managed by EirGrid. Decommissioning activities would be conducted in accordance with the appropriate guidance and legislation at the time of decommissioning.

Table 16.4: Summary of Potential Effects (Gas Connection Corridor)

Project Phase	Potential Direct, Indirect and Cumulative Effects
Construction	
European Sites	• Negative, **Significant** and Short-term to medium-term effects due to waterborne pollution impacts; disturbance / displacement of QI/SCI species at an international level; • Negative, **Significant** and Short-term to Long-term effects due to and spread of invasive species at an international level;
National Sites	• Negative, **Significant** and Short-term effects from waterborne pollution at a national level.
Habitats	• Negative, **Significant** and Permanent effects due to habitat loss. • Negative, **Significant** and Temporary to Short-term national to local effects due to habitat damage, pollution and sedimentation. • Negative, **Significant** and Short-term to Long-term national to local effects due to spread of invasive species.
Bats	• Negative, **Significant** and Permanent national to local effects from loss of roosts. • Negative, **Significant** and Temporary to Short-term national to local effects due to mortality or injury to bats within roost; and disturbance / displacement of roosting and foraging / commuting bats due to artificial lighting, noise, and vibrations.

Badger **Otter** **Other protected mammals** **Marsh Fritillary** **Amphibians** **Breeding Birds**	• Negative, **Significant** and Medium-term to Permanent national to local effects due to loss of foraging and commuting habitat; and habitat fragmentation and disturbance. • The loss of setts would have a Negative, **Slight to Significant** and Permanent County to Local effect. • Negative, **Slight to Significant** and Short-Term County to Local effects from physical damage and or disturbance to setts; mortality risk or injury of badger in setts and construction areas; and disturbance / displacement due to increased human presence, artificial lighting, noise, vibrations and fencing. • Negative, **Slight to Significant** and Short-Term to Permanent County to Local effects due to loss and/or fragmentation of foraging and commuting habitat. • Negative, **Slight to Significant** and Permanent county to local effects due to loss of an otter breeding / resting site. • Negative, **Slight to Significant** and Short-Term county to local effects due to risk of mortality or injury to otter in breeding, resting or construction areas; damage to habitat through water pollution; and disruption and/or displacement by increased human presence, artificial lighting, noise, vibrations and fencing. • **Slight to Significant** and Short-Term county to local effects due to loss and / or fragmentation of habitat. • Negative, **Slight to Significant** and Permanent county to local effects due to loss of breeding / resting sites. • Negative, **Slight to Significant** and Short-term to Permanent county to local effect due to habitat loss. • Negative, **Significant** and Short-term county to local effects due to disturbance / displacement due to increased human presence, artificial lighting, noise, vibrations and fencing; and mortality risk or injury in construction areas. • Negative, **Significant** and Short-Term to Permanent national to local effects due to Habitat loss and fragmentation. • Negative, **Significant** and Short-Term national to local effects due to mortality risk or injury of eggs, larvae and adult butterflies. • Negative, **Significant** and Permanent national to local effects due to loss or damage to breeding ponds/wetlands. • Negative, **Significant** and Short-Term to Permanent national to local effects due to habitat loss and fragmentation of terrestrial habitat. • Negative, **Significant** and Short-Term national to local effects due to damage / disruption to breeding waterbodies; mortality risk of individuals in terrestrial habitat; mortality risk or injury in construction areas; and disturbance / displacement from waterbodies due to artificial lighting.

Wintering Birds **Fisheries and Aquatics**	• Negative, **Significant** and Permanent effect due to loss of breeding habitat. • Negative, **Significant** and Temporary effect due to Mortality risk and injury to nesting birds; and disturbance to adults and their eggs, young and nests, and displacement following removal of nests. • Negative, **Significant** and Temporary county to local effects due to mortality risk and injury in construction areas; and disturbance / displacement due to construction noise, visual disturbance, and artificial lighting. • Negative, **Significant** and Temporary to Permanent county to local effects due to habitat loss and fragmentation. • Negative, **Significant** and Temporary county to local effects due to pollution / sedimentation of habitat; and temporary obstruction of fish passage.
Operation	• No baseline surveys were carried out in respect of habitats, bats, badger, otter, or other mammals, Marsh Fritillary, Amphibians, breeding and wintering birds, along the proposed route of the Gas Connection Corridor. • The pipeline would be entirely underground and would not be visible or result in any permanent habitat loss. Given the nature of the development once operational, the negligible risk of pollution events, and an infrequent requirement for maintenance, no impacts are predicted during the operational phase.
Decommissioning	• The GCC would be managed by the gas network operators activities and it is not envisaged that the gas connection corridor would be decommissioned.

16.5. Mitigation

16.5.1. Universal Mitigation

- Universal mitigation measures are set out in the Construction Environment Management Plan (CEMP) (Appendix 5B), the Habitats Management Plan (Appendix 9K) and the Peat and Spoil Management Plan (Appendix 5B). The CEMP, would be a live document and would include a Pollution Prevention Plan.
- Key mitigation themes are Pre-construction surveys for protected species; Safeguarding of retained habitats; Safeguarding of protected or notable species; and appointment of an appropriately experienced ecologist to undertake an Ecological Clerk of Works (ECoW) role.
- Construction works would be carried out by employing accepted good work practices during construction, and environmental management measures,

including that all materials would be stored at the construction compound; Weather conditions would be taken into consideration; 50m exclusion zones and barriers (silt fences) between any excavated areas and watercourses; Bog mats / aluminium panel tracks used in wet areas; Personnel trained in pollution incident control response; Carry out visual examinations of local watercourses during construction; Excavations left open for minimal periods; Spillage kits and appropriate containment facilities available; Plant equipment, machinery, vehicles and construction personnel shall not be permitted in watercourses or wet drainage ditches; Cabins, containers, workshops, plant, materials storage, and storage tanks shall not be located near any surface water channels and would be located beyond the 50m hydrological buffer at all times.

- The measures set out above would apply to all aspects of the proposed development and the overall project, but additional area specific mitigation measures are also included and are set out below.

16.5.2. Power Plant Area

16.5.3. Construction Phase

- Habitats – Reinstatement of disturbed areas with woodland (17.08ha) and grasses as set out in the Landscape Mitigation Plan (Chapter 10 and Appendix 10B). Also addressed in the Habitats Management Plan, the Ballybeg and Derryarkin Cutaway Bog Decommissioning and Rehabilitation Plans (Appendix 9J) and the Habitat Management Plan (Appendix 9K).
- Invasive Species – Invasive Species Plan to be prepared and implemented.
- Bats – Roosts present within buildings B4, B4a, B5 and S1 (Figure 9.6) would require derogation licences prior to exclusion of bats from these roosts to proceed with demolition works.
- Badger – A Badger Management Plan would be devised and implemented, including identifying all setts immediately prior to commencement, largely restrict works to daylight hours, limit artificial lighting, restrict access to drainage attenuation ducts and trenches and safeguard water sources. These measures also apply to otter, and other protected mammals.

- Marsh Fritillary – Should larval webs be recorded within the PPA, these would be translocated, under licence, if avoidance is not feasible during construction.
- Amphibians – Capture and exclusion methods, including survey, vegetation clearance and fencing would be used to protect smooth newt and common frog, as part of the removal of pond 3. The precise method of capture and exclusion would be set out in a Species Protection Plan which is required as part of a licence from the NPWS. The peat deposition areas would be checked by the clerk of Works before deposition commences.
- Breeding birds – Vegetation removal would be restricted to non-breeding seasons under supervision and if bird nests are detected, works would cease. Buildings to be demolished would also be checked for nests. Nest cups would be installed in new buildings in similar locations to existing nests.

16.5.4. Operational Phase

- Habitats – SuDS measures would mitigate the risk of surface water runoff to watercourses.
- Bats – Minimise number of and power of lights and face away from the southern boundary. Lights would be turned off other than when needed. Lighting design would ensure no light spill in excess of one lux on semi-natural habitats. These measures are also relevant to badger, otter, other protected mammals and amphibians.

16.5.5. Decommissioning Phase

- The same mitigation measures as are proposed for the construction phase would be required and implemented.

16.5.6. Electricity Grid Connection

16.5.7. Construction Phase

- Standard measures set out in CEMP would apply.
- Designated sites – Measures to protect the River Boyne and River Blackwater SAC and SPA, as set out in the CEMP, would apply, to prevent the spread of invasive species.

- Habitats – Reinstatement to include trees planted along the R400, the 200kV substation and the 400kV substation and naturally reinstated disturbed lands.
- Invasive Species – Invasive Species Plan to be prepared and implemented.
- Bats – Minimise number of and power of lights, face away from roosts and turn off other than when needed.
- Badger – Permanent and temporary closure of setts close to the 400kv substation would requires a licence. The same measures as for the PPA (above) will apply and would also apply to Otter.
- Marsh Fritillary – As per measures for PPA (above).
- Amphibians – As per measures for the PPA, other than capture and exclusion would be carried out to translocate amphibians from Pond 1 to a safe refuge area before commencement of the development.
- Breeding birds – As per measures for PPA (above).

16.5.8. Operational Phase

- Bats – As per measures for the operational phase of the PPA (above), while a lighting design for the operation of the 220kV and 400kV substations associated with the Electricity Grid Connection must be produced prior to the commencement of construction, to illustrate how bats would be protected from light spill.
- Badger – Lighting design would ensure no light spill in excess of one lux on semi natural habitats, and particularly in proximity to retained badger setts.
- Otter and other protected mammals – Lighting design would ensure no light spill in excess of one lux on semi natural habitats, and particularly along the Yellow River and Coolcor Stream.
- Amphibians – Lighting design would ensure no light spill in excess of one lux on semi natural habitats.
- Breeding and Wintering Birds – Transmission lines would be fitted with devices such as flight diverters, hanging tags and marker spheres, to make them more visible to flying birds.

- Fisheries and aquatics – Site drainage would be based on SuDS principles and all lighting would be directed away from watercourses to prevent light spillage.

16.5.9. Decommissioning

- The impacts would be the same as the construction phase. The same mitigation measures proposed for the construction phase would be required/implemented.

16.5.10. Gas Connection Corridor

- The GCC does not form part of the application. Mitigation measures would be determined by GNI (Gas Networks Ireland) as part of its future consenting process.

16.6. Residual Effects

- Residual effects are set out in Chapter 9.7. Following the implementation of mitigation measures (including monitoring), no significant residual effects have been identified for the construction, operational or decommissioning phases for the Power Plant Area, Electricity Grid Connection or the Gas Connection Corridor.
- The residual effects are as follows:

16.6.1. Power Plant area

- Bats – Permanent, Negative and Slight – loss of bat roosts in five buildings and disturbance to retained and new roosts.
- Amphibians – Short Term, Negative and Slight

16.6.2. Electricity Grid Connection

- Badger – Permanent, Negative, Slight – the loss of setts, and disturbance/disruption to badger setts and their commuting and foraging habitat, via increased human presence and artificial lighting during operation.
- Amphibians – Short Term, Negative and Slight – habitat loss and fragmentation, disturbance, injury and mortality during construction.
- Breeding and wintering birds – Permanent, Negative and Slight as collisions and subsequent injury or mortality remain possible.

16.6.3. Gas Connection Corridor

- Would be considered as part of the consenting and detailed design process.

16.7. Cumulative Effects

16.7.1. Overall Project

- There is potential for the three elements of the overall project to be carried out at the same time and cumulative effects may arise. Cumulative effects are set out in Chapter 9.8 of the EIAR and summarised in Tables 9.17 (PPA) and 9.18 (EGC).

16.7.2. Power Plant Area

- Following implementation of mitigation measures, the effect would largely be imperceptible or not significant, except on local populations of bats and amphibians where residual effects would remain Permanent, Negative and Slight at a local scale.
- During construction, cumulative effects could arise with amphibians on other elements of the project, but it cannot be determined if cumulative effects could arise for bats on the GCC in the absence of detailed design and surveys.
- No significant cumulative effects are anticipated during the operational phase of the PPA with the EGC or GCC, though slight effects on bats would remain from roost and habitat disturbance.

16.7.3. Electricity Grid Connection

- Following implementation of mitigation measures the effects of the EGC would be imperceptible or not significant, except for on local populations of amphibians during construction and decommissioning where residual effects would remain Permanent, Negative and Slight, and would have the same residual effects on populations of breeding and wintering birds using habitats in the vicinity of the EGC, due to collision risk, electrocution and disturbance from pylons and overhead lines. Badger would also experience slight cumulative effects due to loss of setts, mortality or injury, disturbance and loss of habitat.
- During construction, the effects on amphibians would act cumulatively with the PPA and GCC, but residual effects on breeding and wintering birds would not act cumulatively with the other elements of the overall project.

16.7.4. Gas Connection Corridor

- There is potential for cumulative effects on amphibians with the other elements of the overall project, if construction timescales overlap.
- Potential cumulative effects on bats cannot be determined in the absence of further surveys and mitigation for the GCC.

16.7.5. Cumulative in-combination effects-other nearby projects.

- While Appendix 19A sets out a comprehensive list of projects in the wider area and other similar Gas power plants around the country, Table 9.16 set out 23 projects that may potentially act in-combination with the proposed development and overall project. Of those listed, the 29 turbine Yellow River Wind Farm, a 275MWe gas fired plant and a 100kV substation are completed, while a materials recovery facility (90,000 tonnes per annum) and soil and stone importing facility (25,000 tonnes per annum) were both refused permission and a further application for substitute consent withdrawn.
- The assessment stated that the other projects were sufficiently distant and of a nature that there are not pathways for these projects to act in combination with the proposed development and overall project following implementation of their respective mitigation measures, to affect amphibians, who are likely to remain in suitable habitat within 200-250m of breeding ponds.
- Due to the nature of the plans or projects, they would not have an impact on breeding or wintering birds.

16.8. Analysis, Evaluation and Assessment: Direct and Indirect Effects

16.8.1. I have examined, analysed and evaluated Chapter 13 of the EIAR, all of the associated documentation and submissions on file in respect of Land, Soils and Geology. I am satisfied that the applicants understanding of the baseline environment, by way of desk and site surveys as well as a suite of species specific surveys, which I have listed in paragraph 16.2.2 above, is comprehensive and that the key impacts in respect of likely effects on Biodiversity, as a consequence of the proposed development and overall project have been identified.

European sites / habitats / fisheries and aquatics

16.8.2. This part of the assessment overlaps with the AA Screening Assessment (Appendix 2), the NIS (Appendix 3 AA and AA Determination) and the Water Framework Directive Stage 1: screening the key findings of which I have summarised below.

16.8.3. In respect of effects on the overall conservation status of birds, the NIS it predicted that the proposed development and overall project would not affect the conservation status of the breeding bird populations and would not result in a likely significant negative adverse effect on the integrity of any European site. It concluded that that following an examination, analysis and evaluation of the NIS all associated material submitted and taking into account the submissions and observations received, I consider that adverse effects on site integrity of the River Boyne and River Blackwater SAC (Site Code 002299) and River Boyne and River Blackwater SPA (Site Code 004232) and Lough Ennell SPA (004044) can be excluded in view of the conservation objectives of these sites and that no reasonable scientific doubt remains as to the absence of such effects.

16.8.4. The WFD screening identified potential pathway linkage to water features in the vicinity. However, following the implementation of mitigation measures, set out in the CEPM in Appendix 5A to the EIAR, no residual risk was identified and the need for a Stage 2 WFD assessment was screened out.

In relation to the potential impacts on groundwater and surface water, I am satisfied that the proposed mitigation measures including the proposed drainage network, interceptors and adherence to the terms of the IE licence that would apply to the PPA, would ensure that adverse impacts would not arise in respect of European sites / habitats / fisheries and aquatics.

<u>Bats</u>

16.8.5. Paragraph 9.6.22 of Section 9.6 ‘Mitigation and enhancement measures’ of Chapter 9 ‘Biodiversity’ of the submitted EIAR and paragraph 5.4.3.3.1 of the NIS both state that ‘Eight bat roosts of four different bat species (soprano pipistrelle, common pipistrelle, Natterer’s bat and brown long-eared bat), were confirmed within six buildings and one structure within or directly south of the Power Plant Area. Roosts present within B4, B4a, B5 and S1 will require derogation licences prior to exclusion of bats from these roosts to proceed with demolition works required’.

16.8.6. All four of the species referenced in paragraph 9.6.22 are protected under Annex IV of the Habitats Directive. Derogation Licences may be issued by the National Parks and Wildlife Service under Regulation 54 of the European Communities (Birds and Natural Habitats) Regulations 2011-2021 ("the 2011 Regulations"). The application was not accompanied by derogation licence or licences in respect of the above referenced roosts and the Coimisiún would be precluded from granting permission in the absence of a derogation licence on the basis of the information set out in below.

16.8.7. On the 1st of July 2025, the Department of Housing, Local Government and Heritage published Guidance for Applicants (Version 1.0) titled 'Applications for Regulation Derogations for Annex IV species', wherein section 5 'Timing of Application for Derogation' states that:

> In July 2023, the Court of Justice of the European Union High Court issued a judgment (in respect of Case C-166/22 Hellfire Massy Residents Association v An Bord Pleanála' and others) relating to the relationship between the systems of development consent and the provision of derogations regarding the strict protection of species under the EU Habitats Directive. On the basis of this judgment, it is the Department's opinion that where a proposed activity requires consent from another statutory authority, and it appears that such an activity, if permitted, by that appropriate public authority, will also require a derogation from the Minister, then it is necessary that the derogation should be granted before the approval of the consent to the proposed activity.
>
> Public authorities are advised that, when considering applications for development consent, they should ensure that such applications include copies of the derogation(s) that the applicant has considered it is necessary to acquire. The responsibility of avoiding disturbance or damage to Annex IV species, or of obtaining an appropriate derogation, rests with the applicant.

16.8.8. Following from the above, Regulation 51 of the 2011 Regulations makes it a criminal offence, subject to criminal prosecution, to carry out any of the following activities unless a derogation has been granted in accordance with Regulation 54 of the Regulations:

> (b) Deliberately disturb these species particularly during the period of breeding, rearing, hibernation and migration

(d) Damage or destroy a breeding or resting place of such an animal,

16.8.9. On the 7th of November 2025, the Commission wrote to the applicant seeking a copy of the Derogation Licence for the project. A copy of a Derogation Licence was provided by the applicant, to the Commission on the 22nd of January 2026.

16.8.10. The Derogation licence (Der-BAT-2026-48) is effective from the 22nd of January 2026 until the 31st of December 2026. The licence has been issued by the Minister for Housing, Local Government and Heritage, under Regulation 54 of the European Communities (Birds and Natural Habitats) Regulations, 2011 (S.I. No. 477 of 2011) in respect of species of bat that would be disturbed by the proposed works.

16.8.11. The derogation has been issued subject to strict terms and for two reasons which are a) in the interests of public health and safety, or for other imperative reasons of overriding public interest, including those of a social or economic nature and beneficial consequences of primary importance to the environment and b) there is no satisfactory alternative, and the action authorised by this derogation will not be detrimental to the maintenance of the population of bats referred to below

16.8.12. While the preliminary roost assessment identified either bat roosts of four different bat species soprano pipistrelle, common pipistrelle, Natterer's bat and brown long-eared bat, the impact assessment in the technical note accompanying the Derogation Licence application indicates that three buildings and a bridge would be affected while four buildings would not be affected. Therefore, the Derogation Licence only applies to the soprano pipistrelle, common pipistrelle and brown long-eared bat.

16.8.13. I note that No. 3 of the 'Term and Conditions' of the Derogation Licence states that 'A derogation may be modified where updated information indicates that the basis upon which the derogation was granted has materially changed', while No. 9 states that 'if this derogation expires prior to works permitted under this derogation commencing, a new application must be sought in advance, including the provision of any updated data or reports'.

16.8.14. I am satisfied that subject to the proposed mitigation measures set out in the EIAR and the terms and conditions of the Derogation Licence, all of which are for the protection of Bats and that the Commission is not precluded from deciding to grant permission for the proposed development if it is minded to do so.

Badger

16.8.15. Permanent, Negative and Slight residual effects are predicted to remain for badger in the form of the loss, disturbance or disruption to setts and their commuting and foraging habitat, via increased human presence and artificial lighting during operation.

16.8.16. Offaly County Council recommended that a condition be attached any grant of permission requiring the carrying out of a pre commencement badger survey. I note by reference to Section 16.5 above 'Mitigation' that a badger management plan is proposed for the PPA and that permanent and temporary closure of setts close to the 400kv substation would requires a licence, while lighting design would also factor in potential impacts on badger. I also note that paragraph 6.2.2 of the Badger Survey Report (Appendix 9E) addressed mitigation measures and states that 'preconstruction badger surveys are proposed within the zone of influence of the Proposed Development no sooner than one month prior to works commencing , to determine if any setts have become newly established since baseline surveys. These surveys will be carried out by the ECoW, who will provide advice on constraints related to additional badger setts, should they be identified.

16.8.17. I am satisfied that the proposed mitigation measures would ensure that there would be no significant effects on badger as a result of the proposed development and overall project and that a separate specific condition requiring a badger surveys is not required.

Amphibians

16.8.18. The EIAR predicts that there would be short-term, negative and slight residual effects on amphibians due to habitat loss and fragmentation, disturbance, injury and mortality during construction. However, I am satisfied that the mitigation measures proposed in the EIAR would ensure that there would be no significant effects on amphibians during either the construction or operational phases of the proposed development.

Breeding and wintering birds

16.8.19. While the risk of collision of breeding and wintering birds with pylons and overhead lines cannot be excluded entirely, the proposed mitigation measures in the

form of fitting transmission lines with flight diverters, hanging tags and marker spheres would make the lines more visible to flying birds and would significantly reduce the potential risk, which has been assessed in the EIAR as permanent negative and slight. I would agree with the assessed level of residual risk.

Otter / Other Protected Mammals / Marsh Fritillary

16.8.20. While significant potential impacts have been identified for these species, in the absence of mitigation, I am satisfied that subject to the mitigation measures set out in the EIAR, that no significant effects would occur. I am also satisfied that the potential impacts on otter exclude a requirement for the seeking or issuing of a derogation licence at this time under the requirements of Regulation 54 of the European Communities (Birds and Natural Habitats) Regulations 2011-2021.

16.9. Conclusion: Direct and Indirect Effects

16.9.1. I have considered Chapter 9 biodiversity of the EIAR and the suite of supporting reports. I am satisfied that while there is potential for significant adverse impacts to arise at different stages of the proposed development and overall project that these would be suitably managed and mitigated by the measures set out in the application documentation and/or through the attachment of suitable conditions, should the Commission be mined to grant permission.

16.9.2. On that basis, therefore, satisfied that there is no potential for significant direct, indirect, or cumulative effects on Biodiversity. I am further satisfied that proposed mitigation measures can be agreed, with the planning authority, prior to the commencement of development.

17.0 Landscape and Visual

17.1. Issues Raised

- Observers Adele Kierans and Cllr Liam Quinn consider that the major visual impact can be overcome by undergrounding the entire cable.
- Observers Kim and Jason Henry considered that the visual impact will be irreversible.

- Offaly County Council requested additional viewpoints to assess the cumulative impact of the proposed power plant and the adjacent windfarm and to show the power plant at its most prominent. It considered the EIAR did not provide justification for the proposal to run the overground line and pylons considering its impact on Croghan Hill, an area of high amenity. It also requested detail of the power plants external panelling, as it stated that the buildings would be very prominent and a symbol of 21st century industrial architecture locally and nationally.

17.2. Examination of the EIAR

17.2.1. Context

Impacts on Landscape and Visual are addressed in Chapter 10 of the EIAR. The methodology used is set out below. The assessment in the EIAR chapter is supported by the following technical documents.

- Appendix 10A – Photomontage Booklet (refer to EIAR Volume II);
- Appendix 10B – Landscape Mitigation Strategy (refer to EAIR Volume II);
- Figure 10.1 Landscape Designations (refer to EIAR Volume III);
- Figure 10.2 ZTV – OCGT 45m Stack (refer to EIAR Volume III);
- Figure 10.2 ZTV – CCGT 60m Stack (refer to EIAR Volume III);
- Figure 10.3 ZTV – Lattice towers (refer to EIAR Volume III); and
- Figure 10.4 ZTV – All Project Elements (refer to EIAR Volume III)

The assessment follows the following guidelines:

- EPA: Guidelines on the information to be contained in Environmental Impact Assessment Reports;
- LI/IEMA: Guidelines for Landscape and Visual Impact Assessment, 3rd Edition (GLVIA3);
- TII: Landscape Character Assessment (LCA) and Landscape and Visual Impact Assessment (PE-ENV-01101); and
- Landscape Institute - Visual Representation of Development Proposals, Technical Guidance Note 06/194.

The chapter assessed construction and operational effects for the various elements of the proposed development and overall project.

Landscape and Visual Impact Assessment Criteria

17.2.2. Two distinct considerations have been used to determine the significance of an effect, being the 'Nature' of the receptor, which is assessed under Value, Susceptibility and Sensitivity, as well as 'Magnitude', which is assessed under size and scale, extent of area, duration and quality of effects.

Landscape Effects

17.2.3. Before assessing landscape effects, you must identify the components of the landscape. Landscape effects describe the impact on the fabric or structure of a landscape or landscape character.

17.2.4. Landscape effects are assessed on graduates scales as set out below and follow from GLVIA3 and also involves judgement:

- Landscape Value – 1) Very High; 2) Medium; 3) Very Low
- Landscape Susceptibility – 1) Very High; 2) Medium; 3) Very Low
- Landscape Sensitivity – 1) High; 2) Medium-High; 3) Medium; 4) Medium-Low; 5) Low
- Magnitude of Landscape Change (Size and Scale) – 1) High; 2) Medium; 3) Low; 4) Very Low; 5) None.

Visual Effects

17.2.5. Visual effects are determined by the extent and the nature of the visibility, such as whether a development appears integrated and balanced of creates a focal point in a view.

17.2.6. Receptors – for a visual effect to occur, there must be a receptor and the degree to which they are affected depends on a number of factors, including receptor activities, whether they are stationary or moving, frequency of exposure, orientation of receptor, proportion of development visible, direction and distance of view, accessibility of viewpoint, nature of changes and nature of viewpoint.

17.2.7. Visual effects are assessed under a number of different criteria as set out below and follow from GLVIA3. It also involves judgement.

- Value of the View – 1) Very High; 2) High; 3) Medium; 4) Low; 5) Very Low
- Visual Susceptibility – 1) Very High; 2) High; 3) Medium; 4) Low; 5) Very Low
- Visual Sensitivity – 1) High; 2) Medium-High; 3) Medium; 4) Medium-Low; 5) Low
- Magnitude of Visual Change (Size and Scale) – 1) High; 2) Medium; 3) Low; 4) Very Low; 5) None.

Significance Criteria

17.2.8. The significance of effects is assessed by considering the sensitivity of the receptor and the predicted magnitude of effect in relation to the baseline conditions. The significance of each effect is based on the ability of the landscape character or visual receptor to accommodate changes and is informed by pre-determined criteria as set out below:

- 1) Profound; 2) Very Significant; 3) Significant; 4) Moderate; 5) Slight; 6) Not Significant; 7) Imperceptible.

Cumulative Effects

17.2.9. The approach used for cumulative effects draws on guidance in GLVIA3 and addresses plans and projects located within a reasonable proximity, where effects could act together to create more significant effects.

Fieldwork

Site visits were carried out on days with long distant visibility available and from publicly accessible locations. The magnitude and significance of cumulative effects has also been considered per the criteria set out in 17.2.4 and 17.2 7 above.

Selection of Viewpoints

17.2.10. The study area was determined through ZTV mapping for various project elements and 22 representative viewpoints were selected, where open or intermittent views of the development are available. The selection process is consistent with the GLVIA3.

Photomontages

17.2.11. Photomontages were produced using specialist software and following GLVIA3 and Visual Representation of Development Proposals. The GCC has been excluded as its infrastructure would be predominantly below ground.

Policy Framework

17.2.12. A detailed policy context is set out including at European, national and county level by reference to both the Offaly and Westmeath County Development Plans. In Offaly, the proposed development is set in a 'Moderate Sensitivity' landscape. It highlights protected views within both plans, that fall within or close to the study area.

Landscape and Visual Addendum

17.2.13. A Landscape and Visual Addendum was submitted in response to the submissions received in respect of the original application. It included a revised photomontage booklet that accounted for the presence of the completed Yellow River wind farm, the construction of which was then ongoing but is now completed. It uses the same 22 locations (23 viewpoints) which were used in the original photomontages. The addendum notes that the windfarm has altered the baseline and sets out a revised baseline, and that is what is addressed below in section 17.4.

17.3. Baseline as described in Chapter 10 of the EIAR

17.3.1. It is based on a combination of desk-based and site appraisal. The desk review incorporated a 10 km study area in all directions from all boundaries of the proposed development and overall project. A 5km radius for was selected for the proposed development and a 500m radius for the GCC, to identify significant landscape and visual effects. Visual receptors include residences, archaeological and tourism sites and road users.

17.3.2. The proposed development and overall project are primarily located on BNM owned lands, where peat extraction ceased in 2020 and the overall landscape possesses a sense of coherence and unity by reason of similarity.

Power Plant Area

17.3.3. The PPA site currently accommodates the structures of the Derrygreenagh Works. The nearest settlements are Milltownpass 4.7km northwest, Rochfortbridge 3km northwest, and Tyrrellspass 6.6 km west. The area to the south is sparsely populated

with the nearest houses c1km south. Immediate surrounding land uses are mainly regenerating bog and agricultural lands.

17.3.4. Residential dwellings are considered the most sensitive receptors, as well as users of the M6 and local road network.

17.3.5. The existing brownfield site has a low baseline value, while the regenerating bogland can be considered to be of good local value with a medium landscape value.

Electricity Grid Connection

17.3.6. The EGC is a linear site that runs predominantly over cutover bog that is now regenerating, while the 400 kV substation would be on agricultural land. It hosts a number of waterbodies, due to localised flooding in the bogs.

17.3.7. Rhode, c2km east, is the closest urban centre, while a number of houses are located along either side of the L1010 local road where the underground section of the EGC would cross under the road towards the 400kV substation.

17.3.8. Residents in close proximity to the EGC along the L1010 would be the main and most sensitive receptors of visual changes. Road users of the L1010 and recreational users of the Grand Canal would also be receptors.

Gas Connection Corridor

17.3.9. The majority of the GCC, which is 9.7km in length, lies in County Westmeath. The GCC includes exposed open raised bog land, scrubland, fields in agricultural use, and sections of public road. A 1.4km section of the gas pipe is proposed to run in the R400 road, while the route would cross two local roads and one regional road, the M6 Motorway, the Mongagh River and three streams.

17.3.10. The most sensitive receptors would be residences located along the R400, which would be affected by visual changes during construction.

Receptor Groups

- Residents – Have high susceptibility and sensitivity to visual changes. Most live along the road network.
- Vehicle Users – Have low susceptibility to changes in the landscape character and visual amenity. Sensitivity can range between Low and Medium.

- Recreational Users – Can be local visitors or tourists and have Medium or High susceptibility to visual changes as views are often the reason for visiting the area.

17.4. Baseline following consideration of Yellow River Wind Farm

Landscape Effects

17.4.1. The Yellow River Windfarm is located in closed proximity to the proposed development and has added industrial elements (29 turbines) that have a high degree of visibility within the 5km study area. The turbines reinforce the presence of industrial components in the landscape, so that the introduction of the proposed development and overall project into this landscape would not alter the landscape character further and would reduce slightly the perception of further change to the landscape character compared to the baseline set out in Section 7.3 above. As a result of the windfarm, the susceptibility and sensitivity of landscape receptors, has slightly reduced, compared to what was described In the EIAR.

17.5. Potential Effects (Predicted Impacts) in Chapter 10 of the EIAR

17.5.1. The EIAR identifies the potential for a range of environmental effects on Landscape and Visual. The likely effects of the development, as identified in the EIAR, are summarised in Tables 17.1, 17.2, 17.3 and 17.4 below. The focus of the assessment will be on the Significant and Negative/Adverse effects of the development, while Minor effect, which are deemed to be Imperceptible, Not Significant, Slight or Moderate, have been identified, but will not be assessed in the analysis and conclusion section below, unless there are identified significant impact interactions, cumulative effects or where concerns have been expressed by parties to the application.

Table 17.1: Summary of Potential Effects (Set out in the original EIAR chapter)

Project Phase	Potential Direct, Indirect and Cumulative Effects
Do Nothing	• The Do-Nothing scenario would not result in any significant changes to the baseline landscape character or visual resource and if the proposed development does not proceed environmental monitoring and site management would continue, as required under the conditions of the IPC Licence (P0501-01). • In terms of landscape, the Derrygreenagh Works would be sold to a third party at some stage for another use, while the site of the EGC would be naturally revegetated and would support biodiversity.

Table 17.2: Summary of Potential Effects (Power Plant Area)

Project Phase	Potential Direct and Indirect Effects
Construction	**Landscape Effects** • Loss of existing vegetation and habitat; • Soil stripping, earthworks, grading, etc; • Potential indirect effects to local and wider visual amenity as a result of the visibility of construction activities such as ground works, scaffolding and cranes; • Effects of temporary to short-term site infrastructure such as site traffic, construction compounds, soil storage areas etc. especially those located in areas adjacent to visual receptors. • The physical development would be confined to the site area and would include changes to landform for the buildings and trenching. • The PPA is predominantly a post-industrial brownfield site, bordered by areas with regenerating bog and the landscape has moderate sensitivity to change. • The effects of the PPA construction are considered to be temporary, short-term and reversible. The magnitude of landscape change would be medium and the significance / quality of the change would be Moderate / Adverse. **Visual Effects** • Would not be visible to all visual receptors due to distance, topography and vegetation. • Close distance views available within 1km and elevated parts visible from between 1-3km and 3-5km and beyond. • The effects would be short term and reversible. • Magnitude of visual change is considered medium and the significance / quality would be Moderate / Adverse.
Operation	**Landscape Effects** • Direct and long term change would occur, from the prominent industrial components, which would be most noticeable within 1km and particularly from elevated areas. • From Croghan Hill 5.5km away, the scale would only occupy a small percentage of the open landscape character. • Magnitude of landscape change is considered high, with a medium landscape value and high sensitivity and the resulting significance / quality is **Significant / Adverse**. **Visual Effects** • The PPA would be visible for up to 5km, particularly where there is no intervening vegetation or from elevated positions. Effects on

	residents, vehicle users, and recreational users would range from none to significant, depending on the distance. Residents have high sensitivity, while vehicle users have low sensitivity. • Potential for significant visible plumes from the OGCT is considered very low, with no real risk of significant plumes due to flue gas temperature. • The CCGT would experience occasional plumes due to the lower temperature of the stack gas and but the risk of prolonged visibility of plumes is low.
Decommissioning	• Effects would be no greater than during the construction phase.

Table 17.3: Summary of Potential Effects (Electricity Grid Connection)

Project Phase	**Potential Direct and Indirect Effects**
	• Would include 220kV and 400kV substations, including buildings up to 17m high, 2 lattice gantries each (20m and 28m high), other buildings and 2.6m tall palisade fencing, 5km of overhead line and latticed towers up to 45m high and 3.4km of underground cable, peat and soil deposition areas.
Construction	**Landscape Effects** • Same as for PPA plus 4m wide service road along route of 220kV underground cable. • Permanent change to sections of the local landscape character within approximately 1 km radius from the corridor, particularly from vertical elements. • The magnitude of landscape change is considered High combined with a Low susceptibility and Medium sensitivity. The resulting significance / quality is Temporary, Moderate / Adverse. **Visual Effects** • Visual amenity would be altered within 1km radius of the EGC by prominent new vertical elements, construction plant, earth moving, compounds, fencing and traffic. • Construction effects would be temporary to short term and largely reversible. • Potential permanent loss of trees and hedgerows along the construction corridor. • Landscape character changes would be noticeable within 1km and up to 5.5km in elevated areas, including Croghan Hill.
Operation	**Landscape Effects** • Direct and permanent change where elements would be located including vertical elements and local landform changes. • Magnitude of landscape change is considered High combined with a Low susceptibility and Medium sensitivity, the resulting significance / quality is **Significant / Adverse**.

	Visual Effects • Visual amenity would be altered within a 1km radius, where receptors have access to close or middle distance views. Tall elements would be noticeable from elevated areas more than 1km away, including Croghan Hill and Knockdrin Hill.
Decommissioning	• Effects would be no greater than during the construction phase.

Table 17.4: Summary of Potential Effects (Gas Connection Corridor)

Project Phase	Potential Direct and Indirect Effects
Construction	Landscape Effects • The GCC is largely located in Westmeath, within Landscape Character Area 10 - Lough Ennell and the Southeast Corridor'. Lough Ennell is designated as an Area of High Amenity and is c3km from the GCC. • Effects would be temporary and include surface disturbance depending on pipe depth, removal of hedgerows and trees, soil compaction, erosion, watercourse crossings, and the risk of spills or leaks. • Potential to alter landscape character up to 500m from GCC. • Magnitude of landscape change is considered to be High and the resulting significance / quality is Slight Adverse in Table 10.14 (although in paragraph 10.5.51 it states that it would be **Significant / Adverse**, which I considered to be an error) Visual Effects • Effects would vary and could alter landscape visual appearance between 300 and 500m from GCC depending on vegetation and topography. • Change would be temporary to short term and largely reversible. • Likely permanent loss of trees and hedgerows along route alignment. • Changes in views noticeable within 1km and beyond 5km in elevated areas to the southwest, such as Croghan Hill.
Operation	**Landscape Effects** • Direct and permanent change would occur, but would not significantly alter the Landscape Character of Character Area 10 in Westmeath. • The magnitude of landscape change is considered Medium due to a localised and permanent loss of landscape features such as trees and hedgerows and the resulting significance / quality is Slight/ Adverse. **Visual Effects** • Change would be localised and rarely extend beyond 300m.

	• Magnitude of visual effects is considered to be Medium and their significance / quality will be Slight-Moderate / Adverse. Visual effects reduce quickly with distance to Low and Negligible and their significance / quality to Not significant and Imperceptible / Neutral.
Decommissioning	**Landscape Effects** • Decommissioning would occur at a time determined by the Gas Network operator. • Effects would be no greater than during the construction phase.

17.5.2. Changes to potential Landscape Effects as a result of Yellow River Windfarm

- When the Yellow River Windfarm (altered baseline) is considered, the following landscape character change effects would occur as a result of the proposed development and overall project, relative to that described.

PPA

- Construction and Decommissioning – The susceptibility of the landscape to change would go from High to Medium. Sensitivity would go from Medium to Medium-Low. The Magnitude of change would go from High to Medium. The significance of quality of landscape effects would remain Moderate/Adverse.
- Operation – Sensitivity would go from Medium to Medium-Low and magnitude to change from High to Medium. The resulting significance of quality would reduce from Significant/Adverse to Moderate Adverse

EGC

- Construction and Decommissioning – Susceptibility, Sensitivity and Magnitude would all be reduced, but the significance of quality of landscape effects would remain Moderate Adverse.
- Operation –The susceptibility of the landscape to change would go from Medium to Low. Sensitivity would go from High to Medium-Low. The Magnitude of change would go from High to Low. The significance of quality of landscape effects would change from Significant/Adverse to Slight/Adverse.

GCC

- Construction and Decommissioning and Operation – While Susceptibility would reduce from High to Medium and Sensitivity from Medium to Medium-Low, the significance of quality of landscape effects would remain Slight/Adverse.

In summary, the presence of the wind farm reinforces the industrial nature of the landscape character and the prominence of the wind farm would reduce slightly the perception of further change to the landscape character within County Offaly, when compared to the baseline that was considered in the original EIAR chapter.

17.5.3. Predicted Impacts / Visual Effects including consideration of Yellow River Windfarm

17.5.4. In the addendum report, each of the 22 selected representative viewpoints are assessed in detail, factoring in the presence of the wind turbines, which are evident in a number of the viewpoints. It describes the elements of the proposed development and overall project that would be visible from each viewpoint, whether there is intervening topography or vegetation, as well as the distance of the viewpoints from the PPA, EGC or GCC, which ranges from 240m to 6km, with most located between 1km and 3.4km from the relevant element.

17.5.5. For each view, it sets out the value of the landscape, the receptors that would be affected, the susceptibility and sensitivity of the receptors, the magnitude of visual effects and the resulting significance and quality of visual effects.

17.5.6. Of the 22 viewpoints (which have 23 photomontages), 13 have not changed following consideration of the Yellow River windfarm, as it is not visible from those viewpoints. The effects for nine viewpoints 1, 2, 3, 9, 10, 11, 12, 13 and 14 have been amended to reflect the changes to the baseline brought around by the erection of the wind turbines. Table 10.15 in the EIAR provides a summary of the visual effects for each viewpoint in year 1 without landscape mitigation, and Table 6 of the Addendum report highlights the changes that have arisen following consideration of the Yellow River Windfarm. The key combined and updated changes to predicted visual effects are summarised below.

17.5.7. In eight of the nine viewpoints where the Yellow River Windfarm would be visible, it had the effect of reducing the value of the landscape from the value allocated to it in Chapter 10 of the EIAR. The only exception is VP-14, where the value of the landscape was already deemed to be ‘Low’. The susceptibility of the landscape to

the proposed development has been reduced in VP-11, which is a view adjacent to a quarry. The sensitivity of effects has been reduced in four of the nine viewpoints and the magnitude of visual effects has been reduced in two viewpoints.

17.5.8. The significance / quality of visual effects as a result of the proposed development and overall project, which was originally determined to be Significant / Adverse would not change for the three viewpoints referenced in the EIAR, namely VP- 3 and VP-4b for vehicle users and VP-5 for residents. In the EIAR it was determined that Moderate to Significant / Adverse effects would be experienced by vehicle users for VP-No 5 and VP-14 for residents, but factoring in the presence of the windfarm, the significance would reduce to Moderate/Adverse for residents experiencing in VP-14. A further four viewpoints would experience Moderate/Adverse effects at VP;- 2, 4a and 14 for vehicle users and VP-16 for residents, down from seven before the windfarm was factored in.

17.5.9. Effects on Protected Views, Scenic Routes and Amenity Routes (from EIAR)

This section was not amended in the addendum.

R400 Rhode to County Boundary towards Rochfortbridge

- Viewpoints VP-2, 3 and 4 illustrate points along the R400 where views of the PPA, 220kV substation and overhead line would be available. The significance of visual effects range from Negligible / Neutral to Significant / Adverse due to the close proximity to the proposal in available views. The proposed industrial features are not totally uncharacteristic of the character of the area.

Westmeath Protected View 13

- The PPA and parts of the EGC protrude above the horizon, but due to distance and the scale of view, they would be noticeable but not prominent in views. The magnitude of visual change is considered Medium and the resulting significance / quality of visual effects is considered to be Moderate / Adverse.

Westmeath Protected View 14

- Just outside the 5km study area. Views would be transient at speed on the M6. Upper sections of the PPA would be visible on the horizon. The value of this view is considered Medium and sensitivity of vehicle user receptors low. The significance / quality of visual change is considered Not Significant / Neutral.

17.5.10. Mitigation (and Enhancement Measures) (as per EIAR)

Following from the addendum and response to submissions, no further mitigation measures were proposed over and above those proposed in the EIAR. They are addressed below.

Embedded Mitigation by Design

- Standard construction practice. Modifications include reduced land take, siting of components and minimising impact on established vegetation.
- Landscaping would only screen the lower parts of the development, but not the upper sections of built structures and lattice towers.

Facade Colour Scheme for the Proposed Development (including lattice towers)

- The PPA and 220kV substation are in a prominent location, so the architecture and colour scheme are the principal visual mitigation measures.
- The façade colour scheme is drawn from colours in the local landscape, to allow the structures blend into the low lying background. They would be from the muted mid-dark grey and green spectrum, to help take attention away from the buildings. While they would still be visible, the buildings would form part of a network of industrial buildings across the bog-scape.
- The 220kV and 400kV substations would be finished in dark green or olive to blend in as agricultural structures.
- All latticed structures would be coated in anthracite grey, thereby taking attention away from the EGC, as it takes untreated structures 10-15 years to dull down.

Gas Connection Corridor - Colour Scheme for above ground installations (AGI)

- To integrate the buildings, fences, and lattice structures, into the landscape in available views, muted dark grey and green spectrum colours would be used.

Lighting

- Although not required, the lighting design strategy would be approved by the International Dark Sky Association (IDA) luminaries, with careful positioning and confinement of lighting, with maximum possible shut off periods.

Landscape Mitigation Strategy

Power Plant Area

- Landscape mitigation is set out in the Landscape Strategy Report in Appendix 10B. It includes:
- Deciduous trees between the PPA buildings and the R400 to screen the lower part of the buildings. Woodland and grass mix to the south, to integrate with the scrubland. Retain existing vegetation to the north.
- Remove only those parts of habitat that must be removed. Disturbed, damaged and removed habitat to be reinstated afterwards.
- A 8ha area would be planted with trees to the west of the line-cable interface compound within Ballybeg Bog. Details of proposed planting is in Appendix 9K Habitat Management Plan, including compensation measures to minimise impact.

Electricity Grid Connection – 220kV Substation

- Same as for PPA, with regenerative bog vegetation retained to west of substation.
- It is not possible to plant trees due to underground service and latticed structures.

Electricity Grid Connection – 400kV Substation

- Same as for PPA, retain trees along north and south boundaries, and plant trees along the southern, western and eastern sides of the substation. They would enhance screening in views north from the Grand Canal.

Electricity Grid Connection – Overhead line (OHL) and Underground cable (UGC)

- Measures include avoidance of areas where conflict with views or amenities arise; restrict sighting of structures close to or parallel to roads or road edges; place structures on existing field boundaries; keep on low ground and keep line straight to avoid the need for angle masts.
- Retain as much vegetation as possible, including roadside vegetation where the OHL crosses a road.
- Review of pylon locations at construction stage to ensure optimum micro-siting.

Gas Connection Corridor

- Native hedgerow planning along boundary of future AGI site.

- Protect retained vegetation and replant native hedgerows at crossing points where they are removed and maintain and replace as necessary.

17.6. Residual Effects (as per EIAR)

- Despite mitigation measures that would soften landscape and reduce visual effects the perception of adverse landscape and visual effects would remain for the large structures due to their height.
- Adverse visual effects resulting from lower structures (up to approximately 8-10m) would reduce in tandem with the maturing of the proposed woodland and tree planting where feasible.

17.6.1. Power Plant Area

Residual Landscape Effects

- Due to its scale and location, landscape mitigation measures focus on architectural mitigation – façade treatment and minimising lighting during night-time, as the proposed additional planting would not reduce effects on the landscape character, which would remain unchanged.

Residual Visual Effects

- Residual visual effects would be highest in short and middle-distance views from the adjacent road network and from higher ground, where there is little or no intervening existing vegetation.
- Planting would slightly reduce close and middle distance views (up to 1km) along the R400.
- Middle and long distance views, above 1km and from elevated places, would remain unchanged due to the scale of the PPA.

17.6.2. Electricity Grid Connection

Residual Landscape Effects

- Same as for PPA above, would not reduce landscape effects which would remain unchanged.

Residual Visual Effects

- Effects would be highest close to the site and from higher ground. Residual effects would reduce slightly from up to 1km away along the R400 due to vegetation. Visual effects for middle and long distant views and from elevated areas would not reduce due to the scale of the lattice towers and overhead line.

17.6.3. Gas Connection Corridor

Residual Landscape Effects

- Significant effects within 250-500m would reduce to Slight-Neutral and to Imperceptible-Neutral beyond 500m as planting matures and the overground structures are integrated into the landscape. Retention of existing landscaping and the establishment of new vegetation would reduce adverse effects

Residual Visual Effects

- Effects would be highest close to the site and from higher ground and would not change in places where open views of proposed structures remain visible. Visual effects would reduce within 250-500m as landscaping matures.
- Residual effects between 500m and 1km from the GCC would remain largely similar following completion of the works.

17.6.4. Summary of Residual Effects

17.6.5. Following from Table 10.15 of the EIAR, which provides a summary of the visual effects for each viewpoint in year 1 without landscape mitigation, Table 10.16 summarises the visual effects for the 23 viewpoint in year 15 with landscape mitigation. The key points are:

- There would be no change for 19 of the 23 viewpoints.
- The pre mitigation significant/adverse visual effect for Viewpoint 4b would reduce from significant /adverse to moderate/adverse for vehicle users and the magnitude of residual effect from high to medium.
- VP-5 would reduce from moderate/significant / adverse to moderate /adverse for vehicle users and from significant/adverse to moderate / significant / adverse for residents. The magnitude for both would change from high to medium-high.

- Viewpoint 16 would reduce from slight/moderate / adverse to Slight/Adverse for vehicle users and from significant/adverse to moderate/significant / adverse for residents. The magnitude of effect would reduce from medium too low for both.
- Viewpoint 17 would reduce from Slight-Moderate / Adverse to Slight/Adverse for vehicle users. The magnitude of effect would reduce from medium too low.

17.7. Cumulative Effects (as per EIAR)

17.7.1. Following from the addendum and response to submissions, no further cumulative effects were identifies so the effects set out below are from the EIAR.

17.7.2. Overall Project

Due to proximity, scale and construction timelines, there is potential for cumulative effects between the construction phases of the PPA, EGC and GCC, so potential cumulative landscape and visual effects have been examined.

17.7.3. Power Plant Area (PPA) and Electricity Grid Connection (EGC)

Construction and Decommissioning phases

- Decommissioning effects not anticipated to be greater that during construction.

Cumulative Landscape Effects

- The PPA includes cabling works adjacent to the 220kV substation, so if both are constructed at the same time it would lead to an increased perception of activity for residents and road users. The existing bogland landscape would change in character to industrial.
- The regenerating bog has a degree of monotony and desolation, has a medium landscape value in Offaly and can accommodate the PPA and EGC without losing its overall integrity.
- Construction activity features would be temporary, short-term and reversible. Due to distance, landscape character areas in Westmeath and Meath would not be affected.
- The PPA and EGC would alter a small area but would not result in a permanent loss of the overall landscape structure.

- The magnitude of cumulative landscape change is medium. The significance / quality of cumulative landscape change would be Moderate / Adverse.

Cumulative Visual Effects

- Due to the height of the PPA and lattice towers, both would be visible at a number of locations, where gaps existing in vegetation, from elevated points such as Croghan Hill and from the R446 in Westmeath. In combination effects are illustrated in Viewpoints VP1-2, VP4a/b-5 and VP10-14.
- The magnitude of cumulative visual effects is considered Medium and the significance / quality would be Moderate / Adverse, while construction activities would be short term and reversible.

Operational Phase

Cumulative Landscape Effects

- The landscape character is of moderate sensitivity and the existing regenerating bogland landscape would change in character to industrial. It has a degree of monotony and desolation, has a medium landscape value and can accommodate the PPA and EGC without losing its overall integrity, as it has low susceptibility to accommodate change.
- The magnitude of cumulative landscape change is medium. The significance / quality of cumulative landscape change would be Moderate / Adverse.

Cumulative Visual Effects

- Same as for the construction phase described above, plus cumulative effects are considered long-term in combination with the PPA or permanent in combination with the EGC.
- The magnitude of cumulative visual effects is considered Medium and the significance / quality will be Moderate / Adverse.

Gas Connection Corridor

- In the absence of detailed information on the location of the gas pipeline route alignment, cumulative landscape and visual effects can only be determined at a very high level.

Construction Phase (and Decommissioning Phase)

- If all three elements are constructed at the same time, there would be an increased perception of construction activity for residents and vehicle users adversely affecting landscape character and visual amenity, in the 'Lough Ennell & South Eastern Corridor' landscape character area of Co. Westmeath.
- The majority of cumulative effects would be experienced sequentially due to existing vegetation, topography and built structures.
- The magnitude of additional landscape and visual effects is considered Medium, and their significance / quality as Slight to Moderate / Adverse.

Operational Phase

- While there would be areas where all three elements of the overall project would be visible, considering the nature of the GCC, mitigation and existing vegetation and topography, changes to the landscape character and the visual amenity would be localised and range from Low to Negligible and the significance / quality of cumulative effects would range from Slight to Not Significant / Neutral.

Impacts – Interaction of Effects between the Proposed Development and Overall Project, and other developments

- While Appendix 19A sets out a comprehensive list of projects, only those of sufficient size and scale that may potentially act in-combination with the PPA, EGC and GCC and may further industrialise the landscape were considered.
- Changes would be most prevalent 500m to 1km from the site boundaries.
- The magnitude of cumulative landscape change is considered to be Low, while the significance / quality would be Slight / Adverse.
- Visual cumulative effects relate mainly to combined visibility from available views, particularly from elevated locations such as Croghan Hill and Knockdrin Hill and the R446.
- Combined visibility would increase industrial elements in available views, intensifying the prevalence of industrial focus points in open views, in particular where there is no or little intervening screening vegetation or topography and would likely alter the perception of the visual experience in the study area.

- Overall, the magnitude of cumulative landscape change is considered to be Low. The significance / quality will be Slight / Adverse.

17.8. Analysis, Evaluation and Assessment: Direct and Indirect Effects

17.8.1. I have examined, analysed and evaluated Chapter 10 of the EIAR and all of the associated documents and submission on the file in respect of Landscape and Visual. Following their response to submissions, which included an addendum report that addressed the now completed Yellow River Windfarm, I am satisfied that the baseline environment presented by the applicant is comprehensive and that the key impacts in respect of Landscape and Visual as a consequence of the proposed development have been identified.

17.8.2. As the proposed GCC would be built largely as an underground structure I am satisfied that it would not have any significant effects on landscape or visual.

17.8.3. I have visited the area when the windfarm was in situ and assessed the viewpoints, which include the windfarm, and I am satisfied that they provide an accurate representation of the existing baseline, which I have outlined in the preceding paragraphs.

17.8.4. I am also satisfied that the applicant's assessment of the potential impact and residual impacts are accurate and there are elements of this development that cannot be entirely mitigated by way of landscaping due to the size and scale of the proposed development. In that respect, I note that the initial assessment of predicted impacts considered that significant/adverse effects would arise from the operational phases of both the PPA and the EGC, but that when the windfarm was taken into account, the effects would reduce to moderate adverse in the case of the PPA and slight adverse in the case of the EGC. The change in significance was due to the scale of the 29 turbine windfarm, of which 13 turbines are located in close proximity to the ECG. I would agree with this assessment and in particular I note VPR-12 and VRP-13 which demonstrate that the windfarm has changed the character of the landscape and of views across the landscape looking eastwards from and close to Clonin Hill. In that context, and while they would be visible in the landscape, particularly where there is a lack of vegetation along roadside boundaries or from elevated locations such as Croghan Hill, I am satisfied that that the proposed PPA and EGC would not have significant adverse landscape of visual effects.

Submissions

17.8.5. A number of submissions on the application raised issues which I will address below.

Undergrounding of 220 OHL cable

17.8.6. Two of the observers stated that the major visual impact can be overcome by undergrounding the entire cable, while Offaly County Council considered that the EIAR did not provide justification for the proposal to run the overground line and pylons considering its impact on Croghan Hill, an area of high amenity.

17.8.7. I note that the proposed EGC development would include a 220kV overhead line running for c.5km from the 220kV substation to an interface compound with a c20m high interface tower gantry. It would be facilitated by double circuit suspension pylon towers (13 no.; c. 44m high) and strain pylon towers (6 no. c.38m high).

17.8.8. In responding to Offaly County Council (see 10.3.7 above), the applicant stated that they have proposed to underground the cable where ground conditions permit, which is over the last c3.4km of the route. They continue that the balance of the 220kV line is proposed to be overground, as it is the preferred method of Eirgrid for electricity lines traversing peatlands, and that undergrounding the cable through peatland should be avoided if at all possible, as the cable function and durability may be compromised over time by reason of differential settlement in the peatland areas.

17.8.9. I note that the undergrounded cable section would run close to a number of houses close to the L1010 road, and its undergrounding ensured that sensitive residential receptors would be protected from the visual impacts. The overhead section of 220kV line would be located at a distance from any nearby residential receptors and the nearest house would be c 800m from the interface compound and would be separated by intervening trees, reducing or eliminating the visual impact of the line and pylons. As part of the landscape mitigation it is proposed to plant an 8ha area of trees to the west of the line-cable interface compound within which would minimise the potential visual impact of the interface compound from nearby residents.

17.8.10. The overhead section of the line would run entirely through BNM lands and would not affect any residential receptors.

17.8.11. With respect to views from Croghan Hill, in note that it is described in the Offaly County Development Plan as an area of high amenity. Since the addendum

photomontages were submitted to the Commission, construction has commenced on a large solar at Clonin, c1km east of the proposed over line. The solar farm lies directly below Clonin Hill and is visible from Croghan Hill (refer VP13). The solar farm has further industrialised the nature of the views across the landscape from Croghan Hill and has reduced the potential impact that the proposed development and OHL could have on the landscape and visibility from Croghan Hill.

17.8.12. In addition, permission was granted on the 16th of September 2025, by Offaly County Council, for 2 No. 50m long x 120m wide x 34mm high domes that would capture carbon dioxide and produce energy for the electricity grid. The site lies immediately north of the aforementioned solar farm. I have viewed photomontages VP-13 and VP-15 from (P.A. Reg. Ref.24/60289) which show the scale and extent of the proposed domes. In granting permission, Offaly County Council states that 'the development would not seriously injure the amenities of the area or of property in the vicinity'. The permitted development would be a significantly larger structurer than any of the individual pylons or the interface compound that are proposed in this current application. While the permitted domes development has not commenced construction, I am not satisfied that the proposed overhead line and pylons would have a significant impact on views from Croghan Hill and I am satisfied that it would not be necessary to underground the entire cable taking into account the presence of the much larger structures of the Yellow River windfarm, the more expansive ground presence of the solar farm under construction and the large permitted dome structures.

Prominence of power plant

17.8.13. Offaly County Council requested additional viewpoints to assess the cumulative impact of the proposed power plant and the adjacent windfarm and to show the power plant at its most prominent. The addendum submitted by the applicant did include the windfarm which is visible in nine of the images. I have reviewed these viewpoints and I am satisfied that while planting can only address some of the landscape and visual impacts of the proposed power plant structures and its associated stacks, the proposed development would be located in an existing industrialised and anthropogenic landscape, which includes in the distance the Breedon Ireland facility (c9km north east), as well as the Castlelost FlexGen Power

Plant that is located alongside the M6 motorway c3.7km northwest of the PPA site. I am satisfied that landscape has the capacity to accommodate the proposed PPA.

17.9. Conclusion: Direct and Indirect Effects

17.9.1. I have examined Chapter 10 of the EIAR which deals with this Landscape and Visual. Having regard to the location of the site in highly industrialised character of the baseline rural environment, and the mitigation measures proposed in the EIAR, I am satisfied that there is no potential for any significant direct, indirect or cumulative effects on the landscape or visual amenity as a result of the proposed development.

18.0 Noise and Vibration

18.1. Issues Raised

- Offaly County Council has no concerns subject to construction mitigation conditions, while the operation of the power plant area would be subject to an industrial Emissions Licence.

18.2. Examination of the EIAR

18.2.1. Context

18.2.2. Impacts of the proposed development on Noise and Vibration are addressed in Chapter 11 of the EIAR. It is appended by Appendix 11A – Introduction to Acoustic Terminology; 11B – Sote Receptors and Monitoring Locations; 11C – Baseline Sound Level Monitoring; and 11D – Acoustic Modelling Details.

18.2.3. The study area incorporates the overall site and areas up to and including the closest noise sensitive receptor locations.

18.2.4. The following elements of the development were scoped out as their noise effects were deemed to be not significant or better.

- Construction and operational phase vibration effects from the Power Plant Area, Electricity Grid Connection and Gas Connection Corridor.
- Operational phase of 1) Electricity Grid Connection – Line Cable Interface Compound; 2) 220 kV Overhead Line; and 3) 220 kV Underground Line.

- Operational phase roads impacts from standard operations of the Power Plant Area, as well as maintenance of the Grid Connection and Gas Connection Corridor.
- Fuel deliveries for emergency operations scoped out due to the relatively small daily traffic flow generation and infrequent nature of such emergency events.
- Routine maintenance operations.

18.2.5. The methodology used to assess potential effects from noise generating activities in the construction / decommissioning and operational phases is aligned with the Environmental Protection Agency (EPA) 'Guidelines on the Information to be contained in Environmental Impacts Assessment Reports' (2022).

Construction Phase

18.2.6. Construction noise predictions have been undertaken using the methodology outlined in BS 5228-1:2009+A1:2014 'Code of practice for noise and vibration control on construction and open sites. Noise.'(BS5228-1). These are referred to in EPA guidelines as 'Other Guidance' in 'Guidelines for the Treatment of Noise and Vibration in National Road Schemes' (NRA 2004).

18.2.7. Noise levels at the facades of the nearest noise sensitive dwellings are based on 'Guidelines for the Treatment of Noise and Vibration in National Road Schemes' (NRA 2004).

18.2.8. Where the criteria of the above differ, the more stringent criteria is adopted.

18.2.9. To assess construction traffic on existing roads, changes to road traffic flows during the construction period have been determined in accordance with the NRA Guidelines, which refer to the Calculation of Road Traffic Noise (CRTN) methodology, and where flows below 1,000 vehicles in an 18 hour period are predicted, the Noise Advisory Council (NAC) prediction method is used as detailed in 'A Guide to Measurement and Prediction of the Equivalent Continuous Sound Level Leq'.

18.2.10. The impact of construction phase traffic is assessed in accordance with 'Criteria in LA 111 Rev 2 Noise and Vibration, Design Manual for Roads and Bridges, May 2020, Highways England, UK'.

Operational Phase

18.2.11. Operational noise has been calculated using a 3D model and CadnaA sound modelling software.

18.2.12. The Power Plant Area would be required to operate under an Industrial Emissions (IE) Licence. Guidance on permissible noise emission limits for licenced facilities is contained in the document 'Guidance Note for Noise: Licence Applications, Surveys and Assessments in Relation to Scheduled Activities (NG4)' (EPA, 2016).

Demolition Phase

18.2.13. Effects are considered to be the same as for construction but of a shorter duration.

Limitations and General Assumptions

18.2.14. Acoustic modelling predictions undertaken for this assessment have assumed flat ground, due to the nature of the local topography.

18.2.15. The type, quantity and usage of the construction plant list against named activities for the Power Plant Area has assumed a worst-case representation.

18.2.16. The total sound power level of the plant to be used in the 220 kV and 400 kV substation areas are no higher than the total sound power level associated with plant to be used for the construction of the Power Plant Area.

18.3. Baseline

18.3.1. Seven residential Noise Sensitive Receptors (NSR's) have been identified, with three close to the proposed 400KV substation at the southern end of the site, one to the north of the L1010 road crossing of the proposed underground line that is closest to the overhead line cable interface compound, two to the south of the proposed power plant area and one c350m to the south of the M6 junction. The receptors were identified using satellite imagery.

18.3.2. Eight monitoring locations were selected to determine existing ambient noise levels and are broadly reflective of the seven NSR locations, with the eighth point being within the site of the PPA. The monitored sound levels are considered to represent

the NSR's. Baseline monitoring was not carried out for the GCC, although Noise monitoring location M7, to the south of the M6 motorway is located within the GCC.

18.3.3. During the baseline monitoring period, the Yellow River Windfarm was under construction, while quarries were operating to the west and east of the Power Plant Area and Rhode Power Station was operating to the east of the electricity grid connection. The criteria for a Low Background Noise Area were met at all locations.

18.4. Potential Effects (Predicted Impacts)

18.4.1. The EIAR identifies the potential for a range of environmental effects on Noise and Vibration. The likely effects of the development, as identified in the EIAR, are summarised in Tables 18.1, 18.2, 18.3 and 18.4 below. The focus of the assessment will be on the Significant and Negative/Adverse effects of the development, while Minor effect, which are deemed to be Imperceptible, Not Significant, Slight or Moderate, have been identified, but will not be assessed in the analysis and conclusion section below, unless there are identified significant impact interactions, cumulative effects or where concerns have been expressed by parties to the application.

18.4.2. The weekday daytime and Saturday morning construction noise criteria for all seven sensitive receptors is 65dB LAeq,T (façade).

Table 18.1: Summary of Potential Effects

Project Phase	Potential Direct, Indirect and Cumulative Effects
Do Nothing	The acoustic environment is expected to remain largely unaffected with noise contributions from existing industrial activities from quarries, windfarm, roads and energy/renewable energy projects. Environmental monitoring of the site would continue as required under its IPL Licence.

Table 18.2: Summary of Potential Effects (Power Plant Area)

Project Phase	Potential Direct, Indirect and Cumulative Effects
Construction	• The predicted day-time construction noise level (LAeq, 12hr dB) for NSR 5 is 59dB, for NSR6 is 58dB and for NSR7 is 57dB) • The effects of the Power Plant Area construction would be Not Significant, Negative and Short-Term. • The effect of the Power Plant Area construction vehicles utilising local roads would be Imperceptible, **Negative,** Short-Term, and Reversible.

Operation	• The predicted impacts of occasional maintenance activities would be Negative, Imperceptible, and Momentary. • The impact at NSR6 would be **Negative, Significant**, Permanent and Reversible in the evening and night-time. • The impact at NSR5 and NSR7 and at NDR6 in the day-time, would be Negative, Not Significant, Permanent and Reversible.
Decommissioning	• Would take place over a much shorter period than construction and impacts are expected to be no worse than those from the construction process, so have not been considered separately.

Table 18.3: Summary of Potential Effects (Electricity Grid Connection)

Project Phase	Potential Direct, Indirect and Cumulative Effects
Construction	• No significant construction related noise impacts predicted. Noise levels predicted to be below the daytime threshold of 65dB for the weekday daytime and Saturday morning assessment criteria at NSRs 1-7 inclusive.
Operation	• The OHL and UGC are scoped out of the operational noise assessment. • The effects of the EGC Substation area operations would be Negative, Imperceptible, Permanent, and Reversible.
Decommissioning	• Upon decommissioning of the Power Plant Area, the 220kV and 400kV substations and associated transmission infrastructure would remain in situ and form part of the national grid infrastructure, so decommissioning has not been considered.

Table 18.4: Summary of Potential Effects (Gas Connection Corridor)

Project Phase	Potential Direct, Indirect and Cumulative Effects
Construction	• The route is not determined, so impacts on potential sensitive receptors are not yet known. Sound pressure levels from a Belfast pipeline project were used and a worst case scenario envisaged, which is that only minimal works would take place within 160m of sensitive receptors. • The effect of the pipeline installation are predicted to be Negative, Not Significant and Temporary.
Operation	• Impacts associated with periodic inspection and maintenance are predicted to be Imperceptible, Permanent but Reversible.
Decommissioning	• Upon decommissioning of the PPA, the GCC would remain in situ and form part of the national gas infrastructure, so decommissioning is not envisaged.

18.5. Mitigation (and Enhancement Measures)

18.5.1. Power Plant Area

Construction Phase

- The following have been incorporated into the CEMP: Keep residents informed on progress in noise measures, keep standard working hours, use quiet and low vibration equipment and place plant as far as possible from NSRs. Use electricity plant and generators rather than diesel versions, where possible. Use soundproofing and acoustic covers and shut down plant when not in use. Loading and unloading areas to be acoustically screened. Minimise need for reversing. Noisy activities to take place during less noise sensitive periods of the day.

Operational Phase

- Noise emissions from the PPA would be complaint with the conditions of an IEL.
- Commitment to adopt NG4 operational noise limits detailed in assessment.
- Use of BAT (Best Available Technology) to select quiet alternatives.
- Undertake annual noise level monitoring and periodic plant maintenance.
- Reduce sound power levels (L_{WA} dB) by design.

Decommissioning Phase

- The same good practice measures as for the construction phase.
- Decommissioning would be carried out in compliance with a Closure, Remediation and Aftercare Management Plan (CRAMP) under IE Licence.

18.5.2. Electricity Grid Connection

Construction Phase

- While no significant impacts are predicted, the same construction phase mitigation measures as for the power plant area are recommended, to ensure noise and vibration levels are kept to a minimum.

Operational Phase

- The infrastructure would be maintained to manufacturers specifications. No significant impacts predicted, so no other mitigation measures required.

Decommissioning

- EGC would form part of the national grid infrastructure, so mitigation not relevant.

18.5.3. Gas Connection Corridor

Construction

- Construction work should be limited to weekdays and Saturday mornings and where practical, the same construction phase mitigation measures as for the PPA are recommended, to ensure noise and vibration levels are kept to a minimum.

Operation

- The infrastructure would be maintained to manufacturers specifications. No significant impacts predicted, so no other mitigation measures required.

Decommissioning

- Would form part of the national gas network, so mitigation measures not relevant.

18.6. Residual Effects

18.6.1. With the implementation of mitigation measures (including monitoring), no significant residual effects have been identified for the construction, operational or decommissioning phases for the PPA, EGC or the GCC.

18.6.2. Decommissioning of the Electricity Grid Connection and the Gas Connection have not been considered in the EIAR, as they would be vested in Eirgrid and Gas Networks Ireland and would form part of the national Electricity and Gas networks.

18.7. Cumulative Effects

Cumulative Effects between the Various Elements of the Proposed Development and Overall Project

Overall

18.7.1. There is potential for cumulative impacts between the various elements of the overall project if carried out at the same time.

Construction Phase

18.7.2. The cumulative predicted construction noise levels for the estimated noisiest period, which assumes that the construction of the Power Plant Area, Electricity Grid Connection including the 220kV and 400kV substation are all undertaking their noisiest stage of construction simultaneously, do not exceed the assessment criteria for 65dB LAeq, 12 hrs at NSRs 1-7 and range from 57-63dB.

Operational Phase

18.7.3. The three elements of the project are assessed as operating simultaneously. No cumulative operational phase noise effects have been identified as predicted levels are below NG4 criteria in the day, evening and night-time periods.

Decommissioning Phase

18.7.4. Only applies to the Power Plant Area and is considered to be no worse than the construction phase. However, at that time, other construction or decommissioning projects should be considered.

Cumulative In-Combination Effects

18.7.5. This section of the EIAR refers to a number of nearby planning applications that have been obtained from a larger list of projects in Chapter 4. Four applications are referred to specifically as being the nearest applications, while it states that a high level review of all applications has confirmed that no cumulative construction or operational impacts are anticipated.

Construction

18.7.6. Potential cumulative impacts as a result of on-site activities and concurrent elements of the project are considered to be Imperceptible to Not Significant at residential receptors.

18.7.7. Construction phase cumulative traffic noise levels are considered to be Imperceptible, Negative and Short Term.

Operational

18.7.8. Cumulative noise levels for the overall project are projected to be at least 10dB lower than the limits in the day and 5dB in the evening. This means that the noise emanating from other projects would need to be significant and none are predicted to produce noise emissions of this magnitude, so cumulative day and night impacts can be excluded.

18.7.9. While the predicted noise limit at NSR6 is at the limit at 35dB $L_{Aeq, 8hr}$, the other projects considered would not be expected to operate at night and not expected to generate noise at night of a sufficient level of affect NSR6. Any cumulative operational noise effects are expected to be Negative though Not Significant.

Decommissioning

18.7.10. Cumulative in-combination effects have not been assessed.

18.8. Analysis, Evaluation and Assessment: Direct and Indirect Effects

18.8.1. I have examined, analysed and evaluated Chapter 11 of the EIAR, and all of the associated documentation and submissions on file in respect of Noise and Vibration. I am satisfied that the applicant's understanding of the baseline environment, by way of desk and site noise surveys, is comprehensive and that the key impacts in respect of likely effects on Noise and Vibration, as a consequence of the proposed development and overall project have been identified. No issues have been raised by parties to the application.

Cumulative Effects

18.8.2. Of the four applications referred to as potentially having a cumulative impact with the proposed development, construction of the logistics warehouse (P.A. Ref. Ref. 22/247) commenced in July 2024, while the sand and gravel extraction application (P.A Ref. Ref. 22/60051) was withdrawn. Permission was refused for the importation of soil (P.A. Reg. Ref. 23/277). The fourth application relates to a wind monitoring mast. I am satisfied that none of the applications or any other applications would act together to create cumulative in-combination effects which would effect noise sensitive receptors (NSRs).

NSR6

18.8.3. One significant effect was noted in the absence of mitigation being at NSR6, which is the nearest house to the proposed power plant area and lies c1.1km south east thereof and 350m east of the proposed peat deposition area south of the PPA. I am however satisfied that the applicant has demonstrated clear compliance with current noise limits, subject to mitigation, and subject to compliance with these noise limits, significant adverse impacts on sensitive receptors, in particular NSR6 would not arise.

18.9. Conclusion: Direct and Indirect Effects

18.9.1. Having regard to my assessment of the proposed development on noise and vibration, I am satisfied that:

- Having regard to predicted levels of construction noise and vibration, standard construction noise limits, the distance of all elements of the overall development

from noise sensitive receptors and/or the short-term nature of the proposed construction works, I am satisfied that no significant adverse direct, indirect or cumulative environmental effects would arise during construction from noise or vibration.

- Subject to the operation of the proposed development within the noise limits set out in the application documents, no significant adverse direct, indirect or cumulative environmental effects by way of noise would arise at noise sensitive receptors during the operational phase of the development, or the decommissioning phase of the power plant area.

19.0 **Water Environment**

19.1. Issues Raised

19.1.1. The Water and Environment Section of OCC requested further information regarding drainage and to ensure the riparian zones along waterbodies is maintained, but also recommended planning conditions to address the same issues.

19.2. Examination of the EIAR

19.2.1. Context

19.2.2. Impacts on the water environment are addressed in Chapter 12 of the EIAR. Other than the construction and demolition elements, the principal components of the proposed development of relevance to the water environment are 1) discharge of treated process and foul water by pipe, from the PPA into the Yellow River to the southwest; 2) discharge of surface/ drainage water by pipe, from the PPA into the Mongagh River to the north; 3) use of existing onsite groundwater abstraction borehole, PW1, to supply the PPA's water requirements; and 4) placement of impervious surfaces at the PPA and substation sites and compounds.

19.2.3. The chapter is informed by Chapter 4: Existing Site and Conditions; Chapter 5: The Proposed Development; Chapter 9: Biodiversity; Chapter 13: Soils and Geology; Chapter 17: Major Accidents and Disasters and Appendix 13B: Site Investigation Report (GQRA). It is also appended by three Figures at the rear of the chapter and by Appendices 12A: Flood Risk and Drainage Assessment; 12B: Surface Water and Groundwater Analytical Results; 12C: WFD Screening Assessment; 12D:

Groundwater Yield Report; 12E: Foul Water Technical Note; and 12F: Emission Limit Value Calculation.

19.2.4. A desk based study area of 1km around each component of the proposed development has been used and includes surface and groundwater bodies and their catchments. This was followed by a walkover survey that included inspections of existing groundwater monitoring boreholes, site condition and a brief inspection of surface waterbodies.

19.2.5. A programme of monthly groundwater and surface water quality monitoring was undertaken, at nine surface water locations within the wider catchment and six groundwater monitoring boreholes located at the Power Plant Area and 200kV substation site. This was done to provide an understanding of baseline water quality within the Study Area, to inform the assessment and to inform the calculation of Emission Limit Values (ELVs), which would achieve compliance with the aims of the WFD (Water Framework Directive).

19.2.6. A qualitative assessment of the likely significant effects on the Water Environment has been undertaken, using the source-pathway-receptor approach.

19.2.7. The assessment uses receptor sensitivity rating criteria from the NRA's Guidelines on Procedures for Assessment Treatment of Geology, Hydrology and Hydrogeology for National Road Schemes (NRA, 2008), as they are more specific than the 2022 EPA Guidelines. The magnitude, sensitivity and significance of effects are also based on the 2008 NRA Guidelines.

Limitation and General Assumptions

19.2.8. The assessment is based on available water and ground conditions information in other Chapter 13: Soils and Geology; Appendix 13B Site Investigation Report GQRA; the WFD screening assessment and available water quality data. The baseline information for the GCC is based on a desktop study only, but this element of the overall project does not form part of this application.

19.3. Baseline

19.3.1. A separate baseline is provided for each of the three elements of the development and focusses on 1) Surface waterbodies, and associated water quality, flows and hydromorphology; 2) WFD river sub-basins; 3) Surface water abstraction/

monitoring/ discharge points; 4) Designated sites with surface water dependent habitats or species (or SWDEs); 5) Surface water flood risk areas; 6) Aquifers and associated water quality, levels, and flows; 7) WFD groundwater bodies; 8) Groundwater abstraction/monitoring points/discharges; 9) Karst landforms and traced underground connections; 10) Groundwater dependent terrestrial ecosystems (GWDTEs) and 11) Areas of groundwater flood risk.

19.3.2. Power Plant Area

19.3.3. Land Use, Topography, Rainfall

- The topography is relatively flat at between 85m and 86m above ordnance Datum (AOD), while the site extends over c49 hectares. The Castlejordan_020 (Mongagh River), is immediately north of the sites northern boundary and has a good WFD status. It then flows into the Yellow River c16km downstream and eventually into the River Boyne. The Mongagh and Yellow Rivers have been historically deepened and straightened with resulting poor hydromorphology. The PPA lies within the Boyne WFC catchment and Castlejordan_020 river sub basin.
- Annual average rainfall from 1978-2008 was 941.3mm at Mullingar, the nearest Met Éireann station. This applies to all there areas of the overall project.

19.3.4. Hydrology

- EPA River Flow estimates information is available for both the Mongagh and Yellow Rivers. In terms of surface water quality, there is one river monitoring station 6km downstream on the Mongagh River, which returned a good water quality result in 2020 and two monitoring stations on the Yellow River 1.5 and 20m from the site, with both indicating that the water quality was poor from 2003 and 2020. Surface water was monitored at seven locations over four three-days cycles in April to July 2023 and all but two results were below detection limits for a range of potentially polluting compounds. The exceedances referred to ammonia downstream of the future discharge point and Orthophosphate upstream. There are no surface water abstraction points in the study area.
- The existing Derrygreenagh works discharges treated and surface water into a drainage ditch to the north and ultimately the Mongagh River.

- The PPA is hydrologically linked to the River Boyne and River Blackwater SPA and SAC more than 25km downstream.
- The PPA site is located in Flood Zone C for present and future flood scenarios. Drainage from the site is currently managed under the sites IPL Licence.

19.3.5. Hydrogeology

- Subsoil permeability and groundwater vulnerability are ‘Low’, with no mapped faults beneath the PPA site. Groundwater investigations were carried out in 2008 and 2023. Eight boreholes drilled in 2008 recorded groundwater at depths between 2.6 and 12m, while two boreholes from 2023 recorded water at 6.0m and 10.2m below ground level.
- Groundwater was monitored over a 4 month period at 6 locations within the PPA. They ranged in depth from 7.6m to 60.0m and the water levels were between 6.26m and 11.98m, with changes in levels within the boreholes varying by between 0.32m and 0.91m.
- Two pump tests in 2008 indicated that well PW1 had sufficient capability to supply up to 630m^3/day and a continuous 7 day test from 2023 indicated it has capability of supplying at least 1,008m^3/day on an ongoing basis.
- Four rounds of groundwater monitoring from 2023 did not record any exceedances of the Drinking Water Regulations.
- The PPA lies in the Athboy groundwater body, which is 'poorly productive'. It has a 'Good' status and a WFD status of 'Not at Risk'.
- Groundwater recharge in the PPA is 110mm / year.
- There are no Karst features in the area, the closest being 6.4km south.
- Due to the separation distance to the River Boyne and River Blackwater SAC and SPA, it is unlikely they are connected to the PPA by groundwater.

19.3.6. Electricity Grid Connection

19.3.7. Land Use and Topography

- The 220Kv substation is on a mineral island of 79-84m AOD, while the OHL runs between 70m and 80m AOD. The EGC crosses two WFD designated

waterbodies, the Yellow River and Castletown Tara Stream_010, both which are described as lowland depositing watercourses that have been extensively straightened and deepened. The Esker stream_010 lies 430m east, while the Grand Canal Main Line West runs 450m south of the proposed 400kV substation. River flow estimates for the Esker Stream are provided.

19.3.8. Hydrology

- Surface water quality is the same as for the PPA for the Yellow River, while 2020 results for two locations on the Castletown Tara Stream returned 'Moderate' quality results. Surface water was monitored at seven locations over 4 months, five downstream and two upstream. Five of the locations would receive surface water from the EGC catchment. Ammonia levels were exceeded on multiple occasions, with three exceedances for orthophosphates and one for Nitrate. All other results are below lab detection limits or below appropriate levels.
- The site falls within the Boyne WFD catchment north of the L1010 and the Barrow catchment to the south.
- The local rivers and streams are not surface water abstraction locations.
- There are three urban wastewater (UWW) emission points on the Coolcor Stream. Being two primary effluent and one stormwater overflow. They relate to the UWW plant at Rhode, which has a PE of between 1,000 and 2,000.
- The Grand Canal pNHA is c100m south and is designated for its ecological value, diversity of species and is water supply fed from Lough Owel. The River Boyne and Blackwater SPA and SAC are 22.5km downstream and have surface water dependent habitats.
- Water compatible elements of the EGC would be located in Flood Zone A for present and future flood scenarios. All highly vulnerable elements are located outside of Flood Zone A. Surface water from the EGC site is discharged to the Yellow River north of the site under IPC licence P0501-01. The EGC site also includes a pump site that operates on a duty and assist basis.

19.3.9. Hydrogeology

- Subsoil permeability and groundwater vulnerability are both ‘Low’ when underlaid by peat and moderate when underlaid by till at the 400kV substation. There are no mapped faults beneath the 200kV substation but one exists beneath the site.
- Groundwater was monitored over a 4 month period within the EGC, with results presented for two boreholes around the 220kV substation. The depths of the boreholes were 8.3m and 49.07m, with water levels recorded at 5.11-5.12m and 5.77m to 5.99m.
- The PPA lies in the Athboy groundwater body, which is 'poorly productive'. It has a 'Good' status and a WFD status of 'Not at Risk'.
- There are a number of groundwater abstractions close to the EGC site including four low yielding wells, but it is unclear if they still exist or are still in use. They are located 1) 200m west of the OHL in a quarry; 2) Close to the 400kV substation as (from 19240 as part of the Edenderry RDC and public water supply with a poor yield of 21.8m3/day; 3) a well dug in 1963 close to the 400kV substation (1963) with a yield of 8.7m3/day; and 4) 700m west to 400kV substation (1999) with a yield of 43.6m3/day.
- A spring associated with the Toberdaly PWS is located c900m east of the 400kV substation. It is protected by a delineated Source Protection Area, which at its closest is approximately 500m from the UGC Route. Two boreholes drilled in 1999 by Offaly County Council, 1km east of the 400 kV substation have an excellent yield of 1,000m^3/day, but are not listed as part to the Toberdaly PWS. The EPA use the Toberdaly PWS as an EPA groundwater monitoring point.
- The Grand Canal pNHA is most likely lined and not thought to be a groundwater dependent terrestrial ecosystem. The transmission route travels over cutover bog, which qualifies as the EU Priority Annex I habitat ‘Active Raised Bogs’ [7110], which is listed as a groundwater dependent terrestrial ecosystem, with low to extreme sensitivity to changes in groundwater quality and quantity.
- The mapped groundwater recharge across the OHL part of the site, which is underlain by ‘cut peat’, is between 21mm and 41mm. The western half of the 400kV substation has a mapped recharge of between 151mm and 200mm per year and is underlain by ‘till derived chiefly from limestone’ while the western half

of the site is also underlain by ‘Cut Peat and has a mapped recharge of between 1mm and 50mm per year.

19.3.10. Gas Connection Corridor

19.3.11. Land Use and Topography

- The elevation of the GCC ranges from 80m to 110m AOD, with peatland at the southern end and the rest of the site consisting of agricultural land, other than the M6 motorway and Rochfortbridge.

19.3.12. Hydrology

- The GCC incorporated stretches of four WFD river waterbodies, being the Mongagh River, the Yellow River, the Rochfortbridge Stream and the River Brosna. It provides their 2016-2021 WFD status, (which has been updated for 2019-2024, which is set out at Step 2 in Appendix 4 to this report, the WFD Impact Assessment Stage 1: Screening).
- There are five river monitoring stations in the WFD riverbodies, with four on the Yellow river all recording ‘Poor’ water quality Q values from 1990, 2009 and 2020. The fifth location is on the Rochfortbridge Stream and it returned a moderate Q value in 2020.
- The site falls primarily within the Boyne WFD catchment, with a small section at the north in the Lower Shannon WFD catchment.
- The local rivers and streams are not surface water abstraction locations.
- There is one urban wastewater (UWW) emission points on the Yellow River that relates to the UWW plant at Rochfortbridge. which has a population equivalent (PE) of between 2,100 and 10,000.
- Lough Ennell SAC is 1.8km downstream of the GCC, where the River Brosna enters it. The River Boyne and Blackwater SPA and SAC are 21.5km downstream. All three sites have surface water dependent habitats.
- The GCC pipes would be buried and in Flood Zone C for present and future flood scenarios. It is however, deemed compatible to Flood Zone C.

19.3.13. Hydrogeology

- Subsoil permeability and groundwater vulnerability are both ‘Low’ when underlaid by peat and ‘Moderate’ when underlaid by till and alluvium. There are three mapped faults within the GCC. Regional groundwater flow is likely south east with the Yellow River catchment and northwest in the River Brosna catchment.
- No groundwater monitoring was carried out in the GCC.
- The majority of the GCC lies in the Athboy groundwater body (GWB), which is 'poorly productive'. It has a 'Good' status and a WFD status of 'Not at Risk'. The northern section is in the Clara GWB.
- There are a number of groundwater abstractions close to the GCC including the Hostel well that supplies water to the existing Derrygreenagh works site. There are records of other shallow wells dug to 1.6m, but no data are available on them.
- There are no groundwater dependent terrestrial ecosystems in the GCC. While hydraulically connected to the River Boyne and River Blackwater SAC and SPA, the separation distance between the sites at more than 25km mean that it is unlikely that these habitats are hydraulically connected via groundwater. Lough Ennell SAC and SPA is located c1.8km downstream on the River Brosna and its qualifying interests include EU Annex I habitats which are groundwater dependent terrestrial ecosystems. These habitats are likely to be hydraulically connected to the Clara WFD groundwater body underlying the Gas Connection Corridor.
- Two small area within the GCC, c1km south of Rochfortbridge are mapped as experiencing historic groundwater flooding. The mapped recharge over most of the GCC is between 151-200 mm per year on agricultural land and 1mm to 50mm underneath ‘Cut Peat’ areas at the northern and southern ends.

19.4. Potential Effects (Predicted Impacts)

19.4.1. The EIAR identifies the potential for a range of environmental effects on Water Environment. The likely effects of the development, as identified in the EIAR, are summarised in Tables 19.1, 19.2, 19.3 and 19.4 below. The focus of the assessment will be on the Significant and Negative/Adverse effects of the development, while Minor effect, which are deemed to be Imperceptible, Not Significant, Slight or Moderate, have been identified, but will not be assessed in the analysis and

conclusion section below, unless there are identified significant impact interactions, cumulative effects or where concerns have been expressed by parties to the application.

Table 19.1: Summary of Potential Effects

Project Phase	Potential Direct, Indirect and Cumulative Effects
Do Nothing	• Should the proposed development not progress, there would be no significant changes to hydrological or hydrogeological receptors and Environmental monitoring would continue as required by the existing IPC licence (P0501-01).

Table 19.2: Summary of Potential Effects (Power Plant Area)

Project Phase	Potential Direct and Indirect Effects
Construction	• Effects on water quality due to uncontrolled site runoff is considered to be small adverse, direct, and temporary; which combined would result in a moderate/slight effect on the Mongagh River and a slight impact on 1) the Knockdrin Garr Cutover and Derrygreenagh Bog Group and 2) the onsite well, PW1 and the Hostel Well. • Effects on water quality due to accidental spillages would be the same as for uncontrolled site runoff set out above, with one addition that the impact on Athboy WFD GWB would be moderate/slight. • Effects on water levels and flows due to dewatering activities would be negligible, direct and temporary, and when combined would be imperceptible for Athboy WFD GWB and slight for the Knockdrin Garr Cutover and Derrygreenagh Bog Group. • Effects on watercourse morphology due to construction of the new discharge pipelines on the Mongagh and Yellow Rivers would be small adverse, direct and temporary; which combined would result in a moderate/ slight effect. • Changes to flood risk and site drainage from increased site runoff would be negligible, direct and temporary, which combined would result in an imperceptible effect on the Mongagh River.
Operation	• The proposed discharges would controlled under the conditions of a new IE Licence. Effects on surface water quality as a result of proposed discharges to the Mongagh and Yellow rivers would be negligible, direct, and long-term, which combined would have an imperceptible effect. • Effects on surface and groundwater quality due to accidental spillages affecting the Mongagh and Yellow Rivers and the Athboy WFD GWB, would be small adverse, indirect and temporary; which combined would result in a moderate/slight effect. • Impacts on watercourse morphology due to proposed discharges would be small adverse, direct and long-term; which combined would result in a moderate/slight effect.

	• Impacts on groundwater levels and resource availability due to increased groundwater abstraction are considered to be negligible, direct and temporary for the Athboy WFD GWB, and small adverse, direct and temporary for the bog complex; which combined would result in an imperceptible effect and slight effect on these receptors respectively. • Impacts to flood risk status of the Mongagh River by increased surface water runoff from new impervious areas is considered to be negligible and imperceptible.
Decommissioning	• Impacts are considered to be similar to the construction phase.

Table 19.3: Summary of Potential Effects (Electricity Grid Connection)

Project Phase	Potential Direct and Indirect Effects
Construction	• Impacts on water quality due to uncontrolled site runoff are considered to be small adverse, direct, and temporary; and combined would result in a moderate/ slight effect on the Yellow River and Grand Canal and a slight effect on the Coolcor Stream, the Derrygreenagh bog complex and Gallybeg Cutover complex (groundwater dependent terrestrial ecosystem - GWDTE) the effect on three groundwater abstractions: the 'Abstraction Well', a borehole owned by Edenderry RDC and a dug well would be slight, while the effects on Toberdaly PWS (public water supply) would be moderate/slight. • Impacts on water quality due to accidental spillages would be the same as for uncontrolled site runoff set out above, with one addition that the effect on Athboy WFD GWB would be moderate/slight. • Effects on water levels and flows due to dewatering activities is considered to be negligible, direct and temporary, for the Athboy and Daingean WFD groundwater bodies, and small adverse, direct and temporary for the GWDTE, which combined would respectively result in imperceptible and slight effects. • Changes to flood risk and site drainage from increased site runoff from pluvial sources would be negligible, direct and temporary which combined would result in an imperceptible effect on the Yellow River and Coolcor Stream.
Operation	• Effects are not envisaged, but if they occur during maintenance, they would be similar to those envisaged for the construction phase.
Decommissioning	• Decommissioning is not envisaged.

Table 18.4: Summary of Potential Effects (Gas Connection Corridor)

Project Phase	Potential Direct, Indirect and Cumulative Effects
Construction	• Impacts on water quality due to uncontrolled site runoff are considered to be small adverse, direct, and temporary; and combined would result in a moderate/ slight effect on the Yellow

	River, a slight effect on the Rochfortbridge Stream and the River Brosna and a **significant effect** on Lough Ennell SAC and SPA (groundwater dependent terrestrial ecosystem - GWDTE). The effect on the Hostel Well and other wells is considered to be small, direct and temporary; which combined would result in a slight and imperceptible effect, • Impacts on water quality due to accidental spillages would be small adverse, indirect and temporary, for all receptors which combined, would result in a moderate/ slight effect on the Yellow River, a **significant effect** on Lough Ennell SAC and SPA and a slight effect on the Rochfortbridge Stream and River Brosna. The effect on the onsite well PW1 and the offsite Hostel Well would be slight, while the effect on the Athboy and Clara WFD GWB's would be moderate/slight. • Impacts on water levels and flows due to dewatering activities are considered to be negligible, direct and temporary, for the Athboy and Clara WFD GWB's and the Lough Ennell SAC and SPA, which combined would result in imperceptible effects. • Impacts on watercourse morphology due to proposed discharges would be small adverse, direct and temporary; which combined would result in a moderate/slight effect on the Mongagh River and slight effect on the Rochfortbridge Stream. • Changes to flood risk and site drainage from increased site runoff would be negligible, direct and temporary; which combined would result in an imperceptible effect on the Yellow River, Rochfortbridge Stream and River Brosna.
Operation	• Effects are not envisaged, but if they occur during maintenance, they would be similar to those envisaged for the constriction phase.
Decommissioning	• Decommissioning is not envisaged.

19.5. Mitigation (and Enhancement Measures)

19.5.1. Power Plant Area

19.5.2. Construction Phase

An extensive list of standard mitigation measures is set out in the CEMP in Appendix 5A of the EIAR and are restated in Chapter 12. They are summarised under the following headings and some appear under several of the headings:

1) General Surface Water Management – Inspection, maintenance and monitoring of existing drainage and installation of any necessary new drainage;

2) Sedimentation of Surface Waters – Silt fences, spill kits, buffer zones and bunded areas; regular watercourses inspection; check weather; personnel training; equipment maintenance; discharge pipe placement in accordance with

Inland Fisheries Ireland Requirements for the Protection of Fisheries Habitat during Construction and Development Works at River Sites (2016);

3) Fuel and Chemical Handling – Bunded fuels, oils and lubricant areas at least 50m from water bodies; refuelling in impermeable areas.

4) Control of Concrete and Lime – Wash-down or wash in designated areas, no concreting during wet weather; concrete mixing in designated impermeable areas at least 10m from water bodies or surface water drains.

5) Accidental Spillage, Flooding or Other Emergencies – Licenced disposal of empty or leaking oil drums; prepare an Emergency Response Plan.

19.5.3. Operational Phase

General measures

- Would comply with the requirements of IE Licence that would set limits and minimise the impacts to air, soil, surface and groundwater, and the effects on environment and human health. IEL would include water sampling and analysis.
- Would implement and maintain an Environmental Management System (EMS) to the criteria of International Standards Organisation (ISO) 14001.

Mitigation measures are also set out under the following headings with the measures summarised as (some measures appear under several of the headings):

1) Drainage Strategy – Interception, conveyance, treatment, and attenuation of runoff; Effective drainage design and treatment systems in accordance with IE Licence; Water monitoring programme for process water and surface water runoff; (SuDS) design and maintenance regime; Environmentally sympathetic discharge outfall structure designs are required for proof of meeting WFD objectives.

2) Pollution Prevention and Control – Would comply with Industrial Emissions Directive (IED) under its IE Licence and will operate an EMS.

3) Hazard Prevention and Emergency Planning – Embedded design measures to prevent risk of fire, flooding, spillages or other potentially major incidents; Health and Safety Plan; Site Emergency Plan; Flood Emergency Response Plan and staff training.

4) Flood Risk Mitigation – Suitable drainage systems to reduce fluvial flood risk.

5) Groundwater Abstraction Management – CEMP to be updated prior to commencement of operational pumping at PW1, to determine current operational and water level data and to identify groundwater levels monitoring locations.

19.5.4. Decommissioning Phase

- Effects of a similar nature to construction phase.
- A Decommissioning Plan would be produced and agreed with the EPA as part of the IE Licence application and licence surrender process.
- The IE Licence Baseline Assessment Report would be updated, to determine if remediation is necessary prior to licence surrender, subject to relevant legislation at the time.

19.5.5. Electricity Grid Connection

19.5.6. Construction Phase

- The same general mitigation measures that are described above for the PPA would be in place to minimise the potential for adverse impacts to groundwater, surface water quality, geomorphology, off-site receptors and construction workers.

19.5.7. Operational Phase

- The same mitigation as for the operational phase of the Power Plant Area.

19.5.8. Decommissioning

- Decommissioning not envisaged, so no mitigation required.

19.5.9. Gas Connection Corridor

19.5.10. Construction Phase

- A final CEMP would be prepared. The same general mitigation measures that are described above for the PPA and EGC would be in place.
- Additional measure would include 1) maintenance and restoration of pre-construction land drainage patterns and drainage; 2) open cut ditch crossings for minor water courses and roads and horizontal directional drilling, auger or thrust boring for major water courses and roads; 3) Gas pipe line not less than 1.7m from the bottom of the watercourse and would maintain a depth of cover of not less than 1.2 m; 4) stockpiles monitored to avoid sediment runoff.

19.5.11. Operation Phase

- Same as for the operational phase of the PPA and EGC.

19.5.12. Decommissioning Phase

- Decommissioning not envisaged, so no mitigation required.

19.6. Residual Effects

19.6.1. Power Plant Area

19.6.2. Construction and Operation Phases

- With the implementation of mitigation measures, which are standard good practice measures, that are routinely applied across construction sites and are incorporated into the design, and with the implementation of the CEMP, all 28 residual impacts from the construction and operational phases for the PPA, EGC or the GCC are deemed to be imperceptible as per Table 12-28 of the EIAR and are therefore not significant (Chapter 12.7 of EIAR).

19.6.3. Decommissioning

- Decommissioning of the EGC and the GCC have not been considered in the EIAR, as they would be vested in Eirgrid and Gas Networks Ireland and would form part of the national Electricity and Gas networks.
- With respect to decommissioning of the PPA, paragraph 12.7.1 states that 'Decommissioning of the Power Plant Area is not envisaged and has not been assessed under this EIAR as it will be managed by EirGrid once it is operational and will become an important part of the Republic of Ireland's national grid infrastructure'. The above statement is not consistent with the description of the decommissioning phases of each of the other chapters of the EIAR and I will address it in section 19.4 below.

19.7. Cumulative Effects

19.7.1. Interaction of Effects between the Various Elements of the Proposed Development and Overall Project

19.7.2. There is potential for cumulative effects from the various elements of the proposed development and overall project, if construction is carried out at the same time. The same cumulative effects are anticipated for the three separate elements and are:

- With the implementation of the mitigation measures, residual effects for the Power Plant Area during construction, operation and decommissioning cumulative impacts are considered to be imperceptible or not significant.
- No cumulative operational impacts are anticipated, during the operational phases of any of the three elements of the proposed development or overall project from the operation of the two other elements.

19.7.3. Cumulative In-Combination Effects

19.7.4. A detailed list of planning applications is set out in Appendix 19A, but only projects of sufficient size and scale that may potentially act in-combination were considered relevant. Most projects are sufficiently distant and of a nature and scale that there are no pathways for these to act in-combination. Following mitigation, it is assessed that there is no likelihood of in-combination effects and there would be no significant impacts.

19.8. Analysis, Evaluation and Assessment: Direct and Indirect Effects

19.8.1. I have examined, analysed and evaluated Chapter 13 of the EIAR, all of the associated documentation and submissions on file in respect of 'Water Environment'. I am satisfied that the applicants understanding of the baseline environment, in respect of the proposed development and overall project is comprehensive. It took the form of an initial desk study, followed by a suite of specific surveys which are set out in Appendices 12A Flood Risk and Drainage Assessment; 12B: Surface Water and Groundwater Analytical Results; 12C: WFD Screening Assessment; 12D: Groundwater Yield Report; 12E: Foul Water Technical Note; and 12F: Emission Limit Value Calculation. I am further satisfied that the key impacts in respect of likely effects on the Water Environment, as a consequence of the proposed development and overall project have been identified. While I note that two potential significant effects are anticipated prior to the implementation of mitigation measures, I am satisfied that the applicant has demonstrated that there would be no significant residual or cumulative effects as a result of the proposed development or the overall project.

Industrial Emissions Licence

19.8.2. While matters relating to Water within the boundary of the Power Plant Area would be controlled by an Industrial Emissions Licence (IEL) that is yet to be applied for, matters relating to water or emissions to water outside of the IEL boundary, but part of the proposed development and overall project would be controlled by conditions imposed by the Commission, should it decide to grant permission.

19.8.3. Notwithstanding the above, I am satisfied that the PPA could be operated and decommissioned strictly in accordance with the conditions and terms of its Industrial Emissions Licence (IEL) and I am further satisfied that the propose PPA, with a stated lifespan of 25 years or possibly longer, would not have significant effects on the water environment. Therefore, I am satisfied that the erroneous statement in paragraph 12.7.1 of the EIAR, that Decommissioning of the Power Plant Area is not envisaged, and has not been assessed is not an indication that any significant effects would occur, as it would be decommissioned in accordance with the term and conditions of the IEL that it would be operating under following the issuing of an IEL by the EPA under a separate consent process, that will be carried out if permission is granted for the current proposed development.

19.8.4. I am also satisfied, subject to the implementation of the proposed mitigation measures described in the EIAR, which are standard mitigation measures that would be applied to all projects of this nature and scale, that those aspects of the proposed development and overall project, that are located outside of the IEL boundary, would not have significant effects on the water environment and these mitigation measures can be addressed by way of conditions, if the Commission is minded to grant permission.

Offaly County Council

19.8.5. I noted earlier in Sections 5.1.5 and 5.1.8 that the Water and Environment Section of OCC requested that further information be sought from the applicant regarding a number of issues that they had highlighted from the EIAR and I also noted that they had also set out a number of proposed conditions. The applicant responded to these issues which I have summarised is section 10.3.14 above and address in more detail below. The issues of concern related to:

1) Existing drainage layout - I am satisfied that the required information has been provided in the application in both written an map form and I note in particular Figure 12.1 in Chapter 12 'Surface Water Features, Monitoring Locations and SWDEs, which illustrates the drainage network in the vicinity of the site as well as surface water monitoring points. Streams and rivers are also identified in Appendix 9D Aquatic Survey Reports, which involved carrying out a detailed aquatic assessment of 31 riverine sites that could potentially be affected by the proposed development. I am satisfied that the information requested by OCC has been provided.

2) A proposed comprehensive drainage layout - with a) 10M buffer zone either side of watercourses; b) SuDS compliant separate surface water collection / attenuation prior to discharging; c) pre-treatment of the run-off from the roads driveways, footpaths etc prior to discharge, to avoid contamination; d) separate foul water collection prior to discharging to the proposed wastewater treatment system and percolation area.

   a) The applicant responded that a 10m buffer would be maintained except where it is necessary for the final drainage connections. The effects on watercourse morphology due to construction of these new discharge pipelines on both the Mongagh and Yellow Rivers was considered as part of the assessment and were both considered to be small adverse, direct and temporary; which combined would result in a moderate/ slight effect. While the works required to connect the two discharge pipes would have effect, they would be temporary and I am satisfied that once the necessary works are completed to install what would be underground infrastructure, that a 10m buffer would once again be maintained along both riverbanks consistent with the requirements of BLP-20 of the Offaly CDP 2021-2027.

   b) With respect to the request for SuDS compliant separate surface water collection / attenuation prior to discharging, the applicant identified drawing and the Drainage Engineering Assessment Report, which provided the required details. I am satisfied that the necessary detail has been provided to demonstrate that appropriate drainage arrangement have been designed into the development.

c) The Drainage Engineering Assessment Report, WFD report and drainage drawings details the pre-treatment of the run-off from the roads driveways, footpaths etc prior to discharge, to avoid contamination and would include silt traps, oil interceptors, and attenuation I respect of discharges from the PPA and substations sites. I am satisfied that the applicant has addressed this matter in the application and in their response to submissions.

d) Details of the separate foul water collection system is included in the Drainage Engineering Assessment Report.

19.8.6. I am satisfied that the applicant has addressed all of the concerns raised by OCC in respect to Chapter 12 'Water Environment' of the EIAR and I am further satisfied that there would be no significant effects on the water environment in respect of the matters raised. With respect to emissions from the PPA, these would be controlled by the conditions of an Industrial Emissions Licence, that will be applied for and administered by the EPA, following the receipt of a grant of permission, in respect of this application.

19.8.7. I also note that water to serve the PPA would be abstracted from groundwater, which has been confirmed by testing to have an adequate supply to serve the PPA. Chapter 16 'Material Assets' of the EIAR states that the water requirements for the Proposed Development and Overall Project is 720m^3/d, while a seven day constant test in 2023 of the same well indicated a pumping rate of 1,008m^3/day. It has also been demonstrated that there would be adequate groundwater recharge such that no significant impacts on groundwater would arise as a result of the abstraction. The application for consent to permit abstraction of groundwater will be a separate process to the IEL process and will be made directly to the EPA.

19.9. Conclusion: Direct and Indirect Effects

19.9.1. Having regard to my assessment of potential impact in respect to the Water Environment, it is considered that subject to appropriate mitigation through planning conditions and the conditions of the IEL, that would apply to emissions to water in respect to the PPA, that potential significant direct, indirect and cumulative effects on the Water Environment could be avoided. I am further satisfied that matters to be agreed, could be agreed with the planning authority, prior to the commencement of

development, in respect of those aspects of the proposed development which would be outside of the area subject to an IEL.

20.0 Land, Soils and Geology

20.1. Issues Raised

- The Water and Environment Section of OCC requested that further information be sought requiring the applicant to submit an Article 11 declaration on waste authorisation to the EPA regarding proposed peat extraction and deposition areas.

20.2. Examination of the EIAR

20.2.1. Context

20.2.2. Impacts of the proposed development on Land, Soils and Geology are addressed in Chapter 13 of the EIAR. As the PPA site is brownfield, it also screens for land contamination. It is appended by Appendix 5A - Construction Environmental Management Plan (CEMP) and is supported by Appendices 12A - Flood Risk and Drainage Assessment; 13A - Ground Investigation Report; 13B - Generic Quantitative Risk Assessment (GQRA); 16A - Agricultural Impact Assessment; and Chapters 4 - Existing Site and Conditions; 5 – The Proposed Development and Overall Project; 9 - Biodiversity; 12 - Water Environment; and 19 - Cumulative Effects and Interactions.

20.2.3. The methodology involved a desk based study of previous investigation carried out for the 2010 application for a similar development on the PPA site and a site walkover to observe land use and identify potential sources of contamination and sensitive receptors. This was supplemented by additional ground investigations to obtain an overview of ground and groundwater conditions. The assessment criteria are sensitivity of receptors, magnitude of impact and significance of effects, based on 'Criteria for Rating Site Importance of Geological Features' (NRA 2008) and 'Guidelines for the Preparation of Soils, Geology and Hydrogeology Chapters of Environmental Impact Statements' (IGI 2013).

20.2.4. The study area extends over the entire site and outwards for 2km from the site boundaries, which is consistent with IGI industry guidelines.

The pre-application consultation response received from the Geological Survey of Ireland reflects the information on the GSI online mapping resource.

20.2.5. The assessment is limited to the baseline assessed on the dates of the site walkover and ground investigations.

20.3. Baseline

20.3.1. The baseline is extensive and is set out separately for 1) The PPA; 2) The EGC; and 3) the GCC. The following baseline headings are used:

20.3.2. Topography; Soils Geology; Subsoil Geology; Bedrock Geology; Borehole, Well and Spring information; Ground Stability; Land Cover Mapping and Agricultural land classification; Geological Heritage Areas; Geotechnical Site Records; Geological Hazards; Radon; Mineral and Aggregate Potential; Designated Sites; Previous Ground Investigation information including Soil Chemistry; Potential sources of contamination; Identified Receptors and Conceptual Site Model.

Power Plant Area

20.3.3. Based on 2008 site investigations, the PPA site consists mostly of made ground and is elevated slightly above the surrounding landscape, that is a relatively level, featureless and extensively modified peat terrain. The site is also underlaid by peaty deposits, clay, sand and gravels of depths between 2m and 22.4m on top of limestone and shale. Groundwater is found from 6 to 10m below ground level and the site has a low groundwater vulnerability rating.

20.3.4. The 2008 site investigations showed three active quarries in proximity with high or very high granular potential, but ‘low’ or ‘very low’ crushed aggregate potential. The 2008 investigations also identified various waste materials in the made ground on the PPA site with the most significant area located to the south of the site boundary. The risk associated with the buried waste was deemed ‘low’ to ‘very low’ due to it being covered. It was geo-environmentally assessed under Bord Na Mona’s IPC licence requirements and the EPA considered there was no environmental impact.

20.3.5. The 2023 investigations drilled 29 boreholes of between 3.5m and 58m to assess subsoil and rock composition and groundwater fluid properties. 12 trial pits between 0.5m and 4.8m were dug and 18 cone penetration tests carried out at depths between 0.24m and 17.01m to obtain geotechnical results. Geophysical surveys

were carried out on 2 boreholes and one existing well to investigate bedrock composition and groundwater fluid properties to depths of between 7m and 65.8m. A well was pumped for hydraulic testing of bedrock and 4 soakaway tests were carried out. Soil samples were obtained and analysed for 26 different parameters, and 18 of the samples were subject to leachate extraction. The soil sample results are set out in Appendices 13A and 13B, with none of the results considered significant.

20.3.6. Landcover around the PPA is described as 'inland wetways' and 'peat' with 'mineral extraction sites' 'pastures' and 'agricultural' areas in the 2km study area.

20.3.7. There are two IPC licences sites in the 2km study area being the existing Derrygreenagh Works and a pig rearing facility c1.5km southwest of the proposed PPA. Site investigations in 2008 and 2013 revealed some ground contamination, but is of a low concentrations and poses no risk to human health.

20.3.8. There is one domestic well c1.5km to the south of the PPA. There are no karst bedrock features, verified boreholes, geological heritage sites, geotechnical site records, landslide events, statutorily designated European or national heritage sites, in the 2km study area.

20.3.9. The GSI assigned a 'low' 'Landslide susceptibility classification to the study area.

20.3.10. Potential receptors during construction are agricultural land and soils within the site boundary, and designated geological sites, but both are considered to not be impacted during the construction, operation or decommissioning phases of the development. Other receptors that could be affected by contamination are surface water, tributaries of rivers and groundwater, while human health could be affected through the industrial use of the lands, contamination of well water supplies and impacts on construction workers.

20.3.11. A Conceptual Site Model (CSM) was developed to define plausible contamination source pathway receptor linkages. They are:

- Existing soil contamination could affect 1) construction workers by dermal contact; 2) workers and off site resident and industrial users by way of inhalation of dust; and 3) leaching into water, affecting surface, ground and unknown wells.
- Existing groundwater contamination could affect 1) construction workers and operational staff if they consumed affected water from the on-site well; and 2)

pollution incidents on site could affect surface, ground and unknown well water. It is noted that 4 rounds of tests in 8 on site wells in 2023 did not indicate any significant existing groundwater contamination.

- Off-site sources could affect construction workers, surface, ground and unknown well water, by way of contamination reaching soil and groundwater.
- On-site sources could affect construction workers, surface, ground and unknown well water, by way of construction related pollution incidents reaching soil and groundwater.

Electricity Grid Connection

20.3.12. The 220kV substation has an elevation of 79-84m OD, pylon based range 74-80m and the interface compound would be at 79m, while the underground cable will run at 78-79m OD. The route is almost entirely underlain by 'Cut Peat' with a small area of 'Till derived chiefly from limestone'. 2023 trial pits indicate peat at the substation and pylon locations ranges 0.5 to 1m in thickness and the Peat Slide Hazard Ranking is insignificant. Bedrock is generally limestone and shale with an 800m section of basalt starting 750m south of the PPA. The OHL crosses a bedrock fracture 1.6km south of the PPA. A low yielding domestic borehole is located 1.5km south west of the PPA, while the Inner and Outer Source Protection Zones for the Toberdaly Public Water Supply sources are 680m east of the EGC.

20.3.13. The land of the EGC is almost entirely 'Inland Wetways' described as' Cut Peat'. Rhode lies 2.4km east. 'Agricultural' and 'forest and semi-natural areas' make up the rest of the 2km study area. An Agricultural report in Appendix 16A indicated thar development would not have significant impact on agriculture.

20.3.14. There is a karst spring 1.1km east of the grid connection substation, two geological sites 'Croghan Hill', 1.87km west and 'Tobardaly spring', 0.82km east of the underground cable.

20.3.15. There are no karst bedrock features, verified boreholes, geological heritage sites, geotechnical site records, landslide events, statutorily designated European or national heritage sites, in the 2km study area.

20.3.16. There was one landslide event 1.85km southeast of the 400kV substation in 1975 but it had 'no apparent impact' and the 'Landslide Susceptibility Classification is

'Moderately Low'. The area is not a high radon area. There are three active quarries within the 2km study area.

20.3.17. 12 of the 29 turbines in the Yellow River Windfarm are located within 2-3km of the site and it had a 'Peat Slide Hazard Ranking' of 'Insignificant'.

20.3.18. The 2023 investigations at the substation location and the 220kV line route included 35 boreholes and 70 trial pits, the results of which are in Appendices 13A and 13B. The extracted material was tested, and all results were deemed to be insignificant.

20.3.19. There are no SPA's, SAC's or NHA's within 2km but the Grand Canal pNHA is 400m south of the proposed 400kV substation.

20.3.20. Apart from the former Lough Nashade having been drained, and a number of small structures that were within the site of the proposed 400kV substation but are no longer present, land use in the area is largely unchanged from the late 1800's and there is no indication of any historically potentially contaminative land uses.

20.3.21. As well as the Derrygreenagh Works and a pig rearing facility 1.5km west of the EGC, SSE Generating Ireland Limited (Rhode) operates an IEL facility in the form of a gas/oil fired peaking power plant in part of the former Rhode peat fired Power Plant, to the east of the EGC part of the site.

20.3.22. No pollution events have been recorded in the period 2018-2022 in respect of the IEL licenced boundary that applies to the EGC.

20.3.23. Potential receptors during construction are agricultural land and peatland soil resources and designated sites. Peatlands have already been extensively worked so are considered to be moderately sensitive while neither the Grand Canal pNHA nor Croghan Hill, a geological resource, are considered to be at risk from the soil and land aspects of the development. Agricultural soils as the 400kV substation could be affected during both the construction and operational phases. The potential for flooding of cutover peatland is deemed to be low.

20.3.24. Four surface water receptors that could be affected by contamination during construction are located within 500m of the EGC, being the Mongagh River (Castlejordan_20), the Yellow River (Yellow Castlejordan), Castletown Tara Stream_010, and the Grand Cana (Esker Stream_010 and Grand Canal Manin Line

West Barrow). In addition, there are six groundwater wells and one spring well within 2km, but no surface water abstractions for public water supply. Human health could be affected through the industrial use of the lands, contamination of well water supplies and impacts on construction workers.

20.3.25. A Conceptual Site Model (CSM) was developed to define plausible contamination source pathway receptor linkages. They are the same as are described in respect of the PPA in 20.2.3 above.

Gas Connection Corridor

20.3.26. The GCC has an elevation range of 80-110m OD. The southernmost 2km section is blanket peat, while the rest of the GCC is grey-brown podzolic till soils derived from limestone. The bedrock under the GCC is limestone and shale except for a 750m section of volcaniclastic bedrock between the Mongagh River and the M6 motorway. With the exception of the peat areas, the land use in the GCC is largely agricultural with smaller areas of 'Discontinuous Urban Fabric' in Rochfortbridge and 'Artificial Surfaces' in the M6 corridor.

20.3.27. There are no mapped karst features or verified boreholes in the GCC study area, while there is one agricultural/domestic borehole 850m south of the GCC. The agricultural report in Appendix 16A considers that the proposed GCC would not have a significant impact on agriculture. There are no 'Landslide Events' within 2km and the 'Landslide Susceptibility Classification' is 'Low' except for a small area 300m south of the GCC.

20.3.28. There are no geological heritage sites within 2km, but there are two 'Geotechnical Site Records' associated with the existing Gas Grid Main. Trial holes in the vicinity of the gas connection point indicate ground depths of 0.7m to 2.8m that did not intersect rock. There are no known previous site investigations along the route of the GCC and no statutorily designated sites or Geological Heritage Sites within 2km.

20.3.29. The historic lands use along the GCC route is agricultural. The IEL licenced facilities previously referred to in respect of the PPA are also within 2km of the GCC and there are also three quarries. There are no reported pollution events during the 2018-2022 period according to the EPA Leap portal.

20.3.30. Potential receptors during construction are agricultural land and soil resources of moderate sensitivity and designated sites, although there are no designated sites within 2km of the proposed development. The 1-2m deep pipe trenches would not impact any highly sensitive geological heritage features.

20.3.31. Four surface water receptors that could be affected by contamination during construction within the GCC, are the Mongagh River, the Castlejordan 07, Rochfortbridge Stream_010 and the Rochfortbridge Demesne Brosna_040. In addition, there is one domestic/agricultural well, but no known surface water abstractions for public or group water supplies within 2km. Human health could be affected through the industrial use of the lands, contamination of well water supplies, if present, and construction workers.

20.3.32. A Conceptual Site Model (CSM) was developed to define plausible contamination source pathway receptor linkages. They are:

- Existing soil contamination could affect 1) construction workers by dermal contact; 2) workers and off site residents via inhalation of dust or gas; and 3) leaching into water, affecting surface, ground and known/unknown water supplies.
- Existing groundwater contamination could affect 1) construction workers through direct contact with contaminated groundwater; and 2) rainwater travelling along preferential flow paths in superficial or bedrock aquifers could affect surface water, groundwater and known/unknown water supplies.
- Off-site sources could affect construction workers, surface, ground and unknown water supplies well water, by way of contamination reaching soil and groundwater in direct contact with gas transmission infrastructure.
- On-site sources could affect construction workers, surface, ground and unknown water supplies, by way of construction related pollution incidents reaching soil, groundwater or surface water receptors beneath the route.

20.4. Potential Effects (Predicted Impacts)

20.4.1. The EIAR identifies the potential for a range of environmental effects on Land, Soils and Geology. The likely effects of the development, as identified in the EIAR, are summarised in Tables 20.1, 20.2, 20.3 and 20.4 below. The focus of the assessment

will be on the Significant and Negative/Adverse effects of the development, while Minor effect, which are deemed to be Imperceptible, Not Significant, Slight or Moderate, have been identified, but will not be assessed in the analysis and conclusion section below, unless there are identified significant impact interactions, cumulative effects or where concerns have been expressed by parties to the application.

Table 19.1: Summary of Potential Effects

Project Phase	Potential Direct, Indirect and Cumulative Effects
Do Nothing	• Environmental monitoring would continue as required by the sites existing IPC licence.

Table 19.2: Summary of Potential Effects (Power Plant Area)

Project Phase	Potential Direct, Indirect and Cumulative Effects
Construction	• Imperceptible effects due to removal of agricultural land. • Slight, adverse and permanent effects due to excavation of 142,412m^3 of soil and its placement in the peat deposition area. • Slight, adverse and permanent effects by smearing and compaction of peat and clay subsoils by vehicular movements. • Slight, adverse and temporary effects from management of imported or excavated materials during construction. • Slight, adverse and temporary effects on groundwater quality from potential leaching from disturbed soil or fill material during construction within the subsurface. • Imperceptible effects on Athboy WFD groundwater body and slight effects on Drummand and Derryarkin bogs due to dewatering. • Potential effects of dewatering on ground stability scoped out. • Imperceptible effects of construction activities on ground stability. • Imperceptible effects on off-site receptors through the inhalation of dust and dermal contact with soils, following extensive soil sampling. • Imperceptible effects on designated sites.
Operation	• Imperceptible effects due to removal of agricultural land. • Moderate, adverse, temporary effects on soil and groundwater chemistry as a result of accidental spillages or leakages from stored backup fuel or maintenance/cleaning chemicals into the subsurface, which combined would have moderate significance. • Imperceptible impacts on designated sites.

Decommissioning	• A Decommissioning Plan (including a Decommissioning Environmental Management Plan) would be produced and agreed with the EPA as part of the IE Licence and licence surrender process. • Effects are predicted to be similar to the construction phase. • Temporary effects on 1) soil structure due to soil stripping, smearing and compaction; 2) soil chemistry as a result of spillages and contamination following ground disturbance and; 3) surface and groundwater quality through the migration of introduced contaminants from spillages.

Table 19.3: Summary of Potential Effects (Electricity Grid Connection)

Project Phase	Potential Direct and Indirect Effects
Do Nothing	• Peat harvesting has ceased and areas of cut-over peat may potentially be restored.
Construction	• Slight, adverse, permanent effects on agricultural lands. • Small, adverse, permanent effects from construction of the floating tower access roads, with 27,353m^3 of imported material, which combined would have a moderate effect. • Small/medium, adverse, temporary effects from imported or excavated material, which combined would be moderate. • Small, adverse, permanent effects from excavations for 19 tower foundations (84 legs and for 2 substations and access road foundations, which combined would have a moderate effect. • Small, adverse, permanent effects from the laying of the underground cable, which combined would have a moderate significance. • Imperceptible effects on designated sites.
Operation	• Effects would be similar to the construction phase.
Decommissioning	• The 220 kV and 400 kV substations and associated transmission infrastructure would remain in-situ and form part of the national grid infrastructure, following decommissioning of the PPA.

Table 19.4: Summary of Potential Effects (Gas Connection Corridor)

Project Phase	Potential Direct and Indirect Effects
Construction	• Moderate, adverse, permanent effects from installation of marker posts and cathodic protection test posts. • Has the potential to disrupt land drainage features. • The overall effects would be small, adverse and permanent, which when combined would give an effect of moderate significance.
Operation	• A permanent easement would be required 9m either side of the pipeline.

	• Effects would be similar to during construction phase.
Decommissioning	• The gas pipeline is expected to have residual life and would be refurbished and retained as part of the national transmission network.

20.4.2. Interaction of Effects between the Various Elements of the Proposed Development and Overall Project

- The three elements of the project have been considered together for cumulative effects as they may be carried out at the same time.
- For all three elements, there could be concurrent open excavations, stockpiles of excavated materials, fuel and chemical storage, site vehicle movements causing soil compaction and interconnected subsurface utilities. With mitigation residual effects would be imperceptible or not significant.
- No cumulative impacts are expected between the three elements, given the different nature of each element of the overall project.

20.4.3. Cumulative In-Combination Effects

- A detailed list of planning applications is set out in Appendix 19A, but only projects of sufficient size and scale that may potentially act in-combination were considered relevant. Most projects are sufficiently distant and of a nature and scale that there are no pathways for these to act in-combination. Following mitigation, it is assessed that there is no likelihood of in-combination effects and there will be no significant impacts.

20.5. Mitigation (and Enhancement Measures)

20.5.1. The proposed mitigation measures are either incorporated into the design as embedded mitigation or are standard construction or operational practices.

20.5.2. Power Plant Area

20.5.3. Construction Phase

- A Construction Environmental Management Plan (CEPM) in Appendix 5A and Construction Traffic Management Plan (CTMP) set out mitigation measures to protect land and soil, including how spoil and construction materials would be stored and how traffic would be managed to ensure no damage to soil structure.

- Appendix 5A and Chapter 12 ‘Water Environment’ set out mitigation to minimise potential for adverse effects to soil chemistry and water quality, including controlling erosion and runoff, and handling of fuels and chemicals. Water quality would also be monitored pre and during construction.
- A Resource and Waste Management Plan (RWMP) would be developed.
- If contaminated land is encountered, it would be dealt with in line with the EPA’s Guidance on Management of Contaminated Land.
- Workers and off-site receptors would be protected through health and safety measures and quality and dust mitigation measures set out in Chapter 7 ‘Air Quality and Climate’. Appropriate PPE to be provided to all workers.

20.5.4. Operational Phase

- Follow the requirements of the Industrial Emissions Licence (IEL) to be issued, including monitoring emissions and water quality.
- Implement and maintain an Environment Management System (EMS).
- Comply with health and safety legislation, regular maintenance and inspections to reduce risk of equipment and bunded storage area failure.

20.5.5. Decommissioning Phase

- Mitigation would be similar to the construction phase described above.
- All residues and operating chemicals would be cleaned out from the plant prior to its removal and a detailed risk assessment carried out for materials that pose health risk.
- Hardstanding and sealed concrete would be left in place.
- A Decommissioning Plan would be produced and agreed with EPA (IE Licence).
- Decommissioning activities would be conducted in accordance with the appropriate guidance and legislation at the time of closure.
- The EPA would conduct an Exit Audit inspection post-decommissioning.

20.5.6. Electricity Grid Connection

20.5.7. Construction Phase

- The same general mitigation from the CEMP that is proposed for the PPA.
- Floating access routes would be carefully selected to avoid damage to land and would consist of timber or aluminium bog mats (on peat) or crushed rock on a geotextile (mineral soils). No peat of topsoil would be removed when placing mats.
- Mats would be removed immediately on completion of works.
- Method statements for specific tasks including management of excavated materials, incorporating silt fences, exclusion zones, containment facilities, staff training, concrete pouring during dry weather to be constantly supervised, no instream works, earth stockpiles set back from watercourses.
- The tower foundation excavations would be stepped or would use piles if necessary, with excess soil used for roadside berms or elsewhere on site.
- Drainage systems would be excavated and installed around the substation compound areas, while a geotextile layer would be laid over its footprint.
- Anywhere along the cable route that requires use of heavy machinery would be surfaced with geotextile cover and stone aggregate roadside. Drains would be culverted within temporary works area. Percolation areas or settlement tanks would be used if dewatering of joint bays is necessary.

20.5.8. Operational Phase

- Mitigation would be similar to the construction phase and would apply in the event of any maintenance being required to the power transmission infrastructure.

20.5.9. Decommissioning

- Decommissioning of the Electricity Grid Connection is not envisaged, as it would form part of the national electricity grid.

20.5.10. Gas Connection Corridor

20.5.11. Construction Phase

- A CEMP would be prepared and typical mitigation would include reinstatement of fencing, walls and hedges, maintenance and restoration of pre-construction land drainage and spreading of topsoil to be agreed with landowners.
- Top of gas pipeline a minimum of 1.7m below the bottom of watercourses.

20.5.12. Operation Phase

- An agreed walkover survey would be carried out to determine potential ground movement that could affect the pipes integrity.

20.5.13. Decommissioning Phase

- Decommissioning is not envisaged, so no mitigation is proposed.

20.6. Residual Effects

For all three elements of the development, residual impacts would be moderate, slight or imperceptible and no significant residual effects have been identified.

20.7. Analysis, Evaluation and Assessment: Direct and Indirect Effects

20.7.1. I have examined, analysed and evaluated Chapter 13 of the EIAR and all of the associated documentation and submissions on file in respect of Land, Soils and Geology. I am satisfied that the applicants understanding of the baseline environment, which has been informed by a desk study and multiple site tests and surveys, is comprehensive and that the key impacts in respect of likely effects on Land, Soils and Geology, as a consequence of the proposed development and overall project have been identified. One issue was raised by Offaly County Council which I address below.

Offaly County Council

20.7.2. As noted at the start of this section, the Environment and Water Services Section of OCC requested that further information be sought requiring the applicant to submit an Article 11 declaration on waste authorisation to the EPA regarding proposed peat extraction and deposition. However, they also proposed that a condition be attached, if permission is granted requiring the applicant/developer to submit details of the origin/source of proposed soil and stone to be imported onto the site. The applicants response was that they would agree the source of all stone to be imported onto the site and that all mitigation measures in the Resource and Waste Management Plan would be implemented. I am satisfied that this matter has been adequately addressed in the information submitted with the application and in the applicant's response and if the Commission is minded to grant permission that the movement of material within, onto and off the site, can be controlled by way of a condition.

20.8. Conclusion: Direct and Indirect Effects

20.8.1. I note that no significant effects are predicted prior to the implementation of mitigation measures. Having regard to my assessment of the proposed development and overall project on Land, Soils and Geology, I am satisfied that subject to mitigation through planning conditions, that there is no potential for significant direct, indirect, or cumulative effects on land soils and geology. I am further satisfied that proposed mitigation measures can be agreed, with the planning authority, prior to the commencement of development.

21.0 Traffic and Transport

21.1. Issues Raised

- Observers consider that the L1010 road must be upgraded to accommodate construction traffic, that a footpath should be built from Rhode to the GAA fields and the R400 at Derrygreenagh Hill also requires widening. They also note that the EIAR refers to a pavement assessment in Appendix 14A, but no such assessment was included in the application.
- Comprehensive planning conditions are proposed by OCC including strengthening, resurfacing and creation of passing bays on the L1010.
- TII requires all mitigation to be attached as conditions, requests that official policy is followed and any damage to the national road network, that forms part of the haul route is rectified.

21.2. Examination of the EIAR

21.2.1. Context

21.2.2. Impacts on Traffic and Transport are addressed in Chapter 14 of the EIAR. It considers the existing traffic conditions, the additional traffic generated by the overall development and the resulting impact on the surrounding road network. The EIAR chapter is appended by a series of appendices being 14A – Traffic Survey Data; 14B – Abnormal Loads Report; 14C – Traffic Flow Data; 14D – Autotrafficking & Access Arrangements; 14E – Programme Overlap Periods; 14F – Cumulative Development (Traffic); 14G – Junction 10 Outputs; 14H – Construction Traffic Management Plan; and 14I – Road Safety Audit.

21.2.3. While the level of traffic that would be generated is not expected to increase traffic at any junctions or links, to a level that would trigger a requirement for the preparation of a traffic impact assessment, the applicant has undertaken an assessment of the link from the M6 to the PPA access and at 6 other junctions that would serve the PPA, EGC and GCC, as they are the closest junctions to proposed access points. The need to assess the M6 Motorway was screened out due to its high capacity.

21.2.4. The traffic impact assessment is based on a 10% peak hour flow, which is informed by the Transport Infrastructure Ireland (TII) 'Traffic and Transport Impact Assessment Guidelines', and IMEA 'Guidelines for the Environmental Assessment of Road Traffic' (1993), while the significance of effects is assessed against Table 3.4 of the 2022 EPA 'Guidelines on the information to be contained in Environmental Impact Assessment Reports'. The chapter also relied on a number of other TII guidelines and standards and the DMURS (Design Manual for Roads and Streets).

21.2.5. The greatest volumes of traffic would be generated during the construction phase, which represents the worst case traffic scenario outlined in the chapter.

21.2.6. A limitation was identified in that the access points for the GCC have not yet been confirmed, and trip generation for this element of the overall project was estimated, based on a gas pipeline development in Carrickfergus, Northern Ireland.

21.3. Baseline

21.3.1. All three elements of the development would use the same road network, so have the same baseline, and while the gas connection corridor would extend further north than the study area and have impacts on a number of additional roads and junctions, it will be the subject of a separate consent process.

21.3.2. The traffic baseline has been informed by a series of traffic surveys on the R400 and at five junctions from Rochfortbridge in the north to Rhode Village in the south, which are expected to experience the highest volumes of traffic. It also used 2021 traffic data gathered for a proposed quarry on an adjacent site to the north, in county Westmeath (P.A. Reg. Ref. 2260051 – withdrawn before decision issued), as a baseline, and using TII growth rate facts calculated the 2023 baseline traffic.

21.3.3. The AADT Annual Average Daily Traffic two way movements on the R400 for 2023 (pre development) is calculated as 2,810 movements.

21.3.4. The assessment considers traffic in a range of different years from 2024-2027 due to the varying elements of the development generating peak traffic at different times, with the Offaly Central Local Growth factor used for traffic in different periods, based on the figures generated in 2021 and the base year of 2027, and these figures are reflected in the diagrams in Appendix 14C.

21.3.5. For the base year of 2023, the RFC (rate to flow capacity) of each of the junctions assessed was deemed to be operating satisfactorily and well within capacity.

21.3.6. In November 2021, a pavement condition survey was carried out in respect of an application for the continued use of Edenderry Power Plant, including the R400. The information from that survey used as a baseline for the pavement assessment.

21.3.7. A topographical survey was carried out, as was an Abnormal Load Review, as set out in Appendix 14B. Stage 1 Road Safety Audits were carried out for the proposed Power Plant Area and the 220Kv substation access points.

21.3.8. Consultations were carried out and Road Safety Authority traffic statistics were also consulted.

21.4. Potential Effects (Predicted Impacts)

21.4.1. The EIAR identifies the potential for a range of environmental effects on Traffic and Transport. The likely effects of the development, as identified in the EIAR, are summarised in Tables 21.1, 21.2, 21.3 and 21.4 below. The focus of the assessment will be on the Significant and Negative/Adverse effects of the development, while Minor effect, which are deemed to be Imperceptible, Not Significant, Slight or Moderate, have been identified, but will not be assessed in the analysis and conclusion section below, unless there are identified significant impact interactions, cumulative effects or where concerns have been expressed by parties to the application.

Table 21.1: Summary of Potential Effects

Project Phase	Potential Direct and Indirect Effects
Do Nothing	• Would result in a natural increase in traffic growth and the six identified junctions would continue to operate well below their maximum capacities.

Table 21.2: Summary of Potential Effects (Power Plant Area)

Project Phase	Potential Direct and Indirect Effects
Construction	• It includes the demolition phase and describes the access arrangements, working hours (Monday to Friday 07:00 to 19:00 and Saturday 08:00 to 13:00), daily trip generation (based on a maximum of 750 staff on site (for a 3 month period over the 39 month construction period), peak HGV movements, peak hour assessment, the distribution of staff and deliveries movements including no LGV movements during peak hours and staff parking. 80% of staff are expected to arrive on site by minibus and the site would have capacity for 100 cars and 36 minibuses. • While an impact would be noted at the entrance to the site, as well as at the 2 junctions assessed in Rochfortbridge, the maximum impact would be 4.5% at the PM peak at the site access. The impact was assessed as Neutral, Slight, and Short-Term. • Abnormal loads deliveries along the R400 would facilitate delivery of 1) CCGT Gas Turbine; 2) CCGT generator stator: 3) Steam turbine modules; 4) OCGT module: 5) Step up transformers for OCGT and CCGT and 6) HRSG modules. The heaviest delivery would be the CCGT gas turbine at circa 350 tonnes and the CCGT generator at circa 400 tonnes and would be delivered between months 19 and 24. Pre and post-delivery pavement assessments would be required on the R400 to ensure that the road surface is not negatively impacted.
Operation	• Traffic movements generated by up to 65 on site staff working 3 x 8 hour shifts and a maximum of 10 deliveries would not exceed the construction traffic levels, which is a worst case scenario. • In an emergency, where secondary fuel is required to run the plant, 36 HGV movements could occur daily, but has not been modelled as it is not expected to happen regularly and is not assessed as a typical day. • Continual pavement assessments would be required on the R400 following emergency outages to ensure the road surface is not negatively impacted. • The daily operational impact is assessed as being Neutral, Slight, and Long-Term.
Decommissioning	• Effects are considered to be of a similar nature and duration to those arising from the construction process. • A Decommissioning Plan (including a Closure Remediation and Aftercare Management Plant (CRAMP) would be agreed with the EPA as part of the sites Industrial Emissions Licence. • The traffic impact of decommissioning has been assessed as Neutral, Slight, and Long-Term.

Table 21.3: Summary of Potential Effects (Electricity Grid Connection)

Project Phase	Potential Direct and Indirect Effects

Construction	• The 220kV Station (30 month construction phase); 400kV Station (30 months); and Grid Route (21 months) were assessed separately. The busiest phase of HGV movements would occur during the cut and fill stages, in the first six month period, before the construction workers would arrive on site. this phase would see 43,928cubic metres of fill arrive via 3,661 HGVs at an average of 29 HGV arrivals per weekday. <u>220kV Station</u> • Up to 40 no. staff on site for 18 of the 30 months for the 220kV substation would travel by car with an average occupancy of 1.5 persons generating 27 daily trips, while the majority of HGV movements would happen in a 3 month period early in the construction phase, that would not correspond with the peak of activity at the PPA. Peak hourly HGV trips would be 6. • Staff (LGV's) would not be on the roads during the peak hours of movement from 8:15 to 09:15 and from 17:00 to 18:00 as work hours would be 07:00 to 19:00 on weekdays. • While an impact would be noted at the entrance to the site, as well as at the 2 junctions assessed in Rochfortbridge, the maximum junction impact would be 4.6% at the PM peak, at the site access. The impact was assessed as <u>Neutral, Slight, and Short-Term</u>. <u>400kV Substation</u> • The 40 no. staff for the 400kv substation would travel by car, while the peak of HGV movements (29 arrivals per day) would happen in a 6 month period at the start of the construction phase, and would not correspond with the peak of 27 LGV arrival. This early phase of development would not correspond with the peak of activity at the PPA. The peak hourly HGV trips per hour would be 4. • Car parking would be available for 27 cars, to match projected demand. • Five of the six junctions assessed would experience an impact of between 1.3% and 3.1%, but none exceed the 10% threshold, and do not require additional assessment. The impact was assessed as <u>Neutral, Slight, and Short-Term</u>. <u>Electricity Grid Route</u> • The 40 no. staff for the grid route would travel by car, generating 27 daily trips, during months 16-33 of an overall 39 month construction phase, while the majority of HGV movements, are associated with the cut and fill phase and would happen in a 3 month period early in the 21 month grid route construction. This would not correspond with the peak of activity at either the PPA or the two substations. Peak hourly HGV trips per hour would be 6. • During this first 3 months, 40,560m^3 of fill would arrive via 3,381 HGVs, at an average of 56 HGV arrivals per weekday. In addition, 15 other HGVs would arrive on site during this peak period. • Five of the six junctions assessed would experience an impact of between 0.4% and 4.6%, but none exceed the 10% threshold, and

	do not require additional assessment. The impact was assessed as Neutral, Slight, and Short-Term. • Two abnormal loads are expected for the GCC and are estimated at 280 tonnes each. They are addressed in Appendix 14B.
Operation	• It is not proposed that the Electricity Grid Connection or substations will be manned although periodic inspections and maintenance activities will be undertaken by 1 – 2 staff. • The impact would be Neutral, Not significant and Long-Term.
Decommissioning	• The grids connection would be managed by EirGrid as part of the national grid network and is not expected to be decommissioned, so it has not been considered further.

Table 21.4: Summary of Potential Effects (Gas Connection Corridor)

Project Phase	Potential Direct and Indirect Effects
Construction	• At present, there is a lack of clarity on the number and location of junctions that would be used to access the GCC, but 35% of trips are expected to use the PPA access to facilitate the construction of the AGI, with 35% travelling through Rochfortbridge. • Trip generation is not known, so has been estimated at a maximum of 44 LGV arrivals per day (88 movements) and 25 HGV arrivals per day with an average of 14, based on a similar project in Carrickfergus, Northern Ireland. • There would be no LGV movements during peak am of pm hours as workers would be on site and are expected to access the site via the M6 and R400. The traffic generated by the construction phase would range from 0-2% of traffic through the six assessed junctions and the impact is assessed as Neutral, Slight and Short-Term.
Operation	• The connection would be operated by GNI once operational, with maintenance access expected once a month. This impact would be Neutral, Not significant and Long-Term.
Decommissioning	• The gas connection would be managed by Gas Networks Ireland as part of the national gas network and is not expected to be decommissioned, so it has not been considered further.

21.5. Cumulative Effects

Project Elements

21.5.1. The three elements of the overall project could overlap and the peak construction period could see a total of 828 daily two way trips over a 3 month period in months 16 to 18 of the 39 month construction phase. As LGVs would not be on the roads at peak hours, the peak hour assessment for HGV shows that Junction 3 (Power Plant Area) would be impacted by 13.8% in the AM peak and 16.2% in the PM peak, while

Junction 5a (Roundabout on southern side of M6 exit) would be impacted by 12.2% in the AM peak and 13.0% in the PM peak. With impacts over 10% both junctions have been modelled for cumulative impacts.

Other Cumulative Development Considerations

21.5.2. Appendix 14F sets out the projects that the applicant considered relevant to the cumulative assessment. A number of the listed projects have been built out, while others have been refused permission or were withdrawn. Several are under construction including a large solar farm adjacent to the Rhode Green Energy Park. A number of others provided no traffic data and could not be assessed.

21.5.3. Two developments were deemed to generate significant traffic volumes on the R400. P.A. Reg. Ref. 2260051 was on further information at the time but was later withdrawn, while the second P.A. Reg. Ref.22490 was refused on appeal. Therefore, the assessed developments would not proceed and would not generate cumulative impacts. Nevertheless, with the two proposed developments, which would have generated additional traffic of 372 daily traffic movements on the R400, the capacity of the R400 would remain well within daily design capacity in the cumulative impact assessment as it has a daily capacity for 8,600 Annual Average Daily Traffic (AADT) movements.

Junction Modelling

21.5.4. Junctions 3 and 5b were modelled based on the capacities of the two applications referred to above. It was determined that the junctions would work well with their RFC (Ratio of Flow to Capacity), where the maximum capacity is 1.0 and the maximum cumulative capacity would be 0.10 at Junction 5a, which is a roundabout at the junction of the R400 and the M6. The cumulative impact was assessed as being Neutral, Slight and Short Term.

Pavement Impacts

21.5.5. It states that the existing pavement quality is set out in Appendix 14A, (which it is not). It also states that the pavement would be monitored during construction and would be upgraded where required to bring it back to its then current quality.

Operational Phase

21.5.6. Operational traffic would be less than the construction phase, so no further assessment was undertaken.

Decommissioning Phase

21.5.7. Decommissioning phase traffic would be less than the construction phase, so no further assessment was undertaken.

21.6. Mitigation (and Enhancement Measures)

21.6.1. Power Plant Area

21.6.2. Construction Phase

- A CTMP has been provided in Appendix 14H that identifies haul routes and other measures, and a final CTMP would be provided by the contractor.
- An Abnormal Loads report, in Appendix 14B, sets out mitigation measures including amendments to accesses and temporary road closures. Special consents would be required to carry abnormal loads to site.

21.6.3. Operational Phase

- HGV's would be encouraged to arrive via the M6 to limit damage to the R400.

21.6.4. Decommissioning Phase

- Effects would be similar to the construction phase.

21.6.5. Electricity Grid Connection

21.6.6. Construction Phase

- Same as Power Plant Area above.

21.6.7. Operational Phase

- Low trip generation, so no mitigation measures required.

21.6.8. Decommissioning

- Decommissioning is not envisaged, so no mitigation measures are proposed.

21.6.9. Gas Connection Corridor

21.6.10. Construction Phase

- Detailed mitigation would not be known until a detailed assessment of the corridor is completed.

21.6.11. Operation Phase

- Low trip generation, so no mitigation measures required.

21.6.12. Decommissioning Phase

- Decommissioning is not envisaged, so no mitigation measures are proposed.

21.7. Residual Effects

21.7.1. No significant residual effects have been identified for either the PPA, EGC or GCC, though the construction effects of the GCC would be assessed in more detail at the planning consent stage for that project.

21.8. Analysis, Evaluation and Assessment: Direct and Indirect Effects

21.8.1. I have examined, analysed and evaluated Chapter 15 of the EIAR and all of the associate documents and submission on the file in respect of Traffic and Transport including the appendices to the chapter. I am satisfied that the applicant has provided a detailed description of the baseline environment, which has been informed by a traffic surveys and detailed junction analysis based on trip generation calculations for each phase and element of the proposed development and estimates for the GCC based on a similar project in Northern Ireland. The applicant has identified key impacts in respect of likely effects on traffic and transport as a consequence of the proposed development and overall project. I am also satisfied that the applicant's assessment of likely significant effects is adequate.

21.8.2. I note that no significant direct, indirect, cumulative or residual effects were noted for traffic and transport and I am satisfied that the applicant has demonstrated this by means of supporting evidence in Chapter 15 of the EIAR.

21.8.3. A number of issues which were raised in submissions, are address below.

Pavement Assessment

21.8.4. The submissions state that the EIAR refers to a 'Pavement Assessment' in Appendix 14A, but that no such assessment was included. I note that paragraph 14.6.28 of the EIAR does state that the 'Pavement Assessment' setting out the existing road surface quality, is provided in Appendix 14A and it is also referred to in the baseline

section. However, having inspected the EIAR, I am satisfied that the stated document is not part of Appendix 14A, or any other document on the file.

21.8.5. In response to the submissions, the applicant stated that Chapter 14 comprehensively addresses the concerns raised, while a survey of roads and bridges can be carried out and a schedule of any necessary works can be prepared and agreed post decision. The Roads section of Offaly County Council recommended that conditions be attached to addressed road condition and access.

21.8.6. I note from the site visit that the general area is an industrial and anthropogenic landscape, incorporating former commercial peatlands including the site of the proposed power plant, several quarries, a piggery, Rhode Energy Park, a timber storage facility, substations and a windfarm, all which are in close proximity to the overall site. In addition, other projects are under construction in the area, including a new solar farm adjacent to the Rhode Green Energy Park. All of these developments use the same local and regional road network that the proposed development would use.

21.8.7. As of February 2026, a section of the R400 both north and south of the PPA is closed for repair works and according to the website of Offaly County Council, the closure came into effect on Monday 12th January and lasts until Friday 13th March 2026, a period of 9 weeks. The L-1010 which forms part of the haul route for the proposed development is being used as the diversion route, while the R400 remains closed. Taking into account these works, and the nature of constant and intermittent road improvement works carried out by local authorities, I am satisfied that it would be more appropriate to have a comprehensive road and bridge condition survey carried out prior to the commencement of development, than at the outset of the application, because the condition of the road network would have changed by the time the project is ready to commence. Should the Commission be minded to grant permission, I am satisfied that this matter can be addressed by way of a condition, that would include the need for ongoing monitoring of the road condition during construction to ensure any damage caused would be rapidly repaired. I also consider it appropriate that a post completion road and bridge condition survey be carried out, while the applicant has indicated that it is intended to have ongoing monitoring of the road network, that would be used to access the PPA, because a situation could arise

that gas supply would be cut off and a secondary fuel source be required to service the PPA.

L1010-upgrade (width and capacity)

21.8.8. Submissions on the application consider that the L1010 road must be upgraded to accommodate construction traffic, which is referring to the physical capacity of the road to accommodate two way traffic. The L1010 runs westwards from the R400 at Rhode Village for a distance of c3.1km, where the existing access points to the north and south of the road would be used to provide access to the underground grid route, as well as the proposed 400kV substation.

21.8.9. In proposed condition No. 12 of the Edenderry Municipal District Engineers (EMDE) report, it is stated that they have serious capacity concerns regarding the use of the L-1010 for construction traffic in its current condition. Proposed condition No 12 continues by stating that the applicant shall carry out strengthening works on the L-1010 for 3.1km west of Rhode Village to enable this section of local road to be used as a haul route and that the upgrade shall consist of – Regulation Layer, 60mm of Asphalt Concrete Binder Course and 40mm of Polymer Modified Stone Mastic Asphalt surface course, with details to be agreed. In response to the proposed condition, the applicant stated that a condition survey of the L1010 (all roads and bridges on the haul routes) would determine if any improvements were needed, rather than requiring the applicant to provide an entirely new road surface in advance of the deliveries being carried out. I consider the applicants proposal to be a reasonable approach, that could be addressed by way of a condition, if the Commission is minded to grant permission.

21.8.10. The EMDE also stated that passing bays would be required along the 3.1km section of the L-1010 to enable the road to be used as a haul route and has included it as proposed condition No .13. The applicant did not agree and stated that all lands on either side of the L-1010 are outside of the blue lined site boundary, and it would not be possible to give effect to a condition requiring the provision of passing bays. I would not recommend that such a condition would be attached, if the Commission is minded to grant permission because, based on the information in the application and in Chapter 14 of the EIAR, the majority of HGV's servicing the site would be standard vehicles that would be capable of using L-1010 without any need for road widening

or the creation of laybys and I again note that as of February 2026 the L-1010 is being used as the main diversion route for two way traffic in the area due to the closure of the R400 for repairs, and in the public documents on the councils website, the L-1010 road is stated to have a minimum width of 3m in each direction, which I am satisfied is sufficient for the free movement of normal two way traffic.

21.8.11. I also note that paragraph 14.5.128 of the EIAR indicates that only two abnormal loads are expected to arrive at the site for the electricity grid connection relating to the 400kV substation and Appendix 14B Abnormal Loads Report includes illustrations of the auto-tracked movements of the vehicle that would carry the transformers to the site, having an overall length of 42.770m. It shows the movements at Rhode village and at the entrance points to the north and south of the L1010. The applicant has proposed mitigation for these deliveries in the form of closing the L1010 road for a brief period of time when the deliveries would take place, as they would require the use of the entire road width and that this would be agreed, in advance, with the gardai. I consider that it is reasonable and a proportionate approach and could be dealt with by way of a condition that would not require the creation of new passing bays on third party lands along the L1010.

21.8.12. Offaly County Council has recommended a number of other pre commencement conditions relating to traffic management including a CTMP, temporary traffic arrangements / controls and dedicated haul routes. I am satisfied that these matters could be addressed by way of condition, if the Commission is minded to grant permission.

Footpath

21.8.13. The submissions state that a footpath should be built from Rhode village to the local GAA fields on the L1010 in the interest of pedestrian safety. The area in question lies outside of the boundary of the application site, but would form part of the construction haul route for the EGC. I note that the Road Design Section of OCC recommended 20 planning conditions including specific conditions relating to the L1010, but none refer to the requirement to provide a footpath.

21.8.14. Proposed Condition No 4 refers to the levying of a development contribution towards the management and repair of public roads in the vicinity of the site. The Development Contribution Scheme 2021-2025 is in place as of February 2026, and

Table 1a: 'Level of Contribution – Residential & Industrial / Commercial Development in all other areas' provides for a contribution of €10 per square metre of industrial development for Class B infrastructure, which includes roads and footpaths. I have also visited the area and the entrance to the GAA club lies c890m southwest of the main village cross roads of Rhode. I note that a continuous footpath runs from the Rhode towards the GAA field for a distance of c290m, before ending at the entrance to Priory Lawns. Between that point and the GAA pitch there is one more section of footpath extending to c150m in length with the balance of the route of c450m consisting of grass verges and hard surfaced areas between the front boundary walls of houses and the public road.

21.8.15. If permission is granted for the proposed development, a development contribution would be imposed on the applicant and the money generated could be used to fund the construction of the missing sections of footpath, or alternatively the proposed community benefit fund of €450,000 could be used to fund the provision of footpaths in those sections where there are currently none. I do not consider it appropriate to attach a condition specifically requiring that the applicant should provide a footpath as is requested in the submissions.

TII submission

21.8.16. TII requires all proposed mitigation to be attached as conditions, requests official policy is followed and any damage to the national road network, that forms part of the haul route is rectified. If the Commission is minded to grant permission, I would consider that the attachment of conditions to that effect would be appropriate.

Other projects

21.8.17. A number of the listed projects in Appendix 14F have been built out, some are operational and others are under construction, while a number of applications were refused or deemed withdrawn and others provided not traffic data, so were not assessed by the applicant. The two projects that were assessed for cumulative impacts have been withdrawn and refused and would therefore not have a cumulative impact with the proposed development.

21.8.18. Since this application was submitted, a number of the projects referred to in Appendix 14F have been constructed or are under construction (solar farm adjacent to Rhode Energy Park), while one other major project has been permitted in the

interim, being 2 air dome structures permitted adjacent to Rhode Green Energy park, under P.A. Reg. Ref. 24/60289, granted on the 16th of September 2025. Its projected traffic movements would be lower than the cumulative traffic movements set out in Chapter 14 in respect of the refused and withdrawn applications. Therefore, the proposed development and overall project would not act cumulatively with the permitted air domes to have a significant or negative impact on the carrying capacity of the local road network.

21.9. Conclusion: Direct and Indirect Effects

Having regard to my assessment of the proposed development in respect to Traffic and Transport, it is considered that subject to appropriate mitigation through planning conditions, that potential significant direct, indirect and cumulative effects would be avoided by reasons of detailed design, timing of construction and through a finalised CTMP, as well as road and bridge surveys and improvements to both if necessary, and I am further satisfied that these matters could be agreed, prior to the commencement of development, with the planning authority.

22.0 Population and Human Health

22.1. Issues Raised

22.1.1. Observers consider 1) the route of the underground cable should be preserved as a local walkway/greenway; 2) the community benefit fund should extend beyond 5 years, for the life of the project and be index linked; and 3) the geographical extent of the near neighbour scheme should be extended.

22.1.2. OCC does not consider specific measures are required other than those in the CEMP and CTMP as most mitigation is addressed in other chapters of the EIAR.

22.2. Examination of the EIAR

22.2.1. Context

22.2.2. Impacts on population and human health are addressed in Chapter 15 of the EIAR. Separate methodologies are used for both population and human health, including the geographical extent of consideration, are described in Section 15.2 and predominantly use Census 2022 data or Census 2016 data, where 2022 data was not yet available, at the time of preparing the EIAR.

22.3. Baseline

22.3.1. For Population, the study area for the three elements of the development being 1) PPA; 2) EGC and 3) GCC, consists of Knockdrin Electoral District (ED) Co. Offaly for all three elements, Ballyburley and Croghan ED's, Co. Offaly for the EGC and Ballykilmore, Castlelost and Clonfad ED's Co Westmeath for the GCC. These are the areas where the majority of population effects are likely to occur, due to proximity and the analysis compares the relevant statistics to the county and country figures.

22.3.2. The matters considered are population, employment/socio economic, deprivation, travel patterns, the existing travel network, tourism and human health.

22.3.3. The population of Knockdrin ED fell by 2.9% or 6 persons between 2016 and 2022 to 198, whereas the county and country experienced strong growth. The other five ED's experienced population growth of 1.8% Ballyburley (+24 people), +4.2% Croghan (+23 people), +6.3% Ballykilmore (+46 people), +2.0% Castlelost (+34 people) and +9.3% Clonfad (+49 people), in the same period.

22.3.4. Croghan Hill, an ancient volcano and monastic settlement, noted for its scenic quality and recreational value is located close to the west of the overall site. The Grand Canal is also a valuable recreational route, to the south of the site.

22.3.5. County level human health is assessed using CSO health survey and census data.

22.4. Potential Effects (Predicted Impacts)

22.4.1. Chapter 22 of the EIAR identifies the potential for a range of environmental effects on Population and Human Health. The likely effects of the development, as identified in the EIAR, are summarised in Tables 22.1, 22.2, 22.3 and 22.4 below. The focus of the assessment will be on the Significant and Negative/Adverse effects of the development, while Minor effect, which are deemed to be Imperceptible, Not Significant, Slight or Moderate, have been identified, but will not be assessed in the analysis and conclusion section below, unless there are identified significant impact interactions, cumulative effects or where concerns have been expressed by parties to the application.

Table 22.1: Summary of Potential Effects

Project Phase	Potential Direct and Indirect Effects

Do Nothing	• No significant changes to the baseline environment or local population • Opportunities for local employment and additional economical spend will not be realised. • Would exacerbate security of electricity supply concerns for Ireland resulting in Significant Adverse effects on the population. • No emissions generated during construction or operational phases • Environmental monitoring and site management would continue, as required under the conditions of the IPC Licence (P0501-01).

Table 22.2: Summary of Potential Effects (Power Plant Area)

Project Phase	Potential Direct and Indirect Effects
Construction	• Direct, Slight, Positive and Short-Term effect on the local population, and Short term, Direct and Indirect, Moderate and Positive employment effect with up to 750 jobs for 39 months. • No significant severance effects as HGV traffic movements would be planned and staggered to avoid congestion. • No significant effects expected on the health and safety of tourists and the general public due to measures in the CEMP. • A neutral human health effect on 1 - access to health and social care services and other social infrastructure due to slight negative short-term increase in traffic generation; 2 - access to open space and nature due to no significant effects expected in regard to traffic, air quality and noise and vibration; 3 - air quality, noise and neighbourhood amenity due to no significant effects expected in regard to air quality or noise. • A negative human health effect from climate change as the construction phase would emit greenhouse gas emissions.
Operation	• Positive, Slight and Long-Term effects anticipated on population through Community Gain Scheme and rates paid to the local authority. • A Moderate Positive and Long-Term employment effect is anticipated, with 45-50 jobs expected, as well as indirect jobs. • The severance effect would be imperceptible. • No Significant effect on tourism as the plant would operate within its site boundaries. • A neutral human health effect on 1 - access to health and social care services and other social infrastructure due to limited and controlled traffic generation; 2 - access to open space and nature due to no requirement to demolish open and natural spaces.; 3 - air quality, noise and neighbourhood amenity due to no significant effects expected in regard to air quality (Chapter 7 - Air Quality) or noise (Chapter 11 – Noise and Vibration).

	• While it would have significant CO_2 emissions, it would have a neutral human health effect on climate change, as it would be fully consistent with applicable existing and emerging policy requirements and good practice design standards for a project of this type and is fully in line with Ireland's trajectory towards net zero (Chapter 18 – Climate).
Decommissioning	• It is expected that effects would be of a similar nature and duration to those arising from the construction phase.

Table 22.3: Summary of Potential Effects (Electricity Grid Connection)

Project Phase	Potential Direct and Indirect Effects
Construction	• Positive, Direct, Slight, and Short-Term effect on the local population as a result of increase local employment of up to 120 jobs for 33 months. • No significant severance effect expected as the construction of the substations are to be completed before the grid route construction commences, while deliveries would be staggered and haulage route restriction would be a requirement within the Construction Traffic Management Plan (CTMP). • No significant direct or indirect tourism effects predicted. Contractor would adhere to CEMP health and safety requirements. • A neutral human health effect is assessed on 1 - access to health and social care services and other social infrastructure due to limited and controlled traffic generation; 2 - access to open space and nature due to no requirement to demolish open and natural spaces and slight air emissions impacts with some residential properties within 50m of the site boundary and short-term and slight negative increases in traffic generation; 3 - air quality, noise and neighbourhood amenity due to no significant effects expected in regard to air quality or noise. • A negative human health effect on climate change as the construction phase would emit greenhouse gas emissions.
Operation	• The effect on population, employment/socio economic and severance is assessed as imperceptible. • There would be no significant effect on tourism. • Human health and climate change effects are assessed as neutral.
Decommissioning	• The Electricity Grid Connection would form part of the national electricity grid and decommissioning is not envisaged so has not been assessed.

Table 22.4: Summary of Potential Effects (Gas Connection Corridor)

Project Phase	Potential Direct and Indirect Effects
Construction	• Positive, Direct, Slight, and Short-Term effect on the local population, and Short term, Direct and Indirect, Moderate and Positive employment effect as a result of increased local employment over the 24 month construction phase.

	• No significant severance effect expected as the contractor would prepare a CTMP to determine access points and control HGV traffic. • No significant tourism effect as there are no tourism attractions and public amenities within the Study Area. • A neutral to no significant effect is assessed on access to health and social care services and other social infrastructure due to limited and controlled traffic generation. • A neutral human health effect is assessed for 1 - access to open space and nature with respect to impacts from traffic, air quality and noise and vibration effects; and 2 - air quality, noise and neighbourhood amenity considering air quality, noise nuisance and vibration. • A negative human health effect on climate change as the construction phase will emit greenhouse gas emissions.
Operation	• The effect on population, employment/socio economic and severance is assessed as imperceptible. • There would be no significant effect on tourism. • Human health and climate change effects are assessed as neutral.
Decommissioning	• The Gas Connection Corridor would form part of national gas infrastructure and decommissioning is not envisaged, so has not been assessed.

22.5. Cumulative Effects

22.5.1. A number of housing developments in the vicinity have been considered and are described in chapter 4 of the EIAR and in Appendix 4A (Long List of Planning Applications in Surrounding Environment). The list also includes proposed and planned wind, solar, waste, quarry and renewables related projects.

- No cumulative land use impacts are anticipated, including during the operational phase.
- Cumulative ‘severance’ and ‘Access to Healthcare Services and other Social Infrastructure’ impacts are expected with other committed developments.
- There is potential for a cumulative employment impact.
- No anticipated ‘access to open space and nature’ or ‘Air Quality, Noise and Neighbourhood Amenity’ impacts through noise or dust.
- Greenhouse Gas emissions are considered in Chapter 18 ‘Climate’.

22.6. Mitigation (and Enhancement Measures)

22.6.1. Most mitigation measures relating to population and human health relate to other environmental aspects such as Air Quality (Chapter 7), Cultural Heritage and Archaeology (Chapter 8), Landscape and Visual (Chapter 10), Noise and Vibration (Chapter 11), Water Environment (Chapter 12), Land, Soils and Geology (Chapter 13), Traffic and Transport (Chapter 14) and Climate (Chapter 18) and where required, the related mitigation measures are dealt with in the corresponding chapters of the EIAR, so are not referenced further in this section.

22.6.2. Specific measures reference in the EIAR are set out below.

22.6.3. **Demolition Phase**

- The Derrygreenagh Works would be decommissioned under its existing IPC Licence.
- All asbestos and hazardous material would be carefully removed before demolition.

22.6.4. **Power Plant Area**

22.6.5. Construction Phase

- All works to proceed in accordance with CEMP (Appendix 5A) and CTMP (Appendix 14F).

22.6.6. Operational Phase

- Would comply with an Industrial Emission Licence (IEL) (to be applied for).
- A site-specific Health and Safety Plan covering commissioning and operation would be prepared and would address health and safety issues from the design stage.
- Community Gain Scheme of €450,000 and Near Neighbour Scheme giving annual contribution towards electricity usage to bill payers living within a prescribed distance of the Power Plant Area.

22.6.7. Decommissioning Phase (after 2052)

- A Decommissioning Plan (including a Decommissioning Environmental Management Plan) would be produced and agreed with the EPA as part of a Closure, Restoration and Management Plan (CRAMP).

- Would likely have to prepare an Environmental Liabilities Risk Assessment.

22.6.8. Electricity Grid Connection

22.6.9. Construction Phase

- All works to proceed in accordance with CEMP and CTMP.

22.6.10. Operational Phase

- No additional measures proposed than those in other technical chapters.

22.6.11. Decommissioning (after 2052)

- Decommissioning not envisaged, so no mitigation proposed.

22.6.12. Gas Connection Corridor

22.6.13. Construction Phase

- All works to proceed in accordance with a CEMP and CTMP.
- Detailed mitigation measurements would not be known until the full impact assessment is completed and design details have been determined by GNI.

22.6.14. Operation Phase

- No additional measures proposed that those in other technical chapters.

22.6.15. Decommissioning Phase (after 2052)

- Decommissioning not envisaged so no mitigation proposed.

22.7. Residual Effects

- No significant residual effects have been identified in respect of the Power Plant Area, the Electricity Grid Connection or the Gas Connection Corridor.

22.8. Analysis, Evaluation and Assessment: Direct and Indirect Effects

22.8.1. I have examined, analysed and evaluated Chapter 15 of the EIAR and all of the associate documents and submission on the file in respect of Population and Human Health. I am satisfied that the applicant has provided a detailed description of the baseline environment, and has identified key impacts in respect of likely effects on Population and Human Health as a consequence of the proposed development and overall project. I am satisfied that the assessment is consistent with the published guidelines on the assessment of effects on population and human health, as set out

in the EPA Guidelines on EIA and EIAR and that the applicant's assessment of likely significant effects is adequate.

22.8.2. I note that the effects of the development on landscape are addressed separately in the Landscape and Visual Chapter of the EIAR and in section 17 of this report.

Submissions

Walkways/Cycleways

22.8.3. Observers raised issues relating to the preservation of the proposed underground cable route as a local walkway/greenway that would link the Grand Canal, Croghan Hill and walkways in Westmeath. OCC also stated that the applicant needed to provide further information investigating the potential to provide amenity trails through the site. The applicant responded that a cycleway/greenway through the site is not included as part of the planning application and was not assessed as part of the EIAR. They also stated that Bord na Móna is working with OCC, community groups and other local authorities with respect to the provision of amenities across its land bank and will facilitate such links where feasible. I note that the indicative cycling/walking route that is identified in the 'Feasibility Study on the Development of a Major Cycling Destination in the Midlands of Ireland' document and 'Connecting People - Connecting Places - A Strategy for Walking and Cycling in Offaly' document, is in poor condition and would not currently be fit for use. I note that a series of walking, cycling and amenity routes have been installed on Bord Na Mona owned lands several kilometers to the south of the Grand Canal, in the Mount Lucas wind farm, while P.A. Reg. Ref. 25/60115 was subject to a final grant of permission on the 12th of March 2026. It would build a shared cycle path and walkway on BNM controlled lands to the edge of the Grand Canal, immediately south of the southern extent of the site boundary. This proposal would extend the existing cycle and footpath network from Mount Lucas to the north, east and west. I am satisfied that the BNM has demonstrated a willingness to construct cycle and walkways, on landholdings under its control, and I do not consider it appropriate or necessary to attach a condition to require that such a route through the current application site would form part of a grant of permission for the current proposed development, should the Commission be minded to grant permission.

Community Benefit Fund and Near Neighbour Scheme

22.8.4. Observers considered that the proposed discretionary community benefit fund of €90,000 per annum over 5 years (€450,000 total) should extend beyond 5 years, and should be active for the life of the project, (expected to be 25 years) and index linked. I also note that the planning authority has considered that the geographical area to benefit from the community benefit scheme should be extended, as it may be too restrictive and in that regard, if the Commission is minded to grant permission, I consider that this matter could be dealt with by way of a condition to extend the geographical extent of the fund by agreement. However, as the community benefit fund is discretionary in the case of this application, as it only applies to Renewable energy projects and is part of what is known as the Renewable Electricity Support Scheme' (RESS), which this propose development and overall project is not, I do not consider that it would be appropriate to extend its duration or the overall amount to be paid, over and above that proposed by the applicant. I also note that the development, if permitted, would be subject to Section 48 development contributions and commercial rates.

22.8.5. OCC's submission state that as there are no dwellings within 1km of the PPA, the 'Near Neighbour Scheme' (reference at 15.6.24 of the EIAR) should extend to 1km from the entire red lined site boundary. In response, the applicant stated that reference to a 'near neighbour scheme' was a clerical error and that no such scheme is proposed. I note that a 'Near Neighbour Scheme' is part of the 'Renewable Electricity Support Scheme' (RESS) and does not apply to this application. In that context, if the Commission is minded to grant permission, I do not consider that it would be appropriate to attach a condition that refers to a 'Near Neighbour Scheme'.

Greenhouse Gas Emissions

22.8.6. While it is stated in the predicted effects section of the EIAR that there would be a 'Negative' impact on climate as a result of the greenhouse gas emissions, both during the construction and operational phases of the power plant, I consider that the proposed development of a thermal power plant, with a generating capacity of 710MW and the associated power lines and substations, would be consistent with the objective of transitioning to net zero emissions, as set out in international, European, national and regional policy documents including Climate Action Plan 2024 (CAP 2024), Climate Action Plan 2025 (CAP 2025), Territorial Just Transition Plan – EU Just Transition Fund 2022, Energy Security in Ireland to 2030, Energy

Security Package (November 2023), National Energy & Climate Plan 2021-2030 (NCEP) (July 2024), Ireland's Greenhouse Gas Emissions Projections 2024-2055 (May 2025). Eirgrid/SONI – Shaping our Electricity Future 1.1 - Roadmap (July 2023 and the National Hydrogen Strategy (July 2023), while it is would also be consistent with policies and objectives of the Offaly County Development Plan. In that context, I am satisfied, that despite the fact that the proposed development would emit greenhouse gasses at the level of the proposed development, it would make a significant contribution to the dual obligations of reducing the level of GHG's electricity generation and ensuring the security of electricity supply, at times when renewable energy production is not available, due to unsuitable weather conditions.

22.8.7. I also consider that the development would have a positive impact on local employment during both the construction and operational phases of development.

22.8.8. Greenhouse gas emissions are considered in more detail in Chapter 18 'Climate'.

Cumulative impacts

22.8.9. With respect to cumulative impacts, the applicant carried out a comprehensive review of similar power plant projects and other projects granted permission in closed proximity to the site including wind, solar and other energy projects, as well as waste, quarry and residential projects, and I concur with the applicant that each of these projects would be required to comply with similar conditions to those that would be imposed on this project, in permitted, and included mitigation measures to ensure that the environmental impact would not extend outside the site boundaries for most environmental factors, and in that respect they are addressed in other technical chapters of the EIAR.

22.8.10. Some of the other major projects that are listed in the EIAR have been built, such as Yellow River Wind Farm and the Castlelost power plant in Co. Westmeath, while one grant has been quashed for leave to apply for substitute consent, and other applications refused on sites to the west and east of the grid connection in the form of a materials recovery facility, a quarry extension and the importation of stone and soil (refer to section 3.0 Planning History). A large solar farm and substation are under construction at Clonin, just north of Rhode and adjacent to the Rhode Green Energy Park, while permission has been granted for two dome structures for the storage of carbon dioxide, which would operate as a CO_2 battery that would be

capable of releasing energy to the electricity grid. While the status of permitted and proposed planning applications is a constantly changing factor to consider, I am satisfied that the applicant's assessment of potential direct and indirect effects from the PPA, EGC and the GCC are appropriate. Considering that most mitigation measures that may affect population and human health are addressed in other chapters of the EIAR, I am satisfied that the proposed specific mitigation measures are sufficient to avoid significant adverse effects on the population and human health parameters considered in this chapter.

22.9. Conclusion: Direct and Indirect Effects

22.9.1. Having regard to the examination of environmental information in respect of population and human health as contained within the EIAR and provided by the applicant, the submissions from the planning authority and third parties in the course of the application, and the responses of the applicant, I consider the main significant direct and indirect effects on population and human health are, and would be mitigated where necessary as follows:

- Short-Term, Direct and Indirect, and Positive employment effect as a result of increase local employment throughout the construction phases of the PPA, EGC and GCC. No mitigation necessary.
- At a local level, there would be a negative impact on climate as a result of the release of GHG emission. However, with respect to GHG's, the application must be considered at a national level and in that context, the proposed development and overall project would primarily operation using natural gas, which would help to replace more carbon intensive power generation sources such as oil, coal and peat in the energy system. It would also have a positive impact on population, as it would provide for energy security as part of the transition to net zero by 2050 and be consistent with International, EU, National, Regional and county level policy as well as sector specific policy relating to the security of electricity supply in Ireland.

23.0 Material Assets

23.1. Issues Raised

- An observer has concerns about the impact of the 400Kv substation on the value and future viability of his adjoining lands for agricultural use or building houses for his children.
- Offaly County Council has not expressed any concerns.

23.2. Examination of the EIAR

23.2.1. Context

23.2.2. Impacts on material assets are addressed in Chapter 16 of the EIAR, in respect of Land Use, Electricity Supply, Gas Supply, Wastewater Services, Water Supply, Telecommunications and Waste Management.

23.2.3. For all issues above, other than waste management, the study area incorporates the site and surround area that the applicant considered could be impacted. For waste management, the project area is considered for waste generation, while an expanded area is considered for the management of waste.

23.2.4. There is no specific set of Environmental Impact Assessment Guidelines for assessing material assets. For this reason, the methodology used to assess the impacts of the development refers to best practise guidelines, including 1) 'Guidelines on the Information to be Contained in Environmental Impact Assessment Reports (EPA 2022) and IEMA Guidelines to Materials and Waste in Environmental Impact Assessment (IEMA 2022)**.**

23.2.5. The EIAR sets out a detailed planning policy context at international, European, national, regional and local level with respect to waste, while a Telecommunications and Aviation Assessment Report is in Appendix 16A.

23.3. Baseline

Land Use

23.3.1. PPA - Is rural and consists of a brownfield site, with a number of buildings and hard surfacing. It is known as Derrygreenagh Works and was formerly used for the servicing and repairing of peat harvesting and transport equipment, but is now used to service equipment required for post-peat extraction activities associated with the sites IE licence. It is considered a light industrial land use. It also contains mature

trees, hedges, grassland and part of a former narrow-gauge railway network operating across the nearby boglands.

23.3.2. EGC - Is entirely brownfield former commercial bog, except for the agricultural field where the 400kV substation would be located, c400m north of the Grand Canal.

23.3.3. The 220kv substation would be on a mix of made ground and bare peat. The overhead lines would run over the Derryarkin and Ballybeg Bogs that are served by surface water drainage, silt ponds and drainage channels, a rail network and machine passes. A pumped system is used to drain Ballybeg Bog. The underground cable would be routed within an existing but redundant railway line and machine pass and runs close to a number of houses close to the L1010 road. The 400kV substation would be accessed from the L1010 via the existing rail line, along which the underground cable would be laid.

23.3.4. GCC – Would pass through agricultural land except for 1.4km where it is proposed to be routed in the R400 road, immediately north of the PPA. It is also proposed to cross two watercourses, the M6 motorway, the R446 and two local roads.

Electricity Supply

23.3.5. PPA - Derrygreenagh Works is serviced by electricity and there is potential for underground cabling within the site. A 110kv substation and a number of 110 kV lines are at Derryiron c5km south, a 220Kv line is 3.5km north (Maynooth-Shannonbridge) and the 400 kV line (Oldstreet-Woodland branch) is c.7km to the south.

23.3.6. EGC -The 400 kV line is immediately south of the proposed 400kv substation. A 110kV line crosses the route of the underground cable, where it intersects with the L1010.

23.3.7. GCC – Would pass under the (Maynooth-Shannonbridge) 220Kv Line immediately north of the M6 Motorway.

Gas Supply

23.3.8. The northern end of the Gas Connection Corridor would tie into the Gas Pipeline to the West (BGE/77) that runs east-west c.9.6km to the north of the PPA. No other gas lines run close to or through any part of the site.

Wastewater Services (foul, process and surface water)

23.3.9. PPA - The bog group has a surface water drainage network, incorporating pump stations, silt ponds and drainage channels. Treated and surface water from Derrygreenagh Works flows into the Mongagh River. Foul water is currently discharged to ground through two septic tank systems and soakaways and both will be decommissioned as part of the proposed development.

23.3.10. EGC - Ballybeg Bog, through which most of the overhead line and the underground line would run, has a pumped system used to drain the bog. The pumping and surface water discharge is in accordance with the sites IPC Licence.

Water Supply

23.3.11. PPA - The site is served by a well that meets all of the site's needs, with no mains water connection.

23.3.12. EGC - There are a number of abstraction wells close to the site, including a borehole as part of the public water supply, close to the proposed 400Kv substation.

Telecommunications

23.3.13. The closest operating mobile phone mast is 36m high and c150m south of the PPA and c200m from the EGC. A mast on the site has been decommissioned.

Waste Management

23.3.14. Waste management facilities to be utilised are not yet known and suitability would be determined by the appointed contractor. A list of licenced waste facilities and the types and quantities of waste they are licenced to handle, is included. Some materials may be deemed to be hazardous waste or a by-product and not waste.

23.4. Potential Effects (Predicted Impacts)

23.4.1. The EIAR identifies the potential for a range of environmental effects on Material Assets. The likely effects of the development, as identified in the EIAR, are summarised in Tables 23.1, 23.2, 23.3 and 23.4 below. The focus of the assessment will be on the Significant and Negative/Adverse effects of the development, while Minor effect, which are deemed to be Imperceptible, Not Significant, Slight or Moderate, have been identified, but will not be assessed in the analysis and conclusion section below, unless there are identified significant impact interactions, cumulative effects or where concerns have been expressed by parties to the application.

Table 23.1: Summary of Potential Effects

Project Phase	Potential Direct, Indirect and Cumulative Effects
Do Nothing	• There would be no change to land use or built services and no waste generated. The site would continue to operate under the conditions of its existing IPC Licence.

Table 23.2: Summary of Potential Effects (Power Plant Area)

Project Phase	Potential Direct and Indirect Effects
Construction	• Demolition works effects would be temporary. • Site clearance including storage areas for excavated peat would result in a Permanent, Not Significant and **Negative** effect on the lost vegetation. • The construction phase would have a **Negative**, Moderate and Short-term impact on land use. • When the development is connected to the electricity and gas grids. the impact would be **Negative**, Slight and Temporary in duration. • The impact of water discharging to the Mongagh River would be Slight, **Adverse**, Direct and Temporary. • The impact of construction on the nearby mobile phone mast and unknown underground cables would be **Negative** and Temporary but Not Significant. • At paragraph 16.5.44, the location of the Peat Deposition Areas is incorrectly described and reference is made to an appendix and drawing that do not form part of the file, but it is not a significant errors. The impact of the removal and relocation of peat to the Peat Deposition Area would be Temporary, Moderate and Negative. • The impact of wastes generated on the site are assessed as being Negative, Short-term but Not Significant.
Operation	• The use would change from light industrial use to industrial / power infrastructure on a much larger scale and would have a **Negative, Significant**, Long-term and Direct impact on land use. • The new electrical infrastructure would likely have a Long-term, **Positive** and **Significant**, effect on the electricity supply network • The impact on the Gas network would be **Significant, Positive** and Long-Term. • The impact on water supply is assessed as Negative, Moderate, and Long-Term. • The impact on the ability of the mobile phone mast to the south to provide links to the north would be Direct, Negative, **Significant** and Permanent.

	• The absence of a proper waste management regime would be Indirect, Long-Term, **Significant** and Negative.
Decommissioning	• A Closure, Remediation, Aftercare Management Plan (CRAMP) would be prepared and agreed with the EPA. • Effects arising are considered to be of a similar nature to those arising during construction, but would be shorter in duration. • Potential Short-term, Moderate and **Negative** impact on local and regional waste services.

Table 23.3: Summary of Potential Effects (Electricity Grid Connection)

Project Phase	Potential Direct and Indirect Effects
Construction	• Construction of the 1) electricity grid connection. 2) the 220kV Substation and 3) the 400 kV Substation would have a **Negative, Significant** and Short-term impact on land use. • Significant changes to utilities would be required to connect into the National grid, the impact of which would be **Significant, Negative** and Short-term. • Surface water effects would be Neutral, Imperceptible and Short-term. • The effect on the existing telecoms mast outside of the site boundary would be Negative, Temporary, but Not Significant, while the effect on any unknown services would be Negative, Temporary, but Not Significant. • The effect of wastes generated on the site are assessed as being Negative, Short-term but Not Significant. • The effect of the removal and relocation of peat to two Peat Deposition Areas close to the 220Kv and 400Kv substations would be Temporary, Moderate and **Negative.**
Operation	• The change of use of the land from a brownfield site and peat bogs to industrial / power infrastructure would have a **Negative, Significant**, Long-term and Direct effect on land use. • The new electrical infrastructure would likely have a Long-Term, Positive and **Significant** effect on the existing electricity supply network. • Effects on Foul, Surface and Process Water would be Neutral, Imperceptible and Long-Term. • Effects from the generation of waste would be Long-term, **Negative** but Not Significant.
Decommissioning	• Upon decommissioning of the PPA, the grid connection would remain in-situ and form part of the national grid infrastructure. Decommissioning envisaged and therefore not assessed.

Table 23.4: Summary of Potential Effects (Gas Connection Corridor)

Project Phase	Potential Direct and Indirect Effects
Construction	• The loss of land would be Negative, Short-term, Moderate and Direct. • Connecting to the National network would disrupt the network and be Negative, Significant and Temporary. • The effect on any unknown telecommunications services would be Temporary, Slight and Negative. • The effect on the local and regional environment is Temporary, Moderate and Negative.
Operation	• There would be a **Significant**, Positive and Long-term effect on the existing electricity network.
Decommissioning	• The gas connection would form part of the national gas network.

23.5. Cumulative Effects

23.5.1. The cumulative assessment considered the three separate elements of the project including the gas pipeline connection, that would be subject to a separate consent process. While it was determined that there is potential for cumulative Material Assets and Waste and Resource Management impacts, the cumulative impacts are assessed as imperceptible or not significant.

23.5.2. This section of the EIAR also refers to a comprehensive list of planning applications in Appendix 19A to the EIAR, that is titled 'List of Cumulative Impact Projects'. It includes applications in Offaly and Westmeath, within 5km of the site, including applications that had been decided by both local authorities and the Commission, as well as applications that were at the time, awaiting decision or were at pre-application stage, and described as potential projects. With respect to cumulative impacts with the LVIA, it referenced wind farm applications located between 15km and 29.5km from the site. It also referenced 25 gas-fired plants located around the country between 48.8km and 181.6km from the site. It notes that it is not unreasonable to assume that permitted and planned developments would themselves implement standard and best practice mitigation measures to the extent that impacts are not significant, and no significant impacts are anticipated.

23.6. Mitigation (and Enhancement Measures)

23.6.1. Power Plant Area

23.6.2. Construction Phase

- Follow the requirements of a finalised CEMP as presented in Appendix 5A.
- Location of existing services to be determined by pre-commencement surveys and consultation with service providers. All works to be carried out as agreed with and to requirements of service providers.
- The Resource Waste Management Plan (RWMP) would be regularly updated to reflect changing circumstances on site.

23.6.3. Operational Phase

- Planned maintenance is likely during summer months, when the units are least likely to be operating, having least effect on power supply.
- A Resource and Waste Management Plan (RWMP) would be developed as part of the Industrial Emissions Licence (IEL), with no further mitigation required.

23.6.4. Decommissioning Phase

- Impacts are anticipated to be the similar to the construction phase, and would be carried out in accordance with the requirements of the sites IEL.

23.6.5. Electricity Grid Connection

23.6.6. Construction Phase

- General mitigation the same as for the power plant area (above).
- The final drainage design would have to provide for reactive management of drainage measures.

23.6.7. Operational Phase

- Substations designed to EirGrid specifications and would require routine maintenance.

23.6.8. Decommissioning

- Decommissioning not envisaged, so no mitigation proposed.

23.6.9. Gas Connection Corridor

23.6.10. Construction Phase

- General mitigation the same as for the power plant area (above).

23.6.11. Operation Phase

- Would be operated by GNI, so no additional mitigation measures required

23.6.12. Decommissioning Phase

- Decommissioning not envisaged, so no mitigation proposed.

23.7. Residual Effects

23.7.1. Following the implementation of mitigation measures (including monitoring), no significant residual effects have been identified for the construction, operational or decommissioning phases for the PPA, EGC or the GCC.

23.7.2. Decommissioning of the Electricity Grid Connection and the Gas Connection have not been considered in the EIAR, as they would be vested in Eirgrid and Gas Networks Ireland and would form part of the national Electricity and Gas networks.

23.8. Analysis, Evaluation and Assessment: Direct and Indirect Effects

23.8.1. I have examined, analysed and evaluated Chapter 16 of the EIAR and all of the associated documents and submissions on the file in respect of Material Assets. I am satisfied that the baseline environment presented by the applicant is comprehensive and that the key impacts in respect of material assets as a consequence of the development have been identified.

23.8.2. While the applicant's assessment has identified that without mitigation, a number of significant, negative effects are possible, I am satisfied that, subject to mitigation, that there would be no significant residual effects and that there would be no significant cumulative effects.

23.8.3. A third party observes raised an issue regarding potential loss of development potential of their lands adjoining the proposed 400kv substation site, while another matter arises relating to a telecommunications tower near the proposed PPA.

Submission

Loss of development potential

23.8.4. In addition to the matters considered in the EIAR, an observer to the application has raised concerns about the impact of the proposed 400Kv substation on the value and future viability of his lands for agricultural use or habitation. The applicant addressed this in their response to the submissions on the application and stated that the proposed peat or soil deposition area that would border sections of the observers

southern boundary, would not exceed 1m above the existing ground level, while the proposed 400kV substation building would be located approximately 300m from the observers land boundary, at its closest point. The applicant went on to state that they do not agree that the observers lands would be impacted negatively in terms of 'access, usage and value' or in terms of its 'desirability' as a future site for housing. Nevertheless, they noted that landscape mitigation is proposed by way of additional woodland planting as set out in Appendix 10B to the EIAR.

23.8.5. I note that the nearest part of the proposed 400Kv substation is c430m from the nearest part of the road that runs north to south through the observers landholding. I also note that the observers landholding has c600m of frontage onto the road at a distance of between 430m and c690m from the nearest point of the proposed 400Kv substation, while the 400kV line already runs east to west to the south of the proposed substation, including several supporting pylons, meaning that this landscape is already locally industrialised, and I do not consider that the desirability of the observers landholding for the development of housing, would be reduced as a result of the proposed development.

23.8.6. As part of the mitigation incorporated into the design of the development, the applicant has proposed that the 400kV substation would take the form of a GIS substation, which means that it would be housed almost entirely indoors, and would have a significantly reduced impact compared to the proposed 220kV substation which would be an AIS substation and would be mostly housed outdoor. This design measure and the external cladding, which would be reflective of an agricultural building, was selected in consideration of mitigating potential impacts on nearby residential properties, including the observers, and the Grand Canal, c400m to the south.

23.8.7. I also note that the landholding is located in 'Rural Areas under Strong Urban Influence and Stronger Rural Areas' in Chapter 2 'Core Strategy, Settlement Strategy and Housing Strategy' of the Offaly County Development Plan 2021-2027 meaning that persons seeking to building a home on the observers land would have to have a proven a 'social', 'economic' or 'exceptional health' reason to live there, as well as meeting a number of other criteria. I am satisfied that there would be sufficient separation distance between the proposed substation and the observers landholding to facilitate the development of one or more dwellings on the

landholding, while desirability is a matter that can only be determined by the potential homeowner. I am also satisfied that the proposed substation would not have a significant effect on access to the observers landholding, as construction traffic would be controlled to avoid road and access issues, while it is proposed to access the substation, by way of the disused rail line and undergrounded 220Kv line and not via the access to the observers lands. I am also satisfied that there would be no impediment to using the observers agricultural land for agricultural purposes, as a result of the proposed development.

Telecommunications Mast

23.8.8. Appendix 16A contains the 'Telecoms Impact Study', which notes that the desk study established that point to point (PTP) microwave radio links could potentially be impacted. It goes on at paragraph 5.2.2 to state that Imagine Broadband occupies space on the existing tower 150m south of the PPA and while communications were ongoing, they expressed concerns that the proposed emissions stack and telecommunications structures may cause disruption to its network. Three Ireland considers that it may be necessary to move relocate certain equipment in the event of permission being granted in order to continue the provision of an effective network in the area.

23.8.9. The proposed telecommunications masts that form part of the application are to be vested in ESB for purposes associated with the PPA and would not form part of a wider commercial network. Therefore, it is important that the proposed development does not disrupt existing commercial telecoms networks, but I am satisfied that this matter can be addressed by way of a condition, if the Commission is minded to grant permission.

23.9. Conclusion: Direct and Indirect Effects

23.9.1. Having regard to my assessment of potential impact in respect to Material Assets, it is considered that subject to appropriate mitigation through planning conditions, that potential significant direct, indirect and cumulative effects on Material Assets could be avoided, and I am further satisfied that these matters could be agreed, prior to the commencement of development, with the planning authority.

In particular, I am satisfied that the matter of potential impacts on the existing telecommunications mast c150m to the south of the PPA could be addressed by way

of a condition to ensure that existing signals are not affected during the demolition, construction and operational phases of the development. This matter can be addressed by way of a condition, if the Commission is minded to grant permission.

24.0 Major Accidents and Disasters

24.1. Issues Raised

- In its first and second submissions, the HSA raised queries about the information provided in the application TLUP. In its third submission, the HSA stated that it does not advise against granting planning permission.

24.2. Examination of the EIAR

24.2.1. Context

24.2.2. Potential impacts of 'Major Accidents and Disasters' (MA&Ds) are addressed in Chapter 17 of the EIAR. The EIAR chapter is appended by Appendix 17A 'TLUP and MATTE Assessment', which was amended twice following from submissions made by the Health and Safety Authority.

24.2.3. The definition of 'Major Accident' is taken from guidelines on MA&Ds within EIA published by the Institute of Environmental Management and Assessment. They can be man-made or natural in origin. The major accident criteria of the COMAH Regulations 2015 would apply to the PPA, as it is expected to store 12,750 tonnes of secondary fuel, which is above the threshold of 2,500 tonnes to be deemed a lower tier COMAH site. The criteria for a major accident from Schedule 6 of the COMAH Regulations are used and include a range of consequences or potential impacts to humans, services infrastructure, property, terrestrial, freshwater and marine habitats.

24.2.4. There is no specific Irish guidance for MA&Ds assessment in EIA. However, the assessment has been undertaken with reference to the EPA 'Guidelines on the information to be contained in environmental impact assessment reports' (EPA, 2022), while the EPA 'Guidance on assessing and costing environmental liabilities' (EPA, 2014) and the UK primer published by IEMA on MA&Ds in EIA (IEMA, 2020) have also been considered. Standard risk identification and assessment methodologies, which are typically applied to COMAH sites, have been used.

24.2.5. The normal approach of separately assessing pre and post mitigation measures from the EPA guidelines is not appropriate and is not followed in this assessment, as the development must comply with the Health and Safety and COMAH Acts. In this assessment, following the implementation of mitigation measures, the residual risk should correspond with a level considered by the Regulatory Authorities to be 'as low as reasonably practicable' (ALARP). It means that there is no pre-mitigation assessment, as some measures are embedded in the design. Where residual risks can be reduced to ALARP, it is concluded that the residual effect of the Risk Event does not constitute a likely significant adverse effect.

24.2.6. Whether a Risk Event constitutes a likely significant adverse effect is not considered a yes or no question and the seven-point scale in Table 3.4 of the 2022 EPA Guidelines describing Significance is not applicable. Table 3.4 allows for a topic-specific approach to significance, and this approach has been adopted in this chapter.

24.2.7. Low consequence events are scoped out, while risk events that are more likely to occur or would have potentially greater consequence have been considered in most detail.

24.2.8. The assessment involves the following steps:

- Identification of hazardous substances which could be present;
- Consideration of the quantities and storage arrangements;
- Identification of potential MA&D Risk Events and assessment of the vulnerability to disasters, which constitutes a 'hazard identification record' as described in the IEMA Primer, or 'Long List';
- Reduce the 'Long List' to a 'Short list' of credible Risk Events which are considered relevant, by screening out extremely unlikely events.
- The worst-case consequence of each credible Risk Event is assessed and rated as per the 'Risk Analysis' in the EPA 2014 'Guidance on assessing and costing environmental liabilities'. It includes the 'Risk Likelihood', 'Risk Consequence' and 'Risk Matrix' tables.

24.2.9. It notes that detailed hazard and risk analyses would be carried out throughout the lifecycle of the development and that the engineering design of the development

would be subject to formal process safety risk assessments, which typically comprise of Hazard Identification (HAZID), Hazard and Operability (HAZOP) and Layers of Protection Analysis (LOPA) at the appropriate project / design stage(s).

Limitations and Assumptions

24.2.10. While the assessment of the GCC is based on a well-informed route, this may change during the course of detailed design to by Gas Networks Ireland.

24.3. Baseline

24.3.1. Power Plant Area

24.3.2. There is not definitive guidance of a required study area for MA&Ds, so a 5km radius has been taken from each of the areas constituting the overall project and includes all areas within the outer cumulative risk-based planning zone contours for the PPA. This is what has been modelled in the TLUPS (Technical Land Use and Planning Study) and includes Rochfortbridge, Rhode and Croghan. The surrounding area consists mostly of peat bogs, low density agricultural and residential properties.

24.3.3. Receptors that could be vulnerable to a MA&D risk include the nearest residences 1.1km to the south east and three IE licenced facilities within 5km, being Carrick Farms, 4.3km northeast and Skeagh Farms 1.5km southwest of the PPA (both intensive agriculture), and SSE Generating Ireland Limited, 4.3km south of the PPA (Energy).

24.3.4. The lower tier COMAH site, Castelost FlexGen, is 3.7km north west, while three active quarries are located 1km west, 1.2km north west and 1.3km southwest of the PPA. The PPA is in the Boyne WFD catchment. The Yellow River lies 1.6km southeast of the PPA and its tributary the Mongagh River runs c500m to the north of the PPA. While there are no protected environmental sites in the study area, there are 117 National Monuments and 29 Protected Sites.

24.3.5. Electricity Grid Connection

24.3.6. The nearest residence to the EGC is 50m, while Rhode 2km and Croghan 2km west and other scattered rural housing are also within the 5km study area.

24.3.7. In addition to the three IEL sites referenced in respect of the PPA, a fourth intensive agriculture facility is located 3.4km west of the EGC. Castelost FlexGen COMAH site is 3.4km north west. The PPA is located in both the Boyne and Barrow WFD

catchments, while six watercourses are located in the study area, being Mongagh River (740m north of the EGC), the Yellow River and Coolcor Stream intersects the EGC, the Esker Stream is 700m south, the Grand Canal 90m south and Philipstown 3.2km south of the EGC.

24.3.8. There are 3 national monuments within the EGC, with 316 more and 89 protected sites within the study area.

24.3.9. Gas Connection Corridor

24.3.10. Rochfortbridge lies within the GCC, as do scattered rural house along the local road network. The same IE Licenced Carrick and Skeagh farms lie 3.8km northeast and 1km south west of the GCC, while the SSE facility is 4.7km south east and Castlelost COMAH site is 320m southwest.

24.3.11. The PPA is located in both the Boyne and Lower Shannon WFD catchments. It intersects the Mongagh River, while the Yellow River is 1.5km south and the Brosna River is 3km west of the GCC. Lough Ennell SAC/SPA/NHA is 2.6km northwest, while three other NHAs are located within the 5km study area. There are 3 national monuments within the EGC, with 319 more and 98 protected sites within the study area.

24.4. Potential Effects (Predicted Impacts)

24.4.1. The EIAR identifies the potential for a range of environmental effects on Major Accidents and Disasters. Likely significant and negative effects of the development, as identified in the EIAR, are summarised in Tables 24.1, 24.2, 24.3 and 24.4 below. The focus of the assessment will be on the Significant and Negative/Adverse effects of the development, while Minor effect, which are deemed to be Imperceptible, Not Significant, Slight or Moderate, have been identified, but will not be assessed in the analysis and conclusion section below, unless there are identified significant impact interactions, cumulative effects or where concerns have been expressed by parties to the application.

Table 24.1: Combined summary of Potential Effects for PPA, EDG and PPA

Project Phase	Potential Direct, Indirect and Cumulative Effects
Do Nothing	• In the Do-Nothing Scenario, the existing buildings on the site of the proposed Power Plant Area would not be demolished and the site would continue to be used for the servicing of equipment required for post peat

	extraction activities, for site management and environmental monitoring that is required under the conditions of the IPC Licence (P0501-01). • The EGC is mostly part of the Derrygreenagh bog complex, while the GCC is mostly in agricultural use. Activities associated with those uses are likely to be low risk. • The agricultural land designated for the 400kV substation would continue to be managed for agricultural purposes. • The likelihood of a major accident and / or disaster occurring is very low in the absence of the proposed development.

Table 24.2: Identification of potential Major Accident Risk Event - Long List relating to Hazardous Substances

Construction	Category and Screening and Identification of Potential Disaster Risk Events	Applies to
Credible Risk identified	• None	
Credible risk not identified	• Potential release of liquid concrete could cause harm to aquatic ecosystems, flora and fauna is not considered a credible risk th at could meet the criteria of a Major Accident. • Accidental release of diesel into soil, groundwater or surface water, and the potential for pool fires from the same source, would not be considered a credible risk, as diesel would be held in such small quantities. • Accidental damage to compressed gas cylinders, or unrelated fires impacting on gas cylinders are not considered a credible risk of a MA&D due to the limited number of cylinders that would be on site.	PPA EGC GCC
	Operational	
Credible Risk identified	• Potential loss of containment of natural gas due to mechanical failure or accidental damage to machinery or pipework, could lead to a jet fire, fireball, flash fire or vapour cloud explosion (VCE). The impacts could be a major fire, thermal radiation, smoke inhalation, or property damage. The TLUP (Appendix 17A) has considered this risk event, as credible and considers it further (**Risk Event 1**). • Potential leak of natural gas from the turbine enclosures could result in a build-up and VCE and a major fire, thermal radiation, smoke inhalation, or property damage. The TLUP (Appendix 17A) has considered this risk event, as credible and considers it further (**Risk Event 2**). • Potential release of secondary fuel (HVO or distillate) could contaminate soil, groundwater, local watercourses and aquatic ecosystems, is considered a credible risk and is	PPA GCC PPA PPA

	considered further in Appendix 17A as a Major Accident to the Environment (MATTE) (**Risk Event 3).** • Accidental release of gas from damage, and its ignition, causing fire / explosion and harm to people and assets. Industry standard procedures would reduce risk, but it is considered credible in the TLUP and is considered further (**Risk Event 4)**	 PPA
Credible risk not identified	• Accidental release of secondary fuel and potential for a pool fire, would not be considered a credible risk, as it would have a high flash point. • Release of gas, including an explosive depressurisation event, is <u>not considered a major accident risk</u> as the number of cylinders containing hydrogen and acetylene used on-site would be low and industry standard procedures would be used for the storage and use. • Risk of fire unrelated to gas spreading to gas cylinders is <u>not considered a major accident risk</u>. • Release of from non-flammable gas cylinders, could cause harm to humans, but the number stored on site would be low and it is <u>not considered a major accident risk</u>. • Accidental release of firewater runoff, would be addressed in containment facilities at detailed design stage as require for COMAH installations and EPA licence, and is <u>not considered a major accident risk.</u> • Accidental release of 35% ammonia solution, water treatment chemicals and (lubricating oils) to soil and groundwater is <u>not considered a major accident risk</u> as they would be held in small quantities in suitable storage areas which would be regularly inspected. • Accidental release of transformer and turbine oils, would be into bunded areas and routed through a full retention oil separator.	PPA PPA PPA PPA PPA EGC GCC PPA (EGC) PPA EGC

Table 24.3: Identification of other Potential Major Accident and Disaster Risk Events (Long List)

Credible Risk event identified	Category and Screening and Identification of Potential Disaster Risk Events	Applies to
Yes	• <u>Accident – Peat Fire</u> - A fire at the PPA, EGC or GCC, while unlikely to lead to fired due to mitigation, could spread and create a long lasting peat fire, that would be difficult to extinguish (**Risk Event 5**)	PPA EGC GCC
No	• The following risks were <u>deemed not credible.</u>	 PPA

	• Domino Event Accident – there are no upper tier COMAH sites in the vicinity and the distance between the site and other industrial sites means no credible risk. • Structure Failure / Building Collapse – buildings would be built to industry codes and subject to a CEMP. • Accident Vandalism / Arson / terrorism / Cyber Attack – Potential acts of vandalism, arson or terrorism would have limited effect and would have limited potential for interruption. Cyber security would prevent unauthorised access to computer systems. • Flooding – A Site Specific Flood Risk Assessment was prepared and has informed the finished levels required to avoid flooding, as well as measures to prevent off site flooding. • Climate Change increased ambient temperatures – Potential operational instability to sensitive cooling systems and electrical apparatus, could cause operational interruptions, but detailed design will factor in such risks. • Climate change increase wind speeds – The structural design of tall elements will factor in wind loading, including higher future wind speeds. • Earthquakes and Seismic events – Ireland has a historic low level of seismic activity and it will be factored into the detailed design. • Lightning Strikes – Lightning mitigation is expected to be fitted to the top of all tall structures, to conduct electrical current to earth. • Accident High Voltage (HV) Electrical Equipment – installation will be controlled by a CEPM, specific work plan and carried out by suitable qualified and experienced electoral engineers.	EGC GCC PPA, EGC

Table 24.4: Assessment of Credible Major Accident and Disaster Risk Event (Short List)

Description	Summary of pre-existing mitigation measures
Risk Event 1 Major Fires and explosion due to natural gas pipe release	• Major pipework underground routed where practical. • Equipment and pipework designed to industry codes and standards, including welded connections. • Design subject to numerous formal process safety studies. • Gas pipe safety systems would be installed. • Continuous monitoring of instrumentation and control systems for leaks, with audible and visual alarms fitted. • Compliant equipment would reduce potential for release of gas.

	• HSA and EPA would be closely involved throughout the design, construction, and operation phases. • Facilities shall be operated by experienced and highly trained personnel. • A Site Emergency Response Plan would be developed.
Risk Event 2 Potential leak of natural gas from the turbine enclosures	• Same measures as for Risk 1 event plus: • Turbine enclosures forced ventilated for temperature and gas level control purposes, ensuring small leaks don't reach LEL levels (explosive concentrations). • Turbine closures would have leak detection systems that trips incoming gas supply, to a level below LEL.
Risk Event 3 Potential release of secondary fuel (HVO or distillate)	• Same measures as for Risk Event 2 plus: • Fuel would be stored in fixed steel tanks within impermeable concrete bunds and there would also be tertiary drainage containments system. • Fuel tanks would be designed to recognised codes, fitted with monitored alarms and regularly maintained. • Fuel offloading containment measures would be in place. • Design equipment and pipework would be to industry codes. • Fuel pipe safety measures would include operational control and monitoring and leaks would be rapidly detected.
Risk Event 4 Major Fire and / or Explosion due to catastrophic rupture of LPG cylinder	• Embedded mitigation measures from Risk Events 1 and 2 plus: • LPG would be delivered by road tanker using standard operating procedures to mitigate risk of cylinder rupture or leaks during delivery.
Risk Event 5 Peat Wildfire	• Embedded mitigation measures from Risk Events 1, 2 and 4.

24.4.2. For each of the five Risk Events set out in Table 24.4 above, the 'Description of the Effects' is the same and states:

> A quantitative risk assessment (QRA) has been carried out to assess this Risk Event (refer to Appendix 18A). This study has concluded the level of risk onsite and offsite is acceptable. The residual low risk will be managed by standard operating procedures, safety and environmental management measures to level commensurate with ALARP.

24.4.3. This is followed by reference to the Tables referred to in the 'Methodology' to states that the 'Likelihood' of each of the five risks is '1' or 'Very low' on a scale of 1-5

possible outcomes. The consequences of Risks 1-4 is 'Major' and is 'Massive' for Risk Event 5.

24.4.4. The likely significant of all of the five risks, following pre-mitigation which would be built into the design, is deemed to be Not likely significant.

24.5. Mitigation (and Enhancement Measures)

24.5.1. As no likely significant effects were identified, no mitigation measures are proposed, but a series of best practice measures will be followed, as described below.

24.5.2. Power Plant Area

24.5.3. Construction Phase

- Comply with established industry codes, standards and practice, such as specifications for pipework materials, design of structures, a CEMP and a Health and Safety Plan.

24.5.4. Operational Phase

- As above, plus a detailed chemical inventory and risk assessment for all materials handled on-site, regular maintenance and inspection of all facilities to reduce potential for equipment failure. An Environmental Management System (EMS) would be implemented under an Industrial Emissions Licence (IEL). The EMS would include a Site Emergency Response Plan (ERP) incorporating a fire strategy and appropriate staff training.

24.5.5. Decommissioning Phase

- Same as construction phase.

24.6. Residual Effects

24.6.1. As no likely significant effects were identified, residual effects are not relevant and are no different to the predicted effects set out effects in the tables above.

24.7. Cumulative Effects

24.7.1. Cumulative in-combination effects have been considered in the context of the overall project and the projects listed in Chapter 19. Assuming that the mitigation measures detailed for the PPA, EGC and GCC are implemented, no additional effects due to cumulative developments during construction or operation are anticipated, and the

same applies to the decommissioning phase, assuming decommissioning of the Electricity Connection Corridor and Gas Connection Corridor are scoped out.

24.8. Analysis, Evaluation and Assessment: Direct and Indirect Effects

24.8.1. The proposed Power Plant Area would fall under the requirements of the Chemicals Act (Control of Major Accident hazards (COMAH) involving Dangerous Substances) Regulations 2015 (S.I. No 209 of 2015). For such establishments, the Health & Safety Authority (HSA) is required to advise the Commission on whether or not the risks associated with the proposed development are in accordance with the HSA's criteria for individual and societal risk.

24.8.2. In section 7.0 of this report, I outlined that the HSA had twice stated that they had insufficient information in order to provide technical advice to the Commission in respect of the proposed development. In its third response, the HSA stated that 'the Authority (HSA) does not advise against granting permission'. In that submission, the HSA also stated that they had not receive a revised TLUP risk assessment but had received a summary document. In that respect, I note that Article 215 of the Planning and Development Regulations 2001 (as amended) requires the HSA to provide the Commission with Technical Advice on the effects of the proposed development on the risk or consequences of a major accident.

24.8.3. The HSA's first two submissions raised 28 and 13 issues respectively, while the second submission raised issues that had not been raised in the first submission. A number of the issues raised in both HSA submission related to planning matters, regarding means of access, location of and use of buildings, access points, planning and COMAH boundaries and the demolition of existing structures. I am satisfied that the applicant addressed these matters in their responses, which included amendments to Appendix 17A 'TLUP and MATTE Assessment', as well as individual responses to each of the issues raised by the HSA, in its two submissions.

24.8.4. The majority of issues raised in the first two HSA submissions are of a technical nature, that fall outside of the scope of consideration for this planning application and would be more appropriately addressed under the requirements of the Chemicals Act (Control of Major Accident Hazards Involving Dangerous Substances) Regulations 2015 (S.I. No 209 of 2015) at a point in time after a grant of permission has been issued.

24.8.5. If permission is granted for the proposed development, it would be subject to detailed assessment by the HSA under the 2015 COMAH Regulations, and the operators would be required to carry out various tasks as part of the detailed design in compliance with the Regulations, including a Notification to the HSA, operate a Safety Management System (SMS), and develop a Major Accident Prevention Policy (MAPP), as well as make information available to the public in the form of the activity at the site, the name and characteristics of dangerous substances of the site and emergency contract information.

24.8.6. In that context, I am satisfied that the Commission has sufficient information before it to carry out an assessment of the proposed development and I note that five pre-mitigation 'Risk Events' were identified in carrying out of the assessment, but that all five risks events we deemed to be not significant, once built in mitigation measures were factored in. The five Risk Events related to potential loss of containment of or leaks of natural gas, causing fires or explosions, the potential release of secondary fuel (HVO or distillate) that could contaminate soil, groundwater, local watercourses and aquatic ecosystems, and a long lasting peat fire that would be difficult to extinguish, caused by a fire at the PPA, EGC or the GCC.

24.8.7. Other proposed mitigation measures would require compliance with established industry codes, standards and practice, such as specifications for pipework materials, design of structures, a CEMP and a Health and Safety Plan.

24.8.8. Having reviewed the applicant's initial submission, the three submissions of the HSA and the responses of the applicant, I am satisfied that, subject to mitigation, that there would be no significant residual effects and that there would be no significant cumulative effects.

24.9. Conclusion: Direct and Indirect Effects

24.9.1. If permission is granted for the proposed development, it would be required to apply for and operate in accordance with the terms and conditions of a new or revised Industrial Emissions Licence, to be issued by the EPA. The proposed Power Plant Area would also constitute a Lower Tier COMAH site, and would be governed by the requirements of the Chemicals Act (Control of Major Accident hazards (COMAH) involving Dangerous Substances) Regulations 2015 (S.I. No 209 of 2015). Following consideration of further information provided by the applicant, much of which relates

to COMAH matters, rather than planning issues, the Health and Safety Authority (HSA) stated in an email dated the 18th of July 2025 that it 'does not advise against granting planning permission and makes no further observations at this stage'. Based on the above, I am satisfied that the overall risk of Major Accidents and Disasters has been adequately addressed by the applicant and the risk of MA&D is low.

25.0 **Climate**

25.1. Issues Raised

- No issues have been raised in the submissions, in respect of climate.

25.2. Examination of the EIAR

25.2.1. Context

25.2.2. Impacts on Climate are addressed in Chapter 18 of the EIAR, which is appended by appendices 18A - Risk Framework and 18B - Climate Change Risk Register.

25.2.3. The chapter has been prepared in accordance with Section 15(1) of the Climate Action and Low Carbon Development (Amendment) Act 2021.

25.2.4. The assessment of climate effects is divide into two categories as required by the European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018; and the Institute of Environmental Management and Assessment (IEMA) guidance for climate change mitigation (IEMA, 2022) and adaptation (IEMA, 2020). They are Climate Change Risk (CCR) and Lifecycle Greenhouse Gas (GHG).

Climate Change Risk Assessment

25.2.5. The methodology for assessing Climate Changer Risk follows guidance in IEMA 2020; EU Commission Notice (2021/C 373/01) 'Technical guidance on the climate proofing of infrastructure in the period 2021-2027' (EC, 2021a), and with consideration given to the EPA Guidelines on the information to be contained in Environmental Assessment Reports (EPA, 2022a).

25.2.6. The Climate baseline data relies on available climate databases, including the Met Éireann weather station at Dublin Airport, approximately 70km east of the site. Two climate change projection scenarios are used with different greenhouse gas

concentration trajectories showing 'intermediate' and 'worst-case' GHG scenarios, from information available on Climate Ireland's 'Climate Data Explorer' online platform.

25.2.7. Using the data described above, a Risk Framework is set out in three tables based on the 2021 'EU Technical Guidance on Climate Proofing'. Table 18.1 provides a five tier risk matrix from 'Rare' to 'Almost certain' for the 'Likelihood of Risk' as well as its qualitative and quantitative impact. Table 2 provides a risk matrix in the following risk areas: Asset damage during engineering operations, Health and safety, Environment, Social, Financial, Reputational, Cultural heritage and cultural premises, as well as quantifying the magnitude of consequences from insignificant to catastrophic. Table 18.3 is a Risk Matrix that considers the likelihood and consequences established in the two previous tables to determine the risk as Low, Medium, High or Extreme.

Greenhouse Gas (GHG Assessment

25.2.8. The GHG assessment considered all onsite emissions that may arise during construction, operational and decommissioning, as well as indirect emissions from activities offsite, such as the transport of materials, waste and workers and embedded carbon in construction materials and products.

25.2.9. GHG emissions arising from the proposed development and overall project have been presented in the context of Ireland's national GHG inventory and carbon reduction targets. GHG emissions have been calculated using quantifiable measurements of activity over the lifecycle of each element, such as operating hours and volumes of fuels used. It has also used publicly available emissions factors and calculation methods, while the seven Kyoto Protocol GHG's have specifically been considered and are referred to as 'GHGs' and affixed with the unit of tCO_2e (tonnes CO_2 equivalent) or $MtCO_2e$ (mega tonnes of CO_2 equivalent).

25.2.10. Sources of GHG's at different stages of the project are set out, primarily from fuel and energy use, while it notes that any amount of GHG emissions or reductions from a project might be considered significant.

25.2.11. There are two major considerations when assessing the significance of a project's GHG emissions. The first is 'Alignment to 2050 Net Zero Trajectory' and the IEMA guidance states that the crux of assessing significance is "not whether a

project emits GHG emissions, nor even the magnitude of GHG emissions alone, but whether it contributes to reducing GHG emissions relative to a comparable baseline consistent with a trajectory towards net zero by 2050". The second is 'GHG Mitigation' and the IRMA guidance states that 'The level of mitigation should be used to assess the significance of GHG emissions'.

25.2.12. Following from those considerations, Table 18.5 sets out the significance of effects, which are 'Significant adverse', 'Not significant' or 'Beneficial'. It also states that the significance of a project should not be determined based on whether it will release GHG emissions, or the magnitude of the GHG emission, but that significance should be evaluated by establishing if the project would contribute to reducing GHG emissions relative to a comparable baseline consistent with a trajectory towards net zero.

Limitations

25.2.13. It notes that determining climate change effects requires desktop studies, which rely upon available datasets, and a climate change assessment is therefore constrained to the limitations, baselines and timeframes of such datasets. Climate projections are not predictions of the future, but are rather a projection based on the best available data and science.

25.2.14. With respect to GHG's, there is currently no specific carbon emissions threshold, which if exceeded, would be considered significant. Therefore, there is no means by which to objectively assess the significance of GHG emissions.

25.3. Baseline

Climate Change Risk (CCR) Assessment

25.3.1. Using Dublin Airport as its point of reference, it sets out the highest and lowest temperatures, as well as the highest daily rainfall and 10 minute mean wind speed. It is projected that there would be an increase in the number of very intense winter storms over Ireland from mid-century, but they would still be rare events.

25.3.2. Using Climate Ireland data from 2022, Table 18-8 of the EIAR sets out 'Climate Change Baseline and Projection Data' for the period 2041-2060, based on two scenarios (RCP 4.5 and RCP 8.5), which would encapsulate most of the lifetime of the development. The climate variables considered are Surface air temperature;

Precipitation; Hydrology; Wind speed; Sea level rise; Waves and surges. The criteria considered for the two scenarios are set out in table 18-7, which is summarised as:

- The highest and lowest recorded baseline temperatures are 28.7 and -7.9°C from 1990 and 1995 respectively. Mean annual maximum and minimum daily temperatures (°C) are both projected to rise by 1.2 to 1.5°C from their 1981-2000 baseline. Mean summer and winter temperatures are also expected to rise.
- Rainfall levels and the number of frost days are projected to decrease by between 3.9% and 1.7% from the 747mm mean, while December and July would remain the wettest and driest months. The highest daily rainfall recorded was 92.6mm, while the number of wet days (more than 20mm of rain) and very wet days (more than 30mm of rainfall) are expected to increase from low bases of 3.8 and 1 days respectively by between 8.5% and 36.5%.
- Snowfall is projected to decrease by between 51.2% and 61.6%. The mean wind speed is expected to decrease slightly from 10.1 knots to 9.9 knots in both scenarios.

Greenhouse Gas Assessment

25.3.3. As the previous commercial use of the site has ceased there are no activities on the existing site which cause material GHG emissions. Therefore, the baseline GHG emissions is deemed to be zero.

25.4. Potential Effects (Predicted Impacts)

25.4.1. The EIAR identifies the potential for a range of environmental effects on Climate. The likely effects of the development, as identified in the EIAR, are summarised in Tables 25.1, 25.2, 25.3 and 25.4 below. The focus of the assessment will be on the Significant and Negative/Adverse effects of the development, while Minor effect, which are deemed to be Imperceptible, Not Significant, Slight or Moderate, have been identified, but will not be assessed in the analysis and conclusion section below, unless there are identified significant impact interactions, cumulative effects or where concerns have been expressed by parties to the application.

Table 25.1: Summary of Potential Effects

Project Phase	Potential Direct, Indirect and Cumulative Effects

Do Nothing	Would represent a state of no climate change risks. There are no material GHG emissions from the existing site and this would continue to be the case, with a state of zero GHG emissions.

Table 25.2: Summary of Potential Effects (Power Plant Area)

Project Phase	Potential Direct and Indirect Effects
Construction	Climate Change Risk Assessment • All four identified risks were assessed as being Not Significant for both scenarios described in 25.2.13 above. One relates to extreme temperatures, two to extreme storms and one to extreme rainfall. Greenhouse Gas Assessment • Construction phase emissions are based on the infrastructure area footprint (m^2). Includes embodied carbon emission from the manufacturing of raw material used in construction processes and the construction itself and based on a 2024-2027 construction period. The GHG emissions are calculated at 42,180 tCO_2e and while all emissions are considered significant, the contribution of the project to the national carbon budget from 2021-2025 is projected as 0.007% based on a 2024 commencement date and 0.011% of the 2026-2030 carbon budget, and on 50% of total emissions being generated in each carbon budget period.
Operation	Climate Change Assessment • All five identified risks were assessed as being Not Significant for both scenarios. Three relate to extreme heat, one to extreme storms and one to extreme rainfall. Greenhouse Gas Assessment • Three operational scenarios have been assessed based on common assumptions of a 25-year PPA lifespan, the commencement of operations in 2028 and efficiencies of 59% in the CCGT and 37% for the OCGT. • Scenario 1 – (most likely) CCGT operates at 540MWe for 6,239 hours per year on natural gas and 2 hours per month on distillate for testing, at 540Mwe. The OCGT operates 292 hours per year on natural gas and 2 hours per month on distillate at 140MWe. • Scenario 2 – (Unlikely) Plant operates at the maximum possible design hours. CCGT and OCGT both operate on natural gas for 8,736 hours at 570Mwe and 140Mwe and at the same output levels for 2 hours per month on distillate. • Scenario 3 – (emergency - unlikely) – CCGT and OCGT operate on natural gas for 500 hours per year at 570Mwe and 140Mwe and operate at the same output for 8,260 hours per year on distillate. • The scenarios would contribute annual GHG emissions of 1) 1,393,853; 2) 2.802,376 and 3) 3,888,823 tCO_2e/yr. • The above figures equate to 2.09%, 4.2% and 5.83% of the overall national carbon budget between 2026-2030 (based on 3 years of operating) and 4.62%, 9.28% and 12.88% of the 2031-2035

	carbon budget. When considered in isolation and outside the national policy context all of these contributions would be significant.
Decommissioning	• While plant and machinery used to decommission the plant over a period of less than one year would emit GHG's, impacts are likely to be not significant. A decommissioning plan would be prepared and agreed with the EPA in accordance with the sites IPC Licence.

Table 25.3: Summary of Potential Effects (Electricity Grid Connection)

Project Phase	Potential Direct and Indirect Effects
Construction	Climate Change Risk Assessment • All four identified risks were assessed as being Not Significant for both scenarios. One relates to extreme temperatures, two to extreme storms and one to extreme rainfall. Greenhouse Gas Assessment • Emissions are calculated as 13,306 tCO_2e and all emissions are considered significant. • When compared to the national carbon budgets, the grid connection would contribute 0.002% of the overall national carbon budget between 2021-2025 and 0.003% of the 2026-2031 carbon budget based on a construction period of 2024-2027, and on 50% of total emissions being generated in each carbon budget period.
Operation	Climate Change • All four identified risks were assessed as being Not Significant for both scenarios. Two relate to extreme temperature, one to extreme storms and once to extreme rainfall. Greenhouse Gas Assessment • Operational emissions would be limited to intermittent maintenance and monitoring and would be immaterial.
Decommissioning	• There will be no decommissioning phase.

Table 25.4: Summary of Potential Effects (Gas Connection Corridor)

Project Phase	Potential Direct and Indirect Effects
Construction	Climate Change • All four identified risks were assessed as being Not Significant for both scenarios. One relates to extreme temperatures, two to extreme storms and one to extreme rainfall. Greenhouse Gas Assessment • Emissions are calculated as 3,453 tCO_2e and all emissions are considered significant. • When compared to the national carbon budgets, the grid connection works would contribute 0.001% of the overall national carbon budget between 2021-2025 and 0.001% of the 2026-2031

	carbon budget, based on a construction period of 2024-2027 and on 50% of total emissions being generated in each budget period.
Operation	Climate Change • Two risks were identified and assessed as being Not Significant for both scenarios. One relates to extreme heat and one to extreme rainfall. Greenhouse Gas Assessment • Operational emissions would be limited to intermittent maintenance and monitoring and would be immaterial.
Decommissioning	There would be no decommissioning phase.

25.5. Mitigation (and Enhancement Measures)

All mitigation described below is described as embedded in the design of the project.

25.5.1. Power Plant Area

25.5.2. Climate Change Risk Assessment

- Flood protection to withstand a 1:1000 year flood, water abstraction capable of exceeding daily water requirements, infrastructure monitored for degradation due to extreme heat, emergency procedures for extreme heat.

25.5.3. Greenhouse Gas Assessment

- Construction Phase – Source local materials, use secondary aggregates and lower carbon materials, implement green procurement policy.
- Operation Phase – Monitor operational energy efficiency, minimise secondary fuel use, maintain equipment, strive for optimal performance, monitor policy development to enable smooth transition to hydrogen combustion in line with plans for gas network; set aside funds for climate and energy efficiency purposes.
- Decommissioning Phase – Segregate, reuse, repurpose and upcycle waste, treat waste locally.

25.5.4. Electricity Grid Connection

25.5.5. Climate Change Risk Assessment

- Flood protection to withstand a 1:1000 year flood, infrastructure monitored for degradation due to extreme heat, emergency procedures for extreme heat.

25.5.6. Greenhouse Gas Assessment

- Construction Phase – Source local materials, use secondary aggregates and lower carbon materials, implement green procurement policy.
- Operation Phase – Maintain assets as per manufacturers specification, appropriate monitoring, detection and maintenance of SF6 to prevent leakage in substations (SF6 is Sulphur hexafluoride used to insulate electrical equipment).
- Decommissioning Phase – Segregate, reuse, repurpose and upcycle waste, treat waste locally.

25.5.7. Gas Connection Corridor

25.5.8. Climate Change Risk Assessment

- Flood protection to withstand a 1:1000 year flood, infrastructure monitored for degradation due to extreme heat, emergency procedures for extreme heat.

25.5.9. Greenhouse Gas Assessment

- Construction Phase – Source local materials, use secondary aggregates and lower carbon materials, implement green procurement policy.
- Operation Phase – Maintain assets as per manufacturers specification, appropriate monitoring of infrastructure performance.
- Decommissioning Phase – The asset would be in the control of GNI. There would be no decommissioning phase emissions and no mitigation is required.

25.6. Residual Effects

For climate change risk, mitigation measures reduce the risks rating set out in Section 18.5 of the EIAR (which are stated in 25.2.11 above to be either 'Significant adverse', 'Not significant' or 'Beneficial'.). Due to a lack of quantifiable benchmarks, mitigation measures cannot be quantified numerically for GHG's.

25.6.1. Power Plant Area

25.6.2. Climate Change Risk Assessment

- All identified potential climate change risks are assessed as being not significant for the Power Plant area.

25.6.3. Greenhouse Gas Assessment

- The construction impact on GHG's would be 'not significant' due to the limited contribution to Ireland's carbon budgets.
- The residual operational impact is assessed as being 'significant', when viewed in isolation, as the operational GHG emissions from the Power Plant Area could contribute approximately 2.09% of the 2026-2030 Irish carbon budget and approximately 4.62% of the 2031-2035 Irish carbon budget in the anticipated normal operation scenario and is deemed to fall short of full contribution towards Ireland's trajectory to net zero.
- However, the significance is viewed differently in the context of Irelands energy policy that has a 80% renewable electricity generation target for 2030, which includes a requirement for reliable dispatchable energy generation capacity. The proposed development would replace the higher GHG emitting coal fired generation at Moneypoint and could lead to an average annual reduction in GHG of approximately 2 $MtCO_2e$ per annum compared to Moneypoint. The proposal is consistent with the transition to zero requiring the replacement of existing high-carbon emissions sources with lower emissions sources. It is reasonable to view the power plant as part of an integrated electricity generation system, and it is designed to run on hydrogen blend fuels, which means it can be adapted to a low-carbon fuel source. This, however, has not been modelled in the application. When viewed in a broader policy context, the residual effect of the PPA would be not significant, and would be fully in line with Ireland's trajectory towards net zero.
- Residual decommissioning effects are assesses as not significant.

25.6.4. Electricity Grid Connection

25.6.5. Climate Change Risk Assessment

- All identified potential climate change risks are assessed as 'Low' and are deemed being not significant for the EGC.

25.6.6. Greenhouse Gas Assessment

- Residual construction impact on GHG's would be minor adverse and therefore 'not significant' due to the limited contribution to Ireland's carbon budgets at less than 0.004%.

- Residual Operational effects would be minor adverse and therefore 'not significant'.
- Decommissioning would not happen so mitigation and residual effects are not relevant.

25.6.7. Gas Connection Corridor

25.6.8. Climate Change Risk Assessment

- All identified potential climate change risks are assessed as 'Low' and are deemed being not significant for the EGC.

25.6.9. Greenhouse Gas Assessment

- Residual construction impact on GHG's would be minor adverse and therefore 'not significant' due to the limited contribution to Ireland's carbon budgets at less than 0.001%.
- Residual Operational effects would be minor adverse and therefore 'not significant'.
- Decommissioning would not happen so mitigation and residual effects are not relevant.

25.7. Cumulative Effects

25.7.1. The cumulative effects assessment notes that there are a number of residential and renewable energy projects in the wider area. It also notes that the 2022 IEMA guidance makes it clear that the standard approach to cumulative effects assessment for GHGs differs from that taken for many other environmental disciplines as there is no difference in the impact on the global climate of a tonne of carbon dioxide equivalent emitted at this project or on any other project in the world. It also states that the influence from specific individual projects cannot be individually assessed and the applicant considers that cumulative effects are not relevant for this climate change assessment.

25.8. Analysis, Evaluation and Assessment: Direct and Indirect Effects

25.8.1. I have examined, analysed and evaluated Chapter 18 of the EIAR and all of the associated documents and submissions on the file in respect of Climate. I am satisfied that the baseline environment presented by the applicant is comprehensive

and that the key impacts in respect of Climate as a consequence of the proposed development and overall project have been identified.

Construction phase emissions

25.8.2. I am satisfied that the assessment is consistent with the published legislation and guidelines on the assessment of effects of the proposed development on Climate and Greenhouse gasses, as set out in paragraph 25.2. above. However, the identified potential effects (predicted impacts) that were identified by the application, which I have addressed in section 2.4 above, were based on a 2024-2027 construction period, with 50% of the total construction emissions allocated to each of the carbon budget periods of 2021-2025 and 2026-2030. Due to the time that has elapsed since the EIAR and GHC emissions figures were prepared, the projected construction period of 2024-2027, will not be realised, so I have adjusted the projected emissions on the basis that the overall construction period would be 39 months, as stated in the Traffic and Transport chapter of the EIAR. Assuming a grant of permission issues in 2026, and construction was to start in 2026, the construction emissions would occur entirely in the carbon budget period of 2026-2030. This would apply to the construction phases of the PPA, the EGC and the GCC.

PPA Construction Phase Emissions

25.8.3. As stated above, Table 18-12 of the EIAR established that the Power Plant Area's Construction GHG Emissions, would be 42,180 tCO_2e (tonnes CO_2 equivalent), with 50% to be expended in each of the carbon budget periods 2021-2025 and 2026-2030. The percentage contributions to the carbon budgets was stated in Table 18-13 to be 0.007% of 295 $MtCO_2e$ (2021-2025) and 0.011% of 200 $MtCO_2e$ (2026-2030). However, 100% of construction would likely happened in the 2026-2030 period (39 months of construction, with 58 months left between February 2026 and December 2030) and the percentage contribution to the 2026-2030 total national carbon budget of 200 $MtCO_2e$ (tonnes CO_2 equivalent), would be 0.021%.

EGC Construction Phase Emissions

25.8.4. Table 18-18 of the EIAR established that Construction GHG Emissions from the EGC would be 13,306 tCO_2e (tonnes CO_2 equivalent), with 50% to be expended in each of the carbon budget periods 2021-2025 and 2026-2030. The percentage contributions to the carbon budgets was stated in Table 18-19 to be 0.002% of 295

$MtCO_2e$ (2021-2025) and 0.003% of 200 $MtCO_2e$ (2026-2030). Like the PPA, 100% of construction for the EGC would likely happened in the 2026-2030 period and the percentage contribution to the 2026-2030 national carbon budget of 200 $MtCO_2e$ (tonnes CO_2 equivalent), would be 0.0066%.

GCC Construction Phase Emissions

25.8.5. Table 18-22 of the EIAR established that the GCC's Construction GHG Emissions would be 3,453 tCO_2e (tonnes CO_2 equivalent), with 50% to be expended in each of the carbon budget periods 2021-2025 and 2026-2030. The percentage contributions to the carbon budgets was stated in Table 18-23 to be 0.001% of 295 $MtCO_2e$ (2021-2025) and 0.001% of 200 $MtCO_2e$ (2026-2030). Like the PPA and EGC, 100% of construction would likely happened in the 2026-2030 period and the percentage contribution to the 2026-2030 national carbon budget of 200 $MtCO_2e$ (tonnes CO_2 equivalent), would be 0.0017%.

Total construction emissions in carbon budget period 2026-2030

25.8.6. Based on the three preceding paragraphs, the total combined construction phase emissions for the PPA, EGC and GCC during the 2026 to 2020 period would be 58,939 tCO_2e which would equate to 0.029% or $1/3448^{th}$ of the overall national carbon budget for that period.

Operational phase emissions

25.8.7. With respect to the operational phase of the PPA, the applicant provided three different scenarios and set out the percentage of the 5 year carbon budgets that the operational phase of the PPA would generate based on 3 years of operation between 2026 and 2030, with PPA commencing operation in 2027, while the emissions for 2031-2025 are based on 5 full years of operation. Based on a 39 months construction period, which I have addressed above, as well as the time that it would take to commence development after a u of permission would issue, if the Commission is minded to grant permission, I consider that the operational phase of the PPA is likely to contribute at most 18-months to the carbon budget GHG's in the period 2026-2030, compared to what has been calculated in Table 18-15 of Chapter 18 of the EIAR which was based on three years of operating in the years 2028, 2029 and 2030. This adjustment would equate to percentage contributions for the three PPA operational scenarios of 1.045%, 2.1% and 2.915%, rather than 2.09%, 4.2%

and 5.83% as stated in Table 18-15. The emissions for the period 2031-2035 would not change as a full 5 year operational period has been factored in and would be

Conclusions on emissions from the construction and operational phases

25.8.8. When combined, the contribution of the proposed construction and operational emissions to the national carbon budget for the 2026-2030 period would be (based on the three scenarios in Table 25.2 above):

- Scenario 1 = 1.074% made up of 0.029% + 1.045% (most likely)
- Scenario 2 = 2.129% made up of 0.029% + 2.1% (unlikely)
- Scenario 3 = 2.944% made up of 0.029% + 2.915% (emergency – unlikely)

25.8.9. As there would be no construction works after the 2026-2030 period, the emissions for that period would remain 4.62% (Scenario 1), 9.28% (Scenario 2) and 12.88% (Scenario 3) based on a reduced total budget of 151 $MtCO_2e$.

25.8.10. As stated in the EIAR, all emissions are considered significant. So, at the level of the planning application, the proposed development would clearly and obviously emit GHC emissions, ranging from 1.074% of the 2026-2030 carbon budget, to between 4.62% and 12.88% of the reduced budget between 2031-2035. On that basis, the proposed development would be considered to be a climate negative project which has the capacity to be a significant contributor to the national carbon budget and on that basis it could be determine that a refusal of permission should follow. However, that would be too narrow an interpretation to take and the proposed development must be considered in a wider context of proper planning and sustainable development within the context of the Planning and Development Act, 2000 (as amended), existing government policies and objectives, existing ministerial guidelines and existing county development plans.

Policy

25.8.11. Following from above, I have already provided a detailed policy context in Section 4 of this report and while it forms a significant part of my considerations the assessment of this application, and I have also addressed policy in Section 11 of the assessment above, I consider that it necessary to revisit a number of specific aspects of the policy context, as it applies to specific context of climate considerations and EIAR.

25.8.12. While the proposed development and overall project consists of a number of specific aspects, it is at its core it is proposal for a new back-up power plant with an output of 710MW, that would supply electricity to the national grid and guarantee security of electricity supply.

25.8.13. While it is stated and demonstrated above, that there would be a negative impact on climate as a result of the greenhouse gas emissions, both during the construction and operational phases of the power plant, I consider that the proposed development of a thermal power plant, with a generating capacity of 710MW and the associated power line and substations, would be consistent with the objective of transitioning to net zero emissions, as set out in European, national and regional policy documents including those set out below, which are set out in chronological order to demonstrate how policy evolved regarding gas fuelled power plants and electricity policy.

25.8.14. The White Paper - Ireland's Transition to a Low Carbon Energy 2015-2030 notes that gas will contribute to security of supply through Ireland's the period of transition towards hitting the 2050 GHG reduction target of 80% and 95%, compared to 1990 levels.

25.8.15. The Climate Action and Low Carbon Development Act 2015 (an amended on the 7th of September 2021) established the basis for the carbon budgets I have referred to earlier. Section 3 sets out the 'National Climate Objective' which is that 'The State shall, so as to reduce the extent of further global warming, to pursue and achieve, by no later than the end of the year 2050, the transition to a climate resilient, biodiversity rich, environmentally sustainable and climate neutral economy'. It also sets out at Section 15(1) that 'A relevant body shall, in so far as practicable, perform its functions in a manner consistent with —

a) The most recent approved climate action plan,

b) The most recent approved national long term climate action strategy,

c) The most recent approved national adaptation framework and approved sectoral adaptation plans,

d) the furtherance of the national climate objective, and

e) the objective of mitigating greenhouse gas emissions and adapting to the effects of climate change in the State.

I will examine these documents below, generally in the order they were published except for the climate action plans 2024 and 2025.

25.8.16. In the Government Policy Statement on Security of Electricity Supply (November 2021) the Government recognised that 1) ensuring security of electricity supply continues to be a national priority as the electricity system decarbonises towards net zero emissions by 2050 and 2) there is a need for very significant investment in additional flexible conventional electricity generation, electricity grid infrastructure, interconnection and storage in order to ensure security of electricity supply. The government approved that development of new conventional generation (including gas-fired and gasoil/distillate-fired generation) is a national priority and should be permitted and supported in order to ensure security of electricity supply and support the growth of renewable electricity generation. It also deemed it appropriate for 1) additional electricity transmission and distribution grid infrastructure, electricity interconnection and electricity storage to be permitted and developed in order to support the growth of renewable energy and security of electricity supply; 2) additional natural gas transmission and distribution grid infrastructure to be permitted and developed, in order to support security of electricity supply. The policy statement was accompanied by a circular letter 12/2021, advising that where planning applications are submitted for electricity infrastructure or infrastructure that may impact on electricity supply – including for existing conventional electricity generation – that they should, until further notice, be considered having regard to the Policy Statement.

25.8.17. The National Energy Security Framework (April 2022) states that 'all large gas-fired power stations are required to have secondary fuel capability', that the level of non-wind and solar dispatchable electricity generation capacity needs to increase significantly due to reduced reliability and closure of existing plants and anticipated new power stations not being developed as planned. It notes that part of the National Gas Emergency Plan is the timely switch over of gas-fired power generation to backup fuel.

25.8.18. The Territorial Just Transition Plan – EU Just Transition Fund 2022 (Dec. 2022) which was approved by the government and approved by the EU notes that at least 2 GW of additional gas generation capacity will be required by 2030, and that the sudden closure of 2 peat burning stations in the Midlands in 2020, prevented 2 million tonnes of Bord na Móna peat being burned, reducing carbon emissions by 51% (avoiding at least 1.25 million tonnes of CO^2 emissions) and contributing to a 7.9% reduction in generation emissions. This was aligned with the Ireland's National Peatlands Strategy (2015-25) and the rehabilitation of 33,000 hectares of peatlands over 82 BNM bogs, previously used for peat extraction for electricity generation.

25.8.19. Action 8 of the Energy Security in Ireland to 2030, Energy Security Package (November 2023) is 'the procurement of at least 2GW of new, flexible, enduring, capacity through market mechanisms' while its conclusions state that plans for an electricity system, focused on additional renewable generation, demand side flexibility, new gas-fired generation as back-up, interconnection and storage are the right ones to secure electricity supplies.

25.8.20. A key target of the Climate Action Plan 2024 (CAP 2024) (20th of December 2023), in Table 3.1 of chapter 12 'Electricity' is to include the delivery of at least 2 GW of 'New Flexible Gas Plant by 2030 in tandem with up to 80% of electricity being met by renewable energy, while phasing out and ending the use of coal, oil and peat in electricity generation. It also refers to longer term plans to have zero-emission gas-fired electricity generation from biomethane and hydrogen commencing by 2030.

25.8.21. The Second National Adaptation Framework (NAF) (5th of June 2024) notes that to achieve the objective to reduce greenhouse gas emissions, incremental climate adaptation will be necessary using energy sources and technologies that produce minimal environmental pollution and greenhouse gas emissions. It also note that increased wind variability may require backup generation.

25.8.22. Ireland's Long-term Strategy on Greenhouse Gas Emissions Reduction 2024 (Climate Action Strategy) is a link between shorter-term Climate Action Plans and Carbon Budgets and the longer-term objective of the European Climate Law and Ireland's National Climate Objective. It notes that the carbon intensity of Ireland's electricity has reduced largely due to increased renewable electricity generation and the use of higher-efficiency natural gas turbines, leading to a shift away from oil and

coal generation. It notes that in long term policy may require future dispatchable generation to be zero carbon gas ready, while zero-emissions gas will also be required in a climate neutral pathway in order to support the intermittency of wind and solar generation.

25.8.23. The National Energy & Climate Plan 2021-2030 (NECP) (July 2024). Section 2.3.1 states that peat and coal will no longer be part of Ireland's electricity generation mix by 2025, with increasing reliance on natural gas, a reduced fuel mix diversity and impact on security of supply. It acknowledged gas is crucial in projects need for energy security, that are consistent with national and EU climate policy objectives, within an increasing renewable electricity system based on wind and solar. Gas and electricity networks must be planned and developed to smooth the transition to a low carbon economy and the electricity network must be flexible enough to handle the unpredictability of wind while operating in a secure manner, thus placing an increased reliance on Ireland's gas network. It notes the CRU-led Security of Supply actions include 1) Procurement of at least 2 GW of new, flexible, enduring, capacity through market mechanisms; and 2) temporary retention of older generating units until new enduring capacity is delivered.

25.8.24. The National Risk Assessment 2024 – Overview of Strategic Risks (Sept. 2024) notes that notwithstanding the increased use of renewables and planned energy efficiencies, Ireland will continue to rely on gas as we move away from other fossil fuels. It also states that the existing thermal electricity performance of generating power plants is deteriorating, while there are ongoing problems of delivery of planned thermal generation capacity through planning and auction processes, making the outlook for Ireland's electricity supply very challenging. It also notes that significant investment is required in our electricity grid.

25.8.25. The Programme for Government 2025 (Securing Ireland's Future) January 2025 includes that Government will prioritise investment into our electricity grid to update our power generation systems to enhance security and take all necessary action to ensure and protect Ireland's energy security, while intensifying the transition to lower-cost renewables in electricity generation such as Biomethane and Hydrogen.

25.8.26. Project Ireland 2040, the National Planning Framework was updated in April 2025. It includes National Policy Objective 69 which seeks to - reduce our carbon footprint by integrating climate action into the planning system in support of national targets for climate policy mitigation and adaptation objectives, as well as targets for greenhouse gas emissions reductions as expressed in the most recently adopted carbon budgets. Security of supply is identified as one of three pillars of Irelands National energy policy and it notes that while Ireland must reduce greenhouse gasses, at the same time it must ensure security of supply. It notes that gas will continue to play a key role to support the secure transition to an energy system. National Policy Objective 71 seeks to - Support the development and upgrading of the national electricity grid infrastructure.

NSO No 8 'Transition to a Carbon Neutral and Climate Resilient Society' includes reference to the binding commitments in the Climate Action and Low Carbon Development (Amendment) Act 2021 and that there is need to diversify electricity supply and that new energy systems and transmission grids will be necessary, for a more distributed, more renewables focused energy generation system, which is essential to achieving net-zero emissions no later than 2050.

25.8.27. The Climate Action Plan 2025 (CAP 2025) (15th of April 2025) should be read in conjunction with CAP 2024, notes that while the population grew by 50% between 1990 and the end of 2024, emissions from electricity generation fell by 32.1% while consumption grew by 164%, during the same timeframe and that these reductions were driven by more efficient gas-fired power plants replacing older peat and oil-fired plants as well as increased renewable and interconnectivity. Electricity emissions also saw a 22% reduction from 2021 to 2023. It notes that the key target of 2 GW of 'New Flexible Gas Plant' remains in place for 2030.

25.8.28. Ireland's Greenhouse Gas Emissions Projections 2024-2055 (May 2025) state that with respect to the Climate Act, Ireland is not on track to meet the 51% emissions reduction target, while its 2026-2030 carbon budget of 200 Mt CO2eq is also expected to be exceeded by a significant margin of 77 to 114 Mt CO2eq including carryover from the 2021-2025 budget period. It is also projected to exceed the Sectoral Emissions Ceiling for Electricity, notwithstanding that by 2030, 60 to 68% of electricity generation is projected to come from renewable energy sources.

The yield from new gas fired generation has been adjusted down from 2.0GW to 1.4 GW by 2030, with existing measures, as an implementation pathway to the CAP 2024 target of “at least” 2 GW for new flexible gas fired generation is not available.

25.8.29. The Electricity and Gas Networks Climate Change Sectoral Adaptation Plan 2025 (18th of November 2025), considers national scale impacts and risks for the three EGN subsectors (electricity generation, electricity networks and gas networks), in the context of Ireland’s climate objective of achieving a climate neutral economy by 2050. Natural Gas supplied 44.3% of electricity in 2023

Section 2.3 states that the gas network is playing a key role in the energy transition, complementing wind and solar energy and their inherent intermittency. It states that ‘the complimentary partnership between flexible gas-fired power generation and intermittent renewable generation is critical to optimising Ireland’s renewable energy production’ and that ‘this is likely to increase in importance as more renewables connect to the electricity grid and meet our target of 80% renewable electricity by 2030’. It also states that ‘In response to this, the Government announced that an additional 2,000 megawatts (MW) of flexible gas-fired generation are to be built by 2030’. Gas-fired electricity generation is particular necessary during periods of extremely low winds or extreme cold.

Section 3.3 ‘Electricity Networks refers to the pertinent elements of the ‘Energy Transmission and Distribution subsystem to include high voltage substations, transmission lines, overhead distribution lines, and transmission underground cables.

25.8.30. The priority of Regional Strategic Outcome 16 ‘Support Transition to a Low Carbon, Circular & Climate Resilient Region’ of the Regional Spatial and Economic Strategy for the Eastern and Midland Region 2019-2031 (RSES) is to minimise energy demand and waste, and then address how energy will be supplied and renewable technologies incorporated, while ‘Decarbonising the Energy Sector’ required a regional shift from reliance on using fossil fuels and natural gas. It also identifies electricity and gas networks as critical infrastructure.

Section 10.3 ‘Energy’, states that there is an established tradition of energy production in the Midland counties by state agencies, however, national

environmental policies are dictating the wind down of traditional fossil fuel powered stations, such as peat fired power plants.

Regional Policy Objective (RPO) 10.20 supports and facilitates 'the development of enhanced electricity and gas supplies, and associated networks, to serve the existing and future needs of the Region and facilitate new transmission infrastructure projects. RPO 10.22 supports 'the reinforcement and strengthening of the electricity transmission and distribution network.

25.8.31. The Offaly County Development Plan 2021-2027 precedes many of the policy documents referred to above. However, it still contains policies and objective that support developments such as that proposed in this application. Chapter 3 'Climate Action and Energy' Policies include:

- **CAEP-01:** It is Council policy to support the development, reinforcement, renewal and expansion of the electricity transmission and distribution grid, including the development of new lines, pylons and substations…
- **CAEP-07:** …support and facilitate European and national objectives for climate adaptation and mitigation as detailed in the following documents and subsequent versions or editions 1) Climate Action Plan 2019; 2) National Mitigation Plan 2017; 3) National Climate Change Adaptation Framework (2018); 4) Relevant provisions of any Sectoral Adaptation Plans; 5) Offaly Climate Change Adaptation Strategy.
- **CAEP-10:** …support local, regional, national and international initiatives for climate adaptation and mitigation and to limit emissions of greenhouse gases through energy efficiency and the development of renewable energy sources..
- **CAEP-11:** …to support the transition to a competitive, low carbon, climate-resilient and environmentally sustainable economy by 2050, by way of reducing greenhouse gases, increasing renewable energy, and improving energy efficiency.
- **Gas - CAEO-09:** It is an objective of the Council to support the further extension of the gas grid into County Offaly to serve existing and envisaged future residential, commercial and industrial development.

25.8.32. The Offaly County Council – Climate Action Plan 2024-2029 notes that the local authority can directly influence greenhouse gas emissions through its planning

function. The section on 'Green Energy' notes that the commitment to decarbonisation, and the creation of cleaner and more sustainable energy forms has resulted in the cessation of peat harvesting for energy generation and that the Midlands has been the first Irish region to experience the impact of the decarbonisation programme and the transitioning process to a zero-carbon economy and that Offaly has been particularly affected due to the links with fossil fuel energy generation.

Reflecting the emerging megatrend in energy decarbonisation, Offaly County Council have sought to investigate the potential of renewable hydrogen which has the potential to become a zero-carbon substitute for fossil fuels, enabling this transition as it does not emit carbon dioxide when used.

25.8.33. Through the Westmeath County Development Plan 2021-2027, the council will support the infrastructural renewal and development of electricity and gas networks. Electricity/Gas Policy Objective for the region included

- **CPO 10.175** - Support and facilitate the development of enhanced electricity and gas supplies, and associated networks, to serve the existing and future needs of the Region and facilitate new transmission infrastructure projects that might be brought forward in the lifetime of this Strategy.

25.8.34. I also note policy of energy providers including the Long Term Resilience Study 2018 which states that no projected shortfall in the electricity system, as additional gas plant capacity is assumed by 2040. SEAI Energy Security in Ireland (September 2020) states that all non-renewable electricity generation by 2030 will be from gas, and future gas supply would likely include biogas and that GNI's Vision 2050 presents a scenario whereby a 'net zero carbon gas network' could include 13% hydrogen, with the balance comprising biomethane (37%) and natural gas, while GNI was also assessing how hydrogen could be used in existing gas networks. The objective of Eirgrid Group – Strategy 2020-2025: Transform the Power System for Future Generations is to ensure the electricity system is stable and supply is secure, while the grid will also need to be stronger and more dynamic, responsive and flexible. While new grid development requires partnership with landowners and communities.

25.8.35. The CRU Information Paper - Security of Electricity Supply – Programme of Actions (September 2021) and updated in March 2025 notes at section 3.3 that the 'Programme of Actions to Ensure Security of Supply' has at its core the procurement and delivery at least 2,000MW of additional flexible gas-fired generation capacity by 2030, but that the last two capacity auctions failed to secure delivery of new capacity. Section 3.4 states that '2000MW of flexible gas-fired plant, providing enduring and efficient market capacity, additional flexibility to support our 2030 renewable targets and ensuring security of supply (is required) in the medium to long term and that gas-fired generation will remain a critical enabler of the decarbonisation of the electricity system in 2030 and beyond, particularly as we accelerate the decarbonisation of the natural gas network'. The March 2025 update goes on to note that four Temporary Energy Generators with a combined 653MW of output are fully available to support the grid should the need arise for their use and that older generation units at Moneypoint are being retained until such time as new enduring capacity has been delivered to replace them. It continues that the Commission approved the conversion of the 820 MW rated capacity Moneypoint coal burning power station to heavy fuel oil (HFO) and that the units will operate as a generator of last resort from June 2025 to end March 2029, and will provide a temporary conventionally powered back-up generator to the national electricity grid, making the most sustainable use of existing infrastructure and equipment.

25.8.36. Eirgrid/SONI – Shaping our Electricity Future 1.1 – Roadmap (July 2023) notes that while renewable electricity will increasingly replace fossil fuels like coal and oil, natural gas is expected to still be used to generate some electricity as a backup. Section 4.3 notes that to achieve the ambition of a 51% reduction in Ireland's overall Greenhouse Gas emissions by 2030 (from 2018) as set out in the Climate Action and Low Carbon Development (Amendment) Act 2021, it will require the provision of at least 2GW of electricity from new flexible gas plants. It continues that' Conventional Generation' of thermal electricity with coal, peat and oil as that primary fuel will be decommission by 2030, that the capacity from other plant expected to retire out to 2030 and is expected to be replaced by new gas-fired generation. the application site lies entirely within one of four Renewable Energy hubs identified in the document.

25.8.37. Tomorrow's Energy Scenario's – 2023 Consultation Report states that for the period from 2030 to 2050, gas evolution shows a net zero power system from 2045 and will included renewable gas including hydrogen and that the acceleration of green fuels (hydrogen, biomass and biomethane) will offer reliability and flexibility to the power system.

25.8.38. (Eirgrid/SONI) All-island Resource Adequacy Assessment 2025-2034 notes that delivery of new capacity will remain challenging, with the closure of some older conventional generators, and the declining performance of other generators. It continues by stating that a balanced portfolio of new capacity is required, including the need for new, cleaner gas fired generation which is renewable gas ready and that a balanced portfolio of different generation types including renewable-fuel-ready open cycle and combined cycle gas turbines, is crucial to ensuring operation of a predominantly renewable power system, as well as ensuring that carbon budgets are met by 2030 and the zero net carbon target by 2050.

25.8.39. The National Peatlands Strategy 2015-2025 (DAHG, 2015) notes that former commercial peat bogs have potential to contribute to a low carbon economy.

25.8.40. The National Hydrogen Strategy (July 2023) states that fossil fuels are used as a backup to the variability of renewable energy sources such as wind or solar, but that renewable hydrogen could offer a zero-carbon alternative in the future. This would involve transitioning the gas network to hydrogen over time, and the gas network has proven technical capability to transport hydrogen blends of up to 100%.

It notes that most existing gas turbine designs today can already handle hydrogen shares of 3–5% and some can handle shares of 30% or higher and that turbine manufacturers, are confident that they will be able to provide standard turbines that are able to run entirely on hydrogen by 2030.

It notes Ireland must build 2 GW of new gas fired generation capacity by 2030, to ensure security of electricity supply, that hydrogen will not deliver significantly to Ireland's energy security needs in the short term and in the interim, natural gas will be required to ensure continued security and resilience of Ireland's energy.

Assessment and conclusion on policy

25.8.41. In the policy review in paragraphs 25.8.11 to 25.8.40 above, it is clear that there is a strong policy framework in place to facilitate the development of at least 2GW of new gas fired generation capacity by 2030, that would in turn allow for the closure of older and less efficient power generation facilities including Moneypoint, as well as the four existing temporary generating plants that are in operation around the country. I will examine these matters in more detail below.

Existing electricity generating plant that the proposed PPA would replace

25.8.42. The 'do nothing scenario' for the proposed development refers to no current activity being carried out at the Derrygreenagh Works site, where the new PPA would be sited, and it also states that there are no GHG emissions to be factored in. I do note however that the site is still being used in accordance with the IPC licence covering the site and the nearby bogs. Therefore, there are some GHG emissions emanating from the existing site, but not a significant amount. However, it has not been quantified by the applicant in the EIAR, so the scenarios set out in the predicted impacts section of the EIAR, would constitute a worst case scenario.

25.8.43. Following from the High Court judgement on the 16th of July 2025, in 'Friends of Killymooney Lough v An Coimisiún Pleanála and others' [2025] IEHC 407, the applicant sought a Certificate for Leave to Appeal but it was refused. The certificate judgement included three "essential" steps which form part of assessing a project that causes emissions, such as the current application. The first step is to identify net emissions. That would be consistent with paragraph 18.2.27 of the EIAR states which that "the significance of a project's emissions should therefore be based on its net impact over its lifetime, which may be positive, negative or negligible" (IEMA, 2022). Iin paragraphs 25.6.2 – 25.6.9 above I have set out the gross emissions from the proposed development and overall project. The judgement also stated that the budgetary nature of the process implies a need to quantify net greenhouse gas emissions and a baseline may well not involve no emissions, but rather an alternative level of emissions.

25.8.44. Reference is made in the CRU Information Paper - Security of Electricity Supply – Programme of Actions (March 2025) to the former coal fuelled generating station at Moneypoint, which was subject to a grant of permission on the 29th of September 2024 for a development described as 'Proposed transition and

conversion of the existing 900MW electricity generating station from coal to heavy fuel oil and associated ancillary development at Moneypoint Generating Station'.

25.8.45. The inspector's report relating to the Moneypoint application (Commission Ref. ABP-319080-24) stated at 'Table 8.5.3 – Consideration of impacts, significance, and mitigation measures for Climate' that the proposal to operate the facility up to the end of 2029 on oil, and as a generator of last resort would contribute 4-5% of national carbon emissions by 2030. The existing facility had a capacity of 900MW.

25.8.46. The CRU document also refers to four temporary energy generators with a combined output of 653MW being fully available to support the grid, should the need arise for their use. They were introduced after the Commission for Regulation of Utilities (CRU) identified a substantial risk to security of electricity supply which arose due to of unexpected generator outages and delays in delivery of new gas fired generation capacity, such as the current proposal. These facilities are located at North Wall, Huntstown, Shannonbridge and Tarbert and are all planned to be decommissioned prior to 2030, when the proposed PPA would be operational.

25.8.47. The proposed PPA would have an output of 710MW, which is less than half of the combined capacity of the five temporary plants listed above. Using scenario 1 in Table 25.2 above, which is the most likely operational scenario, the PPA would have a fully operation annual contribution to the national carbon budget of 4.62% which is within the range of the heavy fuel oil fired plant at Moneypoint. Effectively the two figures would cancel themselves out and the net effect of replacing the temporary Moneypoint facility running on Heavy fuel oil with the proposed PPA operating on lower carbon intensity natural gas, with a view to operating at some time in the future on zero carbon hydrogen or low carbon biomethane, would effectively no additional contribution to the national carbon budget as a result of the operational phase of the proposed PPA.

25.8.48. If further note Ireland's Greenhouse Gas Emissions Projections 2024-2055 (May 2025) state that Ireland's 2026-2030 carbon budget of 200 Mt CO_2eq is expected to be exceeded by a significant margin of 77 to 114 Mt CO_2eq and the Sectoral Emissions Ceiling for Electricity, would also be exceeded. Those exceedance are in part due to inefficiencies in existing energy generation facilities such as Moneypoint. I am satisfied that should permission be granted for the

proposed development, the PPA would contribute to a reduction in the amount of CO_2eq being generated via the electricity sector, which has shown significant capacity to reduce emissions over time while both the population and economy continued to grow as I have set out in paragraph 25.6.26 above, under CAP 25 where it states that the greatest reductions in emissions have come in the energy sector and that since 1990 to the end of 2024, emissions from electricity generation fell by 32.1% during a timeframe where electricity consumption grew by 164% and the population by c50%.

25.8.49. While the applicant has provided details of the projected site specific GHC emissions for the construction and operation phases, I am satisfied that the construction emissions would have a negligible impact on the overall carbon budget in the period 2026-2030. I also considered it reasonable, that the baseline scenario for operations is not zero and the proposed PPA would be replacing older and much less efficient power generating facilities that have either already gone off line or are currently operating on a temporary basis, until such time as at least 2GW of gas fired flexible generation has come online, which it has not yet done and is not expected to before 2030. When these temporary facilities are taken into consideration, I am satisfied that the emissions from the proposed PPA would not be significant, would be a replacement for the aforementioned and other higher emitting plant, and would be fully consistent with the long term policy of providing secure and flexible gas generation plants as a step on the way to net zero by 2050, while at the same time fulfilling a national priority of government to ensure security of energy supply during the transition to net zero.

Consistency with Section 15(1) of the Climate Action and Low Carbon Development Act 2015 (as amended)

25.8.50. Section 15(1) (as amended) in 2021, provides that a relevant body shall, in so far as practicable, perform its functions in a manner consistent with the plans and strategies labelled a-e below. The applicant has raised Section 15(1) in support of an application. Section 15 requires ‘engagement’ with the climate impact of the proposed development, in particular the concepts of ‘consistency’ and ‘in so far as is practicable’. and I will now examine whether or not the proposed development would be consistent with the plans and strategies set out in Section 15(1) of the Climate Action and Low Carbon Development Act 2015 (as amended).

a) **The most recent approved climate action plan**

25.8.51. Comment – The 2024 and 2025 Climate Actions Plans are to be read together. The documents which I refer to in Paragraphs 4.21 (CAP24) and 4.28 (CAP25) above, include the following: 1) a key target, is the delivery of at least 2 GW of New Flexible Gas Plant by 2030; 2) References that the introduction of renewable gas generation into the grid is an important factor of ensuring a security of supply for Ireland's electricity system; and 3) Notes reductions in emissions from electricity generation have been driven by more efficient gas-fired power plants replacing older peat and oil-fired plants.

I am satisfied that should be Commission decide to grant permission for the proposed development and overall project, that such a decision would be consistent with the most recently approved climate action Plans for Ireland.

b) **The most recent approved national long term climate action strategy**

25.8.52. Comment – I have addressed 'Ireland's Long-term Strategy on Greenhouse Gas Emissions Reduction 2024 (Climate Action Strategy)' in paragraph 25.8.22. it notes that the carbon intensity of Ireland's electricity has reduced largely due to increased renewable electricity generation and the use of higher-efficiency natural gas turbines, leading to a shift away from oil and coal generation. the proposed development which would run on natural gas would be consistent with this trend.

It also notes that long term policy may require future dispatchable generation to be zero carbon gas ready, while zero-emissions gas will also be required in a climate neutral pathway in order to support the intermittency of wind and solar generation. In that respect the applicant has stated that the plant would be capable of being designed standards required to be zero carbon gas ready.

I am satisfied that should be Commission decide to grant permission for the proposed development, that such a decision would be consistent with the Ireland's most recent approved national long term climate action strategy.

c) recent approved national adaptation framework and approved sectoral adaptation plans

25.8.53. Comment – I am satisfied that the proposed development would be consistent with Second National Adaptation Framework (2024), as it would provide for

incremental climate adaptation, while minimising environmental pollution and greenhouse gas emissions compared to electricity generating plants that are fuelled by oil, with coal and peat having already ceased to be used as a source fuel in electricity generation part of adaption frameworks.it would also provide the necessary back up generation that is a significant part of the transition to renewable energy.

25.8.54. The Electricity and Gas Networks Climate Change Sectoral Adaptation Plan 2025 was publishes on the 18th of November 2025, and like the NAF, it refers to the complimentary partnership between flexible gas-fired power generation and intermittent renewable generation being critical to optimising Ireland's renewable energy production' and that this is likely to increase in importance as more renewables connect to the electricity grid and meet our target of 80% renewable electricity by 2030. It also specifically references that in response to this, the Government announced that an additional 2,000 megawatts (MW) of flexible gas-fired generation are to be built by 2030, while high voltage substations, transmission lines, overhead distribution lines, and transmission underground cables are pertinent elements of the energy transmission and distribution subsystem.

I am satisfied that should be Commission decide to grant permission for the proposed development, that such a decision would be consistent with the Ireland's most recent approved national adaptation framework and approved sectoral adaptation plans.

d) <u>the furtherance of the national climate objective</u>

25.8.55. <u>Comment</u> – the National Climate Objective is 'to pursue and achieve, by no later than the end of the year 2050, the transition to a climate resilient, biodiversity rich, environmentally sustainable and climate neutral economy'. Having considered the nature and extent of the proposed development and overall project and considering it in the context of the prevailing and extensive policy set out in Section 4 of this report and more specifically with climate as set out in paragraphs 25.6.10 to 25.6.39 above, I am satisfied that the proposed development and overall project, if permitted would be consistent with the furtherance of the national climate objective.

e) <u>the objective of mitigating greenhouse gas emissions and adapting to the effects of climate change in the State</u>

25.8.56. Comment – I am satisfied that the proposed development and overall project, if permitted would be consistent with objectives of mitigating greenhouse gas emissions and adapting to the effects of climate change in the states as the proposed development would provide part of what has been identified as critical complementary infrastructure to the provision of wind and solar energy as the primary means of providing for the generation of electricity within the state.

National, Regional and County Planning Policy

25.8.57. The NPF was updated in April 2025 and notes that while Ireland must reduce greenhouse gasses, at the same time it must ensure security of supply, while gas will continue to play a key role to support the secure transition to an energy system. The proposed development would be consistent with National Policy Objective 71 which seeks to - Support the development and upgrading of the national electricity grid infrastructure, and NSO No 8 'Transition to a Carbon Neutral and Climate Resilient Society', which states that there is need to diversify electricity supply.

25.8.58. The RSES was published before the Climate Action and Low Carbon Development (Amendment) Act 2021 came into effect so its policies have not been updates in the same manner that within the NPF. The priority of Regional Strategic Outcome 16 is to 'Support Transition to a Low Carbon, Circular & Climate Resilient Region'. It recognises electricity and gas networks as critical infrastructure. Regional Policy Objective (RPO) 10.20 supports and facilitates 'the development of enhanced electricity and gas supplies, and associated networks, to serve the existing and future needs of the Region and facilitate new transmission infrastructure projects. RPO 10.22 supports 'the reinforcement and strengthening of the electricity transmission and distribution network. I am satisfied that the proposed development and overall project would be consistent with the above Policy Objectives of the RSES.

25.8.59. In paragraph 25.8.31 above, I have set out a number of 'Climate Action and Energy Policies of the Offaly County Development Plan 2021-2027. I am satisfied that the proposed development and overall project, if permitted and developed would be consistent with policies CAEP-01, CAEP-07, CAEP-10, CAEP-11 and CAEO-09 The policies include limiting emissions of greenhouse gases through energy efficiency; supporting the transition to a competitive, low carbon, climate-resilient and

environmentally sustainable economy by 2050, by way of reducing greenhouse gases; increasing renewable energy, and improving energy efficiency; and the further extension of the gas grid into County Offaly.

26.0 Cumulative Effects and Interactions

26.1. Issues Raised

- No concerns were raised by any of the parties to the application in respect of cumulative effects and interactions.

26.2. Examination of the EIAR

26.2.1. Context

26.2.2. As well as being addressed in individual technical Chapters 7 to 18 of the EIAR, cumulative effects are addressed in Chapter 19 which also addresses interactions between the environmental factors addressed in those Chapters 7. It draws on the assessment of effects on other known developments within 5km area from the overall project boundary.

Cumulative Effects

26.2.3. Existing developments are considered as part of the baseline in the technical Chapters. Therefore chapter 19 only considers permitted or planned projects. Careful consideration is given to the potential for significant effects to arise from multiple non-significant effects.

Methodology

26.2.4. All three elements of the proposed development and the overall project are considered being construction, operation and decommissioning.

26.2.5. The PPA is envisaged to have a life of 25 years. Decommissioning is expected after 2052, but is not considered due to a lack of certainty of overlap with other projects.

26.2.6. A 5 year planning search of projects within 5km was carried out, with a wider area considered for similar gas fired power plant projects. A list of projects is set out in Table 19.1 (43 within 5km and 24 power plants), with a slightly more comprehensive list in Appendix 19.1 with 73 cases cited that includes several deemed relevant to the LVIA. Some of the projects are built, others are operational and several have been

refused, have not progressed or have been withdrawn, so the lists of projects set out, represent a worst case scenario.

Interaction of effects

26.2.7. This refers to potential for effects between environmental factors over and above those addressed in the individual technical chapter of the EIAR.

26.2.8. Cumulative Effects Assessment

A cumulative effects assessment is set out under the following headings and addressed other potential or committed projects set out in Appendix 19A.

Air Quality

26.2.9. Other permitted and committed developments are too distance from the proposed PPA to have a cumulative effect. For construction, the mitigation would be the same as in Chapter 7 Air Quality. For the operational phase, changes to NO_2 and CO concentrations due to emission are considered imperceptible.

Cultural Heritage and Archaeology

26.2.10. There would be no significant indirect visual impacts from the proposed development on cultural heritage sites, so no potential for cumulative impacts. No significant cumulative impacts on cultural heritage are anticipate during construction, operation or decommissioning following implementation of mitigation measures.

Biodiversity

26.2.11. There is no likelihood of in combination effects following mitigation measures. In addition, as considered in Chapter 9, Biodiversity, there would be no residual effect on amphibians and no cumulative impacts on breeding or wintering birds. Any impacts arising would not cause significant effects on any ecological receptors.

Landscape and Visual

26.2.12. There is potential for cumulative landscape impacts due to further industrialisation of the landscape. The impacts would be most evident from 500m to 1km from the various sites and the cumulative impact is considered low with a slight adverse significance and quality.

26.2.13. The combined visual impact would increase from elevated areas, included Croghan Hill, particularly where the is no intervening vegetation. The cumulative

magnitude of cumulate change is deemed to be low, and the significance and quality of the impact is slight adverse.

Noise and Vibration

26.2.14. Based on the other developments listed in Appendix 19A, cumulative construction noise impacts are considered Imperceptible to Not Significant at Noise Sensitive Receptors, while cumulative traffic noise would be Imperceptible and Short Term. Cumulative operational day and evening noise was excluded, as none of the committed development would be significant noise producers, while night-time operation noise, as it would affect the most sensitive NRS6, would be Not Significant, due to distance and operating times. Overall operational noise is considered to be Negative though Not Significant.

Water Environment

26.2.15. Most projects are too distant to act cumulatively, but those that are within 1km would not act cumulatively following implementation of mitigation measures, while they also lack pathways to generate significant in-combination effects on the water environment.

Land, Soils and Geology

26.2.16. Most projects are too distant from the proposed development and lack pathways to act cumulatively. Following implementation of mitigation measures, any potential impact would result in No significant impacts on land, soils and geology.

Traffic and Transport

26.2.17. Appendix 14F set out the other projects in the area that would need to be considered for cumulative construction effects, and when added to the proposed development, the R400 would remain within its daily design capacity, while the roundabouts at the M6 / R400 would also operate within their capacities. The operational traffic for the PPA would be less that during construction, so no further assessment was deemed necessary.

Population and Human Health

26.2.18. No significant effects would occur beyond the site boundaries, while other projects would be expected to have suitable measures to prevent significant impacts from construction dust, noise, vibration and water pollution. The development would

generate employment as would other proposed projects, having a positive cumulative effect. No cumulative air quality, noise or neighbourhood amenity effects are expected. Climate change is assessed in the 'Climate' chapter.

Material Assets

26.2.19. Taking into account that other committed projects would have inbuilt mitigation measures, cumulative construction related disruptions to utilities would be Not Significant, while No Significant cumulative impacts are expected arising from waste generation.

Major Accidents and Disasters

26.2.20. Once the mitigation measures proposed in Chapter 17 are implemented, No Significant cumulative effects are expected for the construction or operational phases of the proposed development or the overall project.

Climate

26.2.21. Assessment of GHG covers the entire earth and the IEMA Guidance 2022 makes it clear that the standard approach taken is different to that for many other environment disciplines and that GHG emissions from specific cumulative projects should not be individually assessed, as the mass of CO_2 is the same regardless of the project location. Therefore, the applicant considered cumulative effects are not relevant for this climate change assessment.

26.3. Interactions

26.3.1. Interactions are assessed for both the construction and operational phases, while the decommissioning and demolition phases of the PPA are deemed comparable to or less than the construction phases, so the construction phase impacts are representative of the decommissioning phase. The EGC and GCC are not expected to be decommissioned.

The summary of potential interactions between technical topics is set out in Table 19.2 of the EIAR where 'C' refers to the Construction and Decommissioning phases and 'O' to the Operational phase'.

26.4. Potential Effects, Mitigation and Residual Effects of Interactions

Air Quality

26.4.1. No significant residual effects were identified as a result of interactions. No additional mitigation measures are proposed above those set out in the Chapter 7 Air Quality.

Cultural Heritage and Archaeology

26.4.2. Potential construction stage effects on previously unrecorded archaeological assets were recorded as moderate to significant, permanent and adverse, but following the implementation of mitigation measures, set out in Chapter 8, residual effects were assesses as Moderate, Permanent and Adverse. No additional mitigation measures are proposed above those set out in the relevant chapter of the EIAR.

Biodiversity

26.4.3. The nature of potential interaction impacts is outlined, and with the implementation of mitigation measures set out in the various chapters, the majority of residual effects would be imperceptible to not significant. Residual effects on bats would be Permanent, Negative and Slight; on Amphibian populations would be Short-Term, Negative and Slight; on badger populations would be Permanent, Negative and Slight; and Permanent, Negative and Slight on breeding and wintering birds. No additional mitigation measures are proposed above those set out in chapter 9 'Biodiversity' of the EIAR and other chapters.

Landscape and Visual

26.4.4. Interactions between landscape and material assets in the form of the large structures of the proposed Power Plant would have adverse effects and while landscape mitigation through façade treatment and increase planting would have a positive interaction with biodiversity, residual landscape and visual effects would range from none to significant, depending on distance from visual receptors and intervening vegetation.

Noise and Vibration

26.4.5. Residential receptors would experience residual effects that would be negative, imperceptible and short-term to temporary as a result of construction traffic noise. Residual effects on land, soils and geology as a result of excavations and earthworks would be not significant, negative and short-term to temporary. No additional mitigation measures are proposed above those set out in Chapter 11 of the EIAR.

Water Environment

26.4.6. The nature of potential interaction impacts is outlined, and with the implementation of mitigation measures set out in Chapter 12 of the EIAR, all residual effects are considered to be imperceptible.

Land, Soils and Geology

26.4.7. The nature of potential interaction impacts is outlined, and with the implementation of mitigation measures in Chapter 13, the CEMP and CTMP, residual effects would range from Imperceptible to Moderate Adverse.

Traffic and Transport

26.4.8. Potential interaction impacts are outlined, and with the implementation of mitigation measures, residual construction effects would be not significant and residual operational effects would be negligible. Mitigation measures have been set out in the Chapter 14, in the Outline Construction Environmental Management Plan (CEMP), a Peat and Spoil Management Plan (PSMP), and Outline Construction Traffic Management Plan (CTMP) (Appendices 5A, 5B, and 14H). No further mitigation is proposed.

Population and Human Health

26.4.9. The nature of potential interaction impacts is outlined, and with the implementation on mitigation measures outlined in EIAR Chapter 15, no negative residual effects are predicted. No additional mitigation measures are proposed.

Material Assets

26.4.10. The nature of potential interaction impacts is outline and the likelihood of risks is deemed rare or unlikely. Residual effects were identified as not significant. No additional mitigation measures are proposed to address cumulative effects.

Major Accidents and Disasters

26.4.11. Residual risks from interactions with traffic and transport are deemed to be not significant. The likelihood of risks from interactions with climate change are deemed rare or unlikely. Residual effects are deemed to be not significant and no additional mitigation measures are proposed.

Climate

26.4.12. Potential interaction impacts are outlined and residual Greenhouse Gas (GHG) effects as a result of construction phase of the overall project being the PPA, EGC and GCC are deemed to be minor adverse and therefore not significant.

26.4.13. The residual effects of the EGC and GCC are deemed to be minor adverse and therefore not significant.

26.4.14. In isolation, the residual effects of the PPA are classified as moderate adverse and Significant. However, the power plant has been designed to adapt to run on hydrogen fuel in the future, subject to a separate assessment and planning application and therefore residual effects can be deemed to be minor adverse and not significant as it is in line with Irelands trajectory towards net zero.

26.4.15. An Outline CTMP and Outline CEMP have been prepared as part as this planning application to mitigate negative impacts and no additional mitigation measures are proposed to address cumulative effects.

26.5. Analysis, Evaluation and Assessment: Cumulative Effects and Interactions

26.5.1. Chapter 19 of the EIAR evaluates the potential cumulative effects of the proposed development and overall project as well as the interaction of effects described within the EIAR. Many of the potential effects arising from interactions were identified early in the design process and in preparation of the individual technical chapters of the EIAR and were therefore addressed through embedded design and specific mitigation and monitoring measures detailed within the EIAR. As stated above, under the individual topics, no additional mitigation or monitoring measures are deemed to be required as a result of cumulative effects or the interaction of effects. A summary of the interaction of effects is identified in Table 19.2 of the EIAR, which is reproduced above. I have considered the potential for effects from the interactions and interrelationships between environmental effects and I am satisfied that while most significant effects as a result of interactions can be avoided, managed and mitigated by the measures contained within the EIAR and any recommended planning conditions, a number of effects cannot be mitigated entirely and I address them in my reasoned conclusions on significant effects in Section 27.

26.5.2. I have previously addressed ‘Landscape’ effects in Section 17 above and have addressed the fact that the original EIAR chapter did not include the Yellow River Windfarm. The windfarm was included in the addendum report and revised

photomontages submitted in response to submissions on the application. The wind farm had the effect of increasing the industrialised nature of the landscape, thereby reducing the potential visual and landscape effects of the proposed development when viewed from elevated ground. In my assessment, I have also considered the impact of a solar farm that is under construction, c1km east of the OHL interface compound and have also considered the impact of a permitted development of two large dome structures (500m long x 12m wide x 34m high) and when all elements are considered together the cumulative and residual landscape and visual effects when viewed from elevated ground, in particular Croghan Hill, to the west of the OHL, would be significant.

27.0 Reasoned Conclusions on Significant Effects

27.1. Having regard to the examination of environmental information provided in respect of the proposed development and overall project, in particular, the information set out in the technical chapters and appendices to the EIAR, the submissions of Offaly County Council, prescribed bodies and members of the public in the course of the application, as well as the responses provided by the applicant, it is considered that the main significant direct, and direct, and cumulative effects on the environment, are and would be mitigated as follow:

27.2. Air Quality

No predicted significant residual or cumulative effects have been identified.

27.3. Cultural Heritage and Archaeology

Significant, permanent and adverse effects could occur by way of partial or total removal or compaction of previously unrecorded sub-surface heritage assets, throughout the PPA and EGC sites. This would be mitigated by way of the implementation of mitigation measures, including supervision of works by a suitably qualified archaeologist. No significant residual or cumulative effects have been identified.

27.4. Biodiversity

A number of negative biodiversity effects would arise from the construction and operation of the proposed development and overall project, and while no significant

residual effects have been predicted, residual effects would remain and would be mitigated, as follows:

- Bats – Permanent, Negative and Slight effects on bats would arise as a result of the loss of bat roosts in a number of buildings and disturbance to retained and new roosts. This would be mitigated by adhering to the terms and conditions of the Bat Derogation Licence that was issued by the NPWS on the 22nd of January 2026.
- Amphibians – Short Term, Negative and Slight effect for smooth newt and common frog, due to habitat loss and fragmentation, disturbance, injury and mortality during construction, would be mitigated by capture and exclusion methods, including survey, vegetation clearance and fencing as part of the removal water bodies, as well as the use of low lux lighting.
- Badger – Permanent, Negative, Slight effects due to the loss of setts, and disturbance/disruption to badger setts and their commuting and foraging habitat, via increased human presence and artificial lighting during operation. The effects would be mitigated by carrying out pre development surveys within 1 month of the commencement of construction as well as protection measures for excavated areas during construction.
- Breeding and Wintering Birds – Permanent, Negative and Slight as collisions and subsequent injury or mortality remain possible. This would be mitigated by fitting the transmission lines with devices such as flight diverters, hanging tags and marker spheres, to make them more visible to flying birds.

No significant cumulative effects are predicted although this cannot be confirmed for the GCC as it's route has not been finalised yet.

27.5. Landscape and Visual

Landscaping and planting proposal would have the effect of reducing the visual and landscape effects of the lower parts of the power plant buildings and pylons carrying the 220kv overhead line from some aspects, but would not entirely eliminate effects as due to the height of the stacks at the power plant the pylons and telecommunications masts, particularly when viewed from higher ground.

However, the effect of the recently constructed Yellow River Windfarm has been to reduce the sensitivity of and susceptibility of the landscape to change and to reduce the significance of quality of landscape effects. The wind farm reinforces the industrial nature of the landscape character and the prominence of the wind farm would reduce slightly the perception of further change to the landscape, while a solar farm is under construction and two large domes measuring 500m long x 120m wide and 34m in height have been permitted c1km east of the EGC.

As well as landscaping, due to its scale and location, mitigation measures focus on architectural mitigation through façade treatment and minimising lighting during night-time.

Despite mitigation, from some of the viewpoints selected in the EIAR, which would be representative of typical views, some moderate/significant / adverse effects would remain, for residents, and when viewed from the elevated Croghan Hill.

27.6. Noise and Vibration

Subject to mitigation and monitoring measures, no predicted significant residual or cumulative effects have been identified

27.7. Water Environment

Significant water quality effects could occur to the Lough Ennell SAC and SPA which are groundwater dependent terrestrial ecosystem as a result of uncontrolled site runoff and accidental spillages during construction of the GCC. However, the would be mitigated by 1) General Surface Water Management (Inspection, maintenance and monitoring); 2) Sedimentation of Surface Waters (Silt fences, spill kits, buffer zones and bunded areas); 3) Fuel and Chemical Handling – (Bunded fuels, oils and lubricant areas at least 50m from water bodies; refuelling in impermeable areas); 4) Control of Concrete and Lime: 5) measures for Accidental Spillage, Flooding or Other Emergencies and adherence to the IEL for the PPA site, no predicted significant residual or cumulative effects have been identified for water.

The WFD Screening Assessment also determined that subject to mitigation that no waterbodies would be significantly affected and that a stage 2 WFD assessment would not be necessary.

27.8. Land, Soils and Geology

Subject to mitigation measures site, no predicted significant residual or cumulative effects have been identified.

27.9. Traffic and Transport

Subject to mitigation measures site, no predicted significant residual or cumulative effects have been identified.

27.10. Population and Human Health

Subject to mitigation measures site, no predicted significant residual or cumulative effects have been identified other than for Climate, due to the production of greenhouse Gasses, which is addressed in the Climate Chapter.

27.11. Material Assets

The operational phase of the PPA would change the land use from light industrial use to industrial / power infrastructure on a much larger scale would have a Negative, Significant, Long-term and Direct impact on land use.

The new electrical infrastructure would likely have a Long-term, Positive and Significant, effect on the electricity supply network and gas network.

The impact on the ability of the mobile phone mast to the south to provide links to the north would be Direct, Negative, Significant and Permanent and concerns were expressed by users of the existing mast to the south of the site and that it may be necessary to move relocate certain equipment in the event of permission being granted in order to continue the provision of an effective network in the area. This can be mitigated by way of a condition on a grant of permission.

The absence of a proper waste management regime would have Indirect, Long-Term, Significant and Negative effects. This would be mitigated by way of a Resource Waste Management Plan (RWMP).

27.12. Major Accidents and Disasters

Five potential risk events were initially identified being 1) Major Fires and explosion due to natural gas pipe release; 2) Potential leak of natural gas from the turbine enclosures; 3) Potential release of secondary fuel (HVO or distillate); 4) Major Fire and / or Explosion due to catastrophic rupture of LPG cylinder; and 5) Peat Wildfire.

The residual low risk will be managed by standard operating procedures, safety and environmental management measures to level commensurate with ALARP, AND following pre-mitigation which would be built into the design, risks are deemed to be Not likely significant.

27.13. Climate

At the level of the application the three elements of the proposed development and overall project, being the Power Plant Area, Electricity Grid Connection and the Gas Connection Corridor, would generate significant quantities of greenhouse gasses (GHG's) and would have significant effects on the environment.

However, GHG emissions need to be considered at a global scale and in the context of the national carbon budgets set for a series of five year periods. When considered in that light, the proposed development and overall project aligns with the significant body of European, National Regional and local policies and objectives as well as sector specific targets for the delivery of at least 2GW of gas fired power generation plants that are required and identified as a national priority in order to facilitate the increased generation of the country's electricity needs by way of renewable energy sources, principally from wind and solar. The proposed PPA development would ultimately replace older and less energy efficient generating plants that run of oil and formerly on coal and peat as well as four temporary gas fired plants that are operating until such time as development such as that proposed in this application are operational. In that context, the potential significant of the GHS emissions would be offset by the plants that this development is intended to replace.

27.14. Conclusion

While a number of significant effects have been identified, and the majority can be mitigated, some negative impacts would remain as a result of the development, in particular in respect to impacts on the landscape. However, on balance, having considered all potential effects, I consider that the proposed development and overall project is one which have been identified in multiple strategic planning and sectoral policy documents and is considered to be a national priority. I also consider that the long term positive impacts of the proposed development for the common good and the security of electricity supply on the path towards net zero by 2050 outweigh any negative impacts on particular receptors and the aspects of the environment during

both the construction, operational and decommissioning phases. Subject to any recommended conditions and adherence to the terms and conditions associated with an EPA Industrial Emission Licence, and other consents that would be required to facilitate the completion of the proposed development, I consider that permission should it be granted.

28.0 **WFD Assessment**

28.1. Appendix 12C of the EIAR contains a Water Framework Directive (WFD) Screening Assessment, which I have assessed in Appendix 4 to this report. My assessment updated the WFD waterbody status of the relevant waterbodies for the period 2019-2024, which updates the information that was in the Appendix 12C - WFD Screening Assessment and was the most up to date information available to the applicant at the time that the application was submitted to the commission. The conclusions of my WFD Screening Assessment are set out below.

28.2. Water Framework Directive Stage 1 Screening Assessment

28.2.1. The extensive site is located within the Boyne WFD Catchment, extends across nine WFD surface waterbodies and across three WFD groundwater bodies.

28.2.2. A proposed surface water pipe from the PPA would flow underground from an attenuation tank, for 450m in a northern direction and would discharge into the Mongagh River that is hydrologically connected to the River Boyne and River Blackwater SAC and SPA, c 25km downstream.

28.2.3. Process water from the PPA including treated wastewater would be disposed of by a pipe underground from the PPA for c 3.1km in a south-westerly direction and would discharge into the Yellow River.

28.2.4. Wastewater holding tanks would be installed at each of the proposed substations and would be periodically emptied. These facilities would not be permanently occupied.

28.2.5. It is proposed that water to serve the PPA would be abstracted from groundwater, which has been confirmed by testing, to have an adequate supply to serve the PPA. Chapter 16 ‘Material Assets’ of the EIAR states that the water requirements for the

Proposed Development and Overall Project is 720m^3/d, while a seven day constant test in 2023 of the same well indicated a pumping rate of 1,008m^3/day.

28.2.6. The erection of the overhead line and pylons, will require construction of several new sections of floating tracks and solid tracks and the upgrade of existing tracks/roads, with surface water to runoff into drainage channels along the sides of these tracks.

28.2.7. Surface water would be attenuated within the site of the PPA and would be pipe to local drains via collection and attenuation systems at both substations. Surface water would run directly to drainage channels from the new and upgraded access tracks.

28.2.8. The potential for contamination or spillages from the release of hydrocarbons and cement-based products, and sediment discharges, during the construction and operational phases of the development are considered in the NIS, which also includes mitigation measures to protect both surface and groundwater bodies and aquatic life.

28.2.9. The proposed construction and operational drainage regime are set out in the CEMP in Appendix 5A and in the Drainage Engineering Assessment Report and forms part of the design of the project. Construction phase mitigation will include buffer zones and silt controls.

28.2.10. I have assessed the proposed development and proposed mitigation measures set out collectively in the CEMP and in the other appended reports in the context of objectives set out in Article 4 of the Water Framework Directive, which are to protect and, where necessary, restore surface and groundwater bodies.

28.2.11. On the basis of objective information provided by the applicant and subject to the implementation of the proposed mitigation measures, I consider that the proposed development would not result in a risk of deterioration either qualitatively or quantitively to any waterbody, either on a temporary or permanent basis, and would not otherwise jeopardise any waterbody in reaching its WFD objectives. Therefore, I am satisfied that the need for further assessment can be excluded.

29.0 **Appropriate Assessment (AA)**

29.1. Appendix 2 ‘Screening for Appropriate Assessment -Test for likely significant effects’ and Appendix 3 ‘AA and AA Determination’ to this report, comprehensively address

the requirements for appropriate assessment of the proposed development. Sections 29.2 and 29.3 below set out the conclusion to the appendices and I refer the Commission to Appendices 2 and 3 for further details in this regard.

29.2. Screening Determination - Significant effects cannot be excluded

29.2.1. In accordance with Section 177U of the Planning and Development Act 2000 (as amended) and on the basis of the information considered in this AA screening report, I conclude that it is not possible to exclude that the proposed development alone will give rise to significant effects on 1) Lough Ennell SPA (004044); 2) River Boyne and River Blackwater SAC (Site Code 002299); and 3) River Boyne and River Blackwater SPA (Site Code 004232) in view of the sites conservation objectives. Appropriate Assessment is required.

29.2.2. This determination is based on:

- The nature and scale of the proposed development/works.
- The hydrological connectivity between the application site and 1) River Boyne and River Blackwater SAC (Site Code 002299); and 2) River Boyne and River Blackwater SPA (Site Code 004232) and the potential for significant effects on QI habitats and QI species, by way of pollution, deterioration of water quality and damage of foraging habitats and species, and the spread of invasive non-native species.
- The potential for SCI's from Lough Ennell SPA (004044) to collide with the proposed overhead lines or to be displaced as a result of the overhead lines;
- The potential for ex-situ disturbance impacts on QI otter populations.

29.3. Appropriate Assessment Conclusion: Integrity Test

29.3.1. In screening the need for Appropriate Assessment, it was determined that the proposed development could result in significant effects on the River Boyne and River Blackwater SAC (Site Code 002299) and River Boyne and River Blackwater SPA (Site Code 004232) and Lough Ennell SPA (004044) in view of the conservation objectives of those sites and that Appropriate Assessment under the provisions of S177U was required.

29.3.2. Following an examination, analysis and evaluation of the NIS all associated material submitted and taking into account the submissions and observations received, I

consider that adverse effects on site integrity of the River Boyne and River Blackwater SAC (Site Code 002299) and River Boyne and River Blackwater SPA (Site Code 004232) and Lough Ennell SPA (004044) can be excluded in view of the conservation objectives of these sites and that no reasonable scientific doubt remains as to the absence of such effects.

29.3.3. My conclusion is based on the following:

- The nature, scale and extent of the proposed development; the location of the site at a significant distance from European Sites; and its limited hydrological connectivity with the European Sites.
- Detailed assessment of construction and operational impacts.
- The proposed development would not affect or delay the attainment of the conservation objectives for the qualifying interests of the River Boyne and River Blackwater SAC (Site Code 002299), the River Boyne and River Blackwater SPA (Site Code 004232) and Lough Ennell SPA (004044).
- The proposed development would not prevent or delay the restoration of favourable conservation condition for the following qualifying interests: River Lamprey, Salmon, Pochard or Tufted Duck.
- The effectiveness of mitigation measures proposed in the Natura Impact Statement, the Construction & Environmental Management Plan, and the Environmental Impact Assessment Report.
- The application of planning conditions to require that all relevant mitigation and monitoring measures shall be implemented

30.0 **Recommendation**

30.1. I recommend that the Commission GRANT permission for the proposed development for the following reasons and considerations, subject to the conditions set out below:

31.0 **Reasons and Considerations**

The Commission made its decision consistent with Section 15(1) of the Climate Action and Low Carbon Development Act 2015, as amended by Section 17 of the

Climate Action and Low Carbon Development (Amendment) Act 2021, and the requirement to, in so far as practicable, perform its functions in a manner consistent with Climate Action Plan 2024 and Climate Action Plan 2025 and the national long term climate action strategy, national adaptation framework and approved sectoral adaptation plans set out in those Plans and in furtherance of the objective of mitigating greenhouse gas emissions and adapting to the effects of climate change in the State.

In coming to its decision, the Commission also had regard to the following:

- European Policy/Legislation including:
    - The relevant provision of Directive 2014/52/EU amending Directive 2011/92/EU (Environmental Impact Assessment Directive) on the assessment of the effects of certain public and private projects on the environment;
    - Directive 92/43/EEC (Habitats Directive) and Directive 79/409/EEC as amended by 2009/147/EC (Birds Directive);
    - Directive 2000/60/EC, the Water Framework Directive;
- National policy and guidance, including:
    - Government Policy Statement on the Strategic Importance of Transmission and Other Energy Infrastructure (July 2012)
    - White Paper - Ireland's Transition to a Low Carbon Energy Future 2015-2030
    - Government Policy Statement on Security of Electricity Supply (Nov. 2021)
    - National Energy Security Framework
    - Territorial Just Transition Plan – EU Just Transition Fund 2022
    - Energy Security in Ireland to 2030, Energy Security Package
    - Climate Action Plan 2024 (CAP 2024)
    - Second National Adaptation Framework (NAF) 2024
    - Ireland's Long-term Strategy on Greenhouse Gas Emissions Reduction 2024
    - National Energy & Climate Plan 2021-2030 (NCEP)
    - National Risk Assessment 2024 – Overview of Strategic Risks

- Programme for Government 2025 (Securing Ireland's Future)
- Project Ireland 2040 - National Planning Framework (updated 2025)
- Climate Action Plan 2025 (CAP 2025)
- Commission Assessment of the Final Updated National Energy and Climate Plan of Ireland
- Ireland's Greenhouse Gas Emissions Projections 2024-2055 (May 2025)
- National Development Plan Review 2025
- Electricity and Gas Networks Climate Change Sectoral Adaptation Plan 2025
- Other relevant guidance

- Regional and local policy, including:
  - Regional Spatial and Economic Strategy for the Eastern and Midland Region 2019-2031 (RSES)
  - Offaly County Development Plan 2021-2027 (CDP)
  - Offaly County Council – Climate Action Plan 2024-2029
  - Westmeath County Development Plan 2021-2027
  - Other relevant guidance

- The nature, scale and design of the proposed development as set out in the planning application and the pattern of industrial development in the vicinity.

- The likely consequences for the environment and the proper planning and sustainable development of the area in which it is proposed to carry out the proposed development and the likely significant effects of the proposed development on European sites.

- The Natura Impact Statement submitted with the planning application.

- The submissions and observations made in connection with the planning application.

- The responses received from the applicant in respect of submissions received in respect of the application.

- The report and the recommendation of the Inspector, including the examination, analysis and evaluation undertaken in relation to appropriate assessment, the Natura Impact Statement, the Environmental Impact Assessment and the Water Framework Directive.

- the planning history of the site and the wider area, including the previously permitted development of a 600MW power plant on the site of the proposed Power Plant under Commission planning reg. reference 19.PA0011.

Environmental Impact Assessment

The Commission completed an environmental impact assessment of the proposed development taking into account:

(i) the nature, scale and extent and purpose of the proposed development, which is operate as and when needed to ensure security of electricity supply;

(ii) the location of the proposed development within an area of county Offaly that has a long history of industrial and energy generating land uses;

(iii) the Environmental Impact Assessment Report and associated documentation submitted in support of the application;

(iv) the submissions made during the course of the application and the applicants response to the submissions; and

(v) the Inspector's report.

The Commission considered that the Environmental Impact Assessment Report, supported by the documentation submitted by the applicant in response to submissions on the application, adequately considers alternatives to the proposed development and identifies and describes adequately the direct, indirect and cumulative effects of the proposed development on the environment.

The Commission considered that the main significant direct and indirect effects of the proposed development on the environment are, and would be mitigated as follows:

- Bats – Permanent, Negative and Slight effects on bats would arise as a result of the loss of bat roosts in a number of buildings and disturbance to retained and new roosts. This would be mitigated by adhering to the terms and conditions of the Bat Derogation Licence that was issued by the NPWS on the 22nd of January 2026.
- Amphibians – Short Term, Negative and Slight effect for smooth newt and common frog, due to habitat loss and fragmentation, disturbance, injury and mortality during construction, would be mitigated by capture and exclusion methods, including survey, vegetation clearance and fencing as part of the removal water bodies, as well as the use of low lux lighting
- Badger – Permanent, Negative, Slight effects due to the loss of setts, and disturbance/disruption to badger setts and their commuting and foraging habitat, via increased human presence and artificial lighting during operation. The effects would be mitigated by carrying out pre development surveys within 1 month of the commencement of construction as well as protection measures for excavated areas during construction.
- Breeding and Wintering Birds – Permanent, Negative and Slight as collisions and subsequent injury or mortality remain possible. This would be mitigated by fitting the transmission lines with devices such as flight diverters, hanging tags and marker spheres, to make them more visible to flying birds.
- Landscaping and planting proposal would have the effect of reducing the visual and landscape effects of the lower parts of the power plant buildings and pylons carrying the 220kv overhead line from some aspects, but would not entirely eliminate effects, due to the height of the stacks at the power plant the pylons and telecommunications masts, particularly when viewed from higher ground. Despite mitigation, from some of the viewpoints selected in the EIAR, which would be representative of typical views, some moderate / significant / adverse effects would remain, for residents, and when viewed from the elevated Croghan Hill.
- Significant water quality effects could occur to the Lough Ennell SAC and SPA which are groundwater dependent terrestrial ecosystem as a result of uncontrolled site runoff and accidental spillages during construction of the GCC.

However, the would be mitigated by 1) General Surface Water Management (Inspection, maintenance and monitoring); 2) Sedimentation of Surface Waters (Silt fences, spill kits, buffer zones and bunded areas); 3) Fuel and Chemical Handling – (Bunded fuels, oils and lubricant areas at least 50m from water bodies; refuelling in impermeable areas); 4) Control of Concrete and Lime: 5) measures for Accidental Spillage, Flooding or Other Emergencies and adherence to the IEL for the PPA site.

- The impact on the ability of the mobile phone mast to the south to provide links to the north would be Direct, Negative, Significant and Permanent and concerns were expressed by users of the existing mast to the south of the site and that it may be necessary to move relocate certain equipment in the event of permission being granted in order to continue the provision of an effective network in the area. This can be mitigated by way of a condition on a grant of permission requiring that the applicant submits a plan to the planning authority, demonstrating how they would maintain uninterrupted telecommunications signals at the existing mast to the south of the PPA site, during the construction and operational phases of the PPA development.
- The absence of a proper waste management regime would have Indirect, Long-Term, Significant and Negative effects. This would be mitigated by way of a Resource Waste Management Plan (RWMP).
- At the level of the application the three elements of the proposed development and overall project, being the Power Plant Area, Electricity Grid Connection and the Gas Connection Corridor, would generate significant quantities of greenhouse gasses (GHG's) and would have significant effects on the environment. However, GHG emissions need to be considered at a global scale and in the context of the national carbon budgets set for a series of five year periods. When considered in that light, the proposed development and overall project aligns with the significant body of European, National Regional and local policies and objectives, as well as sector specific targets for the delivery of at least 2GW of gas fired power generation plants that are required and identified as a national priority in order to facilitate the increased generation of the country's electricity needs by way of renewable energy sources, principally from wind and solar. The proposed Power

Plant development would ultimately replace older and less energy efficient generating plants that run of oil and formerly on coal and peat as well as four temporary gas fired plants that are operating until such time as development such as that proposed in this application are operational. In that context, the potential significant of the GHS emissions would be offset by the plants that the proposed development is intended to replace.

The Commission agreed with the examination, set out in the Inspector's report, of the information contained in the Environmental Impact Assessment Report and associated documentation submitted by the applicant and submissions made during the course of the application.

Appropriate Assessment Stage 1

The Commission considered the Appropriate Assessment Screening Report, Natura Impact Statement and carried out both an appropriate assessment screening exercise and an appropriate assessment in relation to the potential effects of the proposed development on designated European Sites, taking into account the nature, scale and location of the proposed development, the Appropriate Assessment Screening Report and Natural Impact Statement submitted with the application, the Planning Inspector's report and submissions on file. The Commission agreed with and adopted the screening assessment and conclusion carried out in the Inspector's Report that the relevant European Sites in respect of which the proposed development has the potential to have a significant effect are:

- Lough Ennell SPA (004044);
- River Boyne and River Blackwater SAC (Site Code 002299); and
- River Boyne and River Blackwater SPA (Site Code 004232)

and that Stage 2 Appropriate Assessment was, therefore, required.

Appropriate Assessment Stage 2

The Commission considered the Natura Impact Statement and associated documentation submitted with the application, the mitigation measures contained therein, the submissions and observations on file, and the Inspector's assessment.

The Commission considered that the information before it was adequate to allow the carrying out of an appropriate assessment.

The Commission completed an Appropriate Assessment of the implications of the proposed development for Lough Ennell SPA (004044); River Boyne and River Blackwater SAC (Site Code 002299); and River Boyne and River Blackwater SPA (Site Code 004232), in view of the site's conservation objectives. In completing the appropriate assessment, the Commission considered, in particular, the following;

(i) the likely direct and indirect impacts arising from the proposed development both individually or in combination with other plans or projects;

(ii) the mitigation measures which are included as part of the current proposal; and

(iii) the conservation objectives for the European Sites.

In completing the Appropriate Assessment, the Commission accepted and adopted the appropriate assessment carried out in the Inspector's report in respect of the potential effects of the proposed development on the aforementioned European Sites, having regard to the site's conservation objectives.

In overall conclusion, the Commission was satisfied that the proposed development, by itself or in combination with other plans or projects, would not adversely affect the integrity of the European Sites, in view of the Site's conservation objectives.

Proper Planning and Sustainable Development

The Commission considers that the proposed Combined Cycle Gas Turbine and Open Cycle Gas Turbine Thermal Power Plant and Electricity Grid Connection including overhead and underground 220kV lines and two substations, 220kV and 400kV, and all ancillary and supporting infrastructure enjoys very strong policy support at European, national, regional and local levels in terms of planning, electricity and climate policy as part of Ireland's net zero commitment and obligations for 2050, as it would provide for the development of part of the minimum requirement of 2GW of back up gas fired electricity, to support the development of an electricity generation system that is primarily generated from renewable energy sources. While the proposed development would have significant environmental effects as a result of greenhouse gas emissions during its operational phase, the Commission is

satisfied that these impacts have been factored into the national carbon emissions budgets and that at the national level, the proposed development would the transition to net zero by 2050 and the long-term benefits and would not give rise to an unacceptable impact on any sensitive receptors that would justify or warrant a refusal of permission.

The Commission is also satisfied that there has been full engagement with Section 15(1) of the Climate Action and Low Carbon Development Act 2015 (as amended) and in doing so has perform its functions in a manner consistent with documents and objectives referenced in Section 15(1).

The Commission also considers that while the above ground structures at the power plant area and as part of the overhead section of the 220kV line and the substation would be visible in the landscape, the existing landscape is an already highly anthropogenic and industrialised landscape and that the applicant has demonstrated a balance between reducing landscape and visual effects where possible by undergrounding a section of the 220kV line, but that adverse impacts on landscape are unavoidable at a number of locations. Again, the Commission considers such impacts must be balanced against the very significant wider societal benefits that would accrue from the provision of the proposed development.

It is considered that, subject to compliance with the conditions set out below, the proposed development would not have an unacceptable impact on the character of the landscape or on cultural heritage, would not seriously injure the visual or residential amenities of the area including designated views and prospects and scenic routes, would be acceptable in terms of public health and traffic safety, would not have an unacceptable impact on ecology or on any European Site, and would make a positive contribution to Ireland's requirements to provide for at least 2GW of gas fired electricity generating plant to support an increased quantum of electricity being generated by renewable energy in accordance with national, regional and local policy. The proposed development would, therefore, be in accordance with the proper planning and sustainable development of the area.

32.0 Conditions

Note

Emissions from the power plant area of the proposed development shall be required to adhere to the terms and conditions of an Industrial Emissions Licence that can only be applied for and issued following a grant of permission. The boundary of the Licensable area has not yet been determined. However, those parts of the site area that lie outside of the IEL licenced area, will be subject to the conditions set out below. Therefore, for that part of the overall site area that will be subject to a future IEL licence, the conditions set out below shall not apply where they relate to emissions to the environment. All other conditions will apply to the Power Plant Area

1 The development shall be carried out and completed in accordance with the plans and particulars lodged with the application, as amended by the additional details received by the Commission on the 7th of June 2024, the 20th of June 2024, the 5th of July 2024, the 7th of November 2024 and the 23rd of January 2026**,** except as may otherwise be required in order to comply with the following conditions. Where such conditions require details to be agreed with the planning authority, the developer shall agree such details in writing with the planning authority prior to commencement of development and the development shall be carried out and completed in accordance with the agreed particulars.

Reason: In the interest of clarity.

2 The period during which the development hereby permitted may be carried out shall be 10 years from the date of this Order.

Reason: Having regard to the nature of the development and its interdependent relationship to other developments, the Commission considers it appropriate to specify a period of validity of this consent in excess of five years.

3 For the avoidance of doubt: -

(a) The output from the proposed Closed Cycle Gas Turbine shall be a maximum of 570MW.

(b) The output from the proposed Open Cycle Gas Turbine shall be a maximum of 140MW.

(c) The operational lifespan the proposed Open Cycle Gas Turbine shall be 25 years, after which the facility shall be decommissioned, unless, prior to the end of the period, planning permission shall have been granted for their retention for a further period.

Reason: In the interest of clarity to enable the planning authority to review the operation of the Power Plant in the light of the circumstances then prevailing.

4 The mitigation measures contained in the submitted Natura Impact Statement (NIS), shall be implemented.

Reason: To protect the integrity of European sites.

5 The mitigation measures contained in the submitted Environmental Impact Assessment Report (EIAR) and its associated appendices, shall be implemented.

Reason: To protect the environment.

6 Prior to commencement of operation, the developer shall submit for the written agreement of the planning authority detailed plans and proposals for the restoration and reinstatement of the site of the Power Plant following decommissioning of the plant. The restoration works shall be completed within two years of the closure of the plant site or cessation of use for a period or one year or more.

Reason: To ensure the satisfactory restoration of the site.

7 The services of a suitably qualified and experienced Ecological Clerk of Works shall be retained to oversee and supervise the entirety of the construction works, and to provide monthly electronic reports to the planning

authority (Planning and Environment Sections) detailing the stage of the works, and compliance with EIAR and NIS mitigation measures.

Reason: In the interest of protecting ecology and wildlife in the area.

8 A dedicated Liaison Engineer shall be appointed to liaise between the developer and Offaly County Council for the duration of this development. All costs associated with this appointment shall be incurred at the developer's expense for the duration of the construction period. Details of the scope and role of the engineer shall be agreed between the two parties prior to commencement of development.

Reason: In the interest of clarity, road safety and orderly development.

9 The construction of the development shall be managed in accordance with a Final Construction Environmental Management Plan, incorporating a traffic management plan, which shall be submitted to, and agreed in writing with, the planning authority prior to commencement of development. This plan shall incorporate all mitigation measures set out in the application documentation and provide details of intended construction practice for the development, including:

(a) locations of site and material compound (s) including areas (s) identified for the storage of construction refuse, site offices, construction parking and staff facilities, re-fuelling arrangements, security fencing and hoardings;

(b) measures to prevent the spillage or deposit of clay, rubble, or other debris on the public road network;

(c) include the location of any and all archaeological or cultural heritage constraints relevant to the proposed development as set out in Chapter 8 of the EIAR. The CEMP shall clearly describe all identified likely archaeological impacts, both direct and indirect, and all mitigation measures to be employed to protect the archaeological or cultural heritage environment during all phases of site preparation and construction activity.

(d) details of appropriate mitigation measures for noise and dust, and monitoring of such levels;

(e) containment of all construction related fuel and oil within specifically constructed bunds to ensure that fuel spillages are fully contained; such bunds shall be roofed to exclude rainwater;

(f) off-site disposal of construction/demolition waste and details of how it is proposed to manage excavated soil/peat that would be required to be disposed of off-site and not in the peat deposition areas;

(g) means to ensure that surface water run-off is controlled such that no deleterious levels of silt or other pollutants enter local surface water drains or watercourses;

(h) an audit list of all construction and operational mitigation measures, their timelines for implementation and responsibility for reporting.

(i) a record of daily checks that the works are being undertaken in accordance with the Construction Environmental Management Plan shall be kept for inspection by the planning authority.

Reason: In the interest of environmental protection, amenities, public health, and safety.

10 Prior to commencement of development, an overall Construction Transport Management Plan for the construction stage shall be submitted to, and agreed in writing with, the planning authority. The traffic management plan shall incorporate details of the different road networks to be used by construction traffic in accordance with the Abnormal Loads Report. The traffic management plan shall incorporate details of the road network to be used by construction traffic, including over-sized loads, and detailed arrangements for the protection of bridges, culverts or other structures to be traversed, as may be required for different elements of the overall development. This shall include pre and post construction phase road, bridge and culvert surveys survey's in conjunction with Offaly County Council and other County Council's where necessary. The plan should also contain details of how the developer

intends to manage the interaction between the construction traffic for different aspects of the development, particularly in respect to the phasing of different elements of the works and how it intends to engage with and notify the local community in advance the delivery of oversized or abnormal loads. Any damage caused to existing road pavement due to deliveries will be rectified in accordance with TII Pavement Standards.

Reason: In the interest of traffic safety

11 Roadside drainage shall not to be inhibited by new site entrances. Suitably designed pipe/culvert to be constructed in accordance with the Recommendations for Site Development Works for Housing Areas, Section 3.4 Modified Rational Method. Drainage pipe to extend across entire front boundary. Headwall to be formed each end of drainage pipe to be constructed in accordance with TII RCD 500/53 to allow roadside drainage to flow undisturbed.

Reason: In the interest of traffic safety

12 The site development and construction works shall be carried out such a manner as to ensure that the adjoining roads are kept clear of debris, soil and other material and cleaning works shall be carried on the adjoining public roads by the developer and at the developer's expense on a daily basis.

Reason: To protect the residential amenities of property in the vicinity.

13 A detailed schedule for the implementation of the landscaping scheme as set out in Appendix 10B to the EIAR 'Landscape Mitigation Strategy', dated January 2024, shall be submitted to and agreed in writing with the planning authority prior to the commencement of development

All planting shall be adequately managed maintained and protected from damage until established for a period 10 years as set out in the Maintenance Approach and Management Strategy.

Reason: In order to screen the development, in the interest of visual amenity.

14 The planning authority and the Department of Housing, Local Government and Heritage shall be furnished with a final archaeological report describing the results of the archaeological monitoring and any archaeological investigative work/excavation required, following the completion of all archaeological work on site and any necessary post-excavation specialist analysis. All resulting and associated archaeological costs shall be borne by the developer.

Reason: In order to ensure a record of all archaeological investigations associated with the proposed development is available on public record.

15 All plant and machinery used during the works should be thoroughly cleaned and washed before delivery to the site to prevent the spread of hazardous invasive species and pathogens.

Reason: In the interest of the proper planning and sustainable development of the area, and to prohibit the spread of invasive species.

16 Prior to commencement of development, the developer shall submit details of the means of the proposed water supplies to both the 220kV substation and the 400 kV substation.

Reason In the interest of clarity and of public health

17 Prior to commencement of development, the developer shall submit to the planning authority for written agreement, a plan indicating how local telecommunications signals related to the mast located south of the site the Power Plant will be maintained during the construction and operational phases of the development.

Reason: In the interest of maintaining uninterrupted telecommunications signals.

18 a) Details of the materials, colours and textures of all the external finishes to buildings, pipework, telecommunications masts, fencing and other structures associated with the proposed development hereby permitted shall be submitted to, and agreed in writing with the planning authority, prior to the commencement of development, and the agreed materials, colours and textures of all the external finishes shall be applied to the buildings and structures upon erection.
b) Details of a maintenance strategy for all external and materials finishes shall also be submitted to and agreed in writing with the planning authority, prior to the commencement of development.

Reason: In the interest of visual amenity, durability and to ensure a high standard of architectural design.

19 A low intensity fixed red obstacle light shall be fitted as close to the top as practicable of the masts at each of the 220kv and 400kv substations and at the top of the proposed stacks at the power plant and shall be visible from all angles in azimuth. Details of this light, its location and period of operation shall be submitted to, and agreed in writing with, the planning authority prior to commencement of development.

Reason: In the interest of public safety.

20 The developer shall notify the Irish Aviation Authority a minimum of 30 days in advance of the erecting of cranes at the site, and shall do so in advance of advance each element of the development if more than one carne is to be erected or operated within the overall site area and shall apply to both fixed and mobile cranes.

Reason: In the interest of public health and aviation safety

21 A detailed lighting plan for the construction and operational phases of the power plant, the 220kV and 400kV substations shall be submitted to and

agreed in writing with the planning authority prior to the commencement of development.

Reason: in the interest of residential amenity and to reduce the impact of the proposed development on nocturnal species.

22 Mitigation measures to safeguard bats shall be implemented in accordance with Terms and conditions of the Derogation licence (DER-BAT-2026-48) issued by the National Parks and Wildlife Service (NPWS) on the 22nd of January 2022 and received by the Commission on the 22nd of January 2026.

Reason: in the interest of public health and safety

23 Site development and building works shall be carried out only between the hours of 0700 to 1900 Mondays to Fridays inclusive, between 0800 to 1400 hours on Saturdays and not at all on Sundays or public holidays. Deviation from these times will only be allowed in exceptional circumstances where prior written approval has been received from the planning authority.

Reason: In order to safeguard the amenities of property in the vicinity.

24 Prior to commencement of development, the developer shall lodge with the planning authority a cash deposit, a bond of an insurance company, or such other security as may be acceptable to the planning authority, to secure the reinstatement of public roads which may be damaged by the transport of materials to the site, coupled with an agreement empowering the planning authority to apply such security or part thereof to the satisfactory reinstatement of the public road. The form and amount of the security shall be as agreed between the planning authority and the developer or, in default of agreement, shall be referred to An Bord Pleanála for determination.

Reason: To ensure that the public road is satisfactorily reinstated, if necessary.

25 The developer shall pay to the planning authority a financial contribution in respect of public infrastructure and facilities benefiting development in the area of the planning authority that is provided or intended to be provided by or on behalf of the authority in accordance with the terms of the Development Contribution Scheme made under section 48 of the Planning and Development Act 2000. The contribution shall be paid prior to the commencement of development or in such phased payments as the planning authorities may facilitate and shall be subject to any applicable indexation provisions of the Scheme at the time of payment. Details of the application of the terms of the Scheme shall be agreed between the planning authority and the developer or, in default of such agreement, the matter shall be referred to the Commission to determine the proper application of the terms of the Scheme.

Reason: It is a requirement of the Planning and Development Act 2000 that a condition requiring a contribution in accordance with the Development Contribution Scheme made under section 48 of the Act be applied to the permission.

I confirm that this report represents my professional planning assessment, judgement and opinion on the matter assigned to me and that no person has influenced or sought to influence, directly or indirectly, the exercise of my professional judgement in an improper or inappropriate way.

Joe Bonner
Senior Planning Inspector

13th of March 2026

Appendix 1 - Form 1 - EIA Pre-Screening

Case Reference	**ABP-319023-24**
Proposed Development Summary	Combined Cycle Gas Turbine and Open Cycle Gas Turbine Thermal Power Plant, Electricity Grid Connection including 2 no. substations, and associated buildings, plant, site works, service and ancillary development
Development Address	townlands Knockdrin, Derrygreenagh, Derryarkin, Derryiron, Ballybeg, Coolcor, Barrysbrook, Clonin, Togher and Coole, Co. Offaly
	In all cases check box /or leave blank
1. Does the proposed development come within the definition of a 'project' for the purposes of EIA? (For the purposes of the Directive, "Project" means: - The execution of construction works or of other installations or schemes, - Other interventions in the natural surroundings and landscape including those involving the extraction of mineral resources)	☒ Yes, it is a 'Project'. Proceed to Q2. ☐ No, No further action required.
2. Is the proposed development of a CLASS specified in Part 1, Schedule 5 of the Planning and Development Regulations 2001 (as amended)?	
☒ Yes, it is a Class specified in Part 1. **EIA is mandatory. No Screening required.**	Class 2 of Part 1 to Schedule 5 to the Planning and Development Regulations 2001 (as amended) *'A thermal power station or other combustion installation with a total energy output of 300 megawatts or more'*
☐ No, it is not a Class specified in Part 1. Proceed to Q3	
3. Is the proposed development of a CLASS specified in Part 2, Schedule 5, Planning and Development Regulations 2001 (as amended) OR a prescribed type of proposed road development under Article 8 of Roads Regulations 1994, AND does it meet/exceed the thresholds?	
☒ No, the development is not of a Class Specified in Part 2, Schedule 5 or a prescribed type of proposed road	

development under Article 8 of the Roads Regulations, 1994. **No Screening required.**	
☐ Yes, the proposed development is of a Class and meets/exceeds the threshold. **EIA is Mandatory. No Screening Required**	
☐ Yes, the proposed development is of a Class but is sub-threshold. **Preliminary examination required. (Form 2)** **OR** **If Schedule 7A information submitted proceed to Q4. (Form 3 Required)**	

4. Has Schedule 7A information been submitted AND is the development a Class of Development for the purposes of the EIA Directive (as identified in Q3)?	
Yes ☐	**Screening Determination required (Complete Form 3)**
No ☒	**Pre-screening determination conclusion remains as above (Q1 to Q3)**

Inspector: _____ Date: _____

DP/ADP: _____ Date: _____

(only where Schedule 7A information or EIAR required)

Appendix 2 - Screening for Appropriate Assessment -Test for likely significant effects

Step 1: Description of the project and local site characteristics
Case File: ABP-319023-24

Brief description of project	The proposed development would consist of a Combined Cycle Gas Turbine and Open Cycle Gas Turbine Thermal Power Plant, Electricity Grid Connection including 2 no. substations, and associated buildings, plant, site works, service and ancillary development. A detailed description of the proposed project is set out in section 2.0 of this report and I refer the Commission thereto for details of the proposal.
Brief description of development site characteristics and potential impact mechanisms	The proposed development consists of a number of separate but connected elements located in different locations over a site of 312ha that extends for c8.17km north to south in north east County Offaly. The proposed development consist of a 10-year planning permission to develop a Combined Cycle Gas Turbine ('CCGT') and Open Cycle Gas Turbine ('OCGT') Thermal Power Plant, Electricity Grid Connection including 2 no. substations, and associated buildings, plant, site works, services and ancillary development. Emissions from the PPA will be via a 60m high stack. The Power Plant Area would have a 39 month construction duration, while the electricity grid connection would have a construction duration of 33 months. The nearest European Site is located 7.1km southwest of the proposed PPA, with six sites located within 15km and two more sites

	hydrologically linked, but more than 25km downstream of the site. The proposed development relates to an activity requiring an Industrial Emission Licence and a submission from the EPA has been received in relation to the application. The development would also constitute an establishment for the purposes of the Chemicals Act (Control of Major Accident Hazards Involving Dangerous Substances) Regulations 2015 (S.I.209 of 2015) and submissions have been received in this regard from the HSA. Authorisation to construct a power plant, as well as a licence to generate electricity are required from the Commission for the Regulation of Utilities. As part of the licence approval, a Safety Case would also be required to be submitted for acceptance by the CRU. The development would be required to register with the EPA the material to be imported onto the lands, in accordance with Article 27 of the European Communities (Waste Directive) Regulations 2011, S.I. No. 126 of 2011. Potential impacts mechanisms are addressed in Table 2 below
Screening report	Yes. (Prepared by AECOM)
Natura Impact Statement	Yes. (Prepared by AECOM)
Relevant submissions	No issues raised
Step 2. Identification of relevant European sites using the source-pathway-receptor model Section 2 of the applicant's 'Appropriate Assessment Screening Report and Natura Impact Statement', sets out methodology used and explains how they established the Zone of Influence (ZoI) using the source-pathway-receptor approach. They note that all Designated Sites within 15km of the Proposed Development have been considered as a minimum and that any sites greater than 15km away which are hydrologically connected to the Proposed Development have also been considered, as well as those with or potential ecological pathways linking to the QIs / SCIs.	

Eight European sites were identified in section 3 of the AA screening Report which is described as 'Proposed Development Baseline Information' as being located within a potential zone of influence of the proposed development either due to proximity, hydrological linkage or potential ecological pathways linking to the QIs / SCIs. The sites are detailed in Table 1 below, and they also set out the potential linking impact pathways.

For an effect to occur, all three elements of this source-pathway-receptor mechanism must be in place and the absence or removal of one of the elements of the mechanism means there is no likelihood for an effect to occur.

I note that the Proposed Development is described is Section 3.1 as being 'both the Power Plant Area and the Electricity Grid'. The AA screening does not consider the proposed Gas Connection Corridor, which does not form part of the application.

Table 1

European Site (code)	**Qualifying interests[1] Link to conservation objectives (NPWS, date)**	**Distance from proposed development (km)**	**Ecological connections[2]**	**Consider further in screening[3] Y/N**
Lough Ennell SAC **(000685)**	• Hard oligo-mesotrophic waters with benthic vegetation of *Chara* spp. [3140] • Alkaline fens [7230] https://www.npws.ie/protected-sites/sac/000685 (July 2024)	10.2km northwest of Power Plant Area	No direct hydrological linkage with the Power Plant Area. Not inside its ZoI for water pollution. Pollution-sensitive habitats are present. Lies within the ZoI for atmospheric pollutants released from the operational stack.	Y
Lough Ennell SPA **(004044)**	• Pochard *Aythya ferina* [A059] • Tufted duck *Aythya fuligula* [A061] • Coot *Fulica atra* [A125] • Wetland and Waterbirds [A999] https://www.npws.ie/protected-sites/spa/004044 (May 2024)	10.8km northwest of PPA 11.1km northwest of EGC	No direct hydrological linkage with the Power Plant Area. Not inside its ZoI for water pollution SCI species in functionally linked habitats could be impacted by disturbance from	Y

			direct visual / noise disturbance impacts in the construction / operational / decommissioning phases. Any natural habitat within the Power Plant Area that is developed in the construction phase has the potential to result in the loss of functionally linked habitat, for mobile SCI species. Lies within the potential ZoI for atmospheric pollutants released from the operational stack, as well as the ZoI for dust deposition in construction / decommissioning phases. Mobile SCI species from the Lough Ennell SPA may routinely use functionally linked habitats around the Electricity Grid Connection for foraging, preening and loafing. SCIs foraging in the vicinity of or	

			traversing the Electricity Grid Connection are at risk of mortality from collision with powerlines.	
Raheenmore Bog SAC **(000582)**	• Active raised bogs [7110] • Degraded raised bogs still capable of natural regeneration [7120] • Depressions on peat substrates of the *Rhynchosporion* [7150] https://www.npws.ie/protected-sites/sac/000582 (November 2015)	7.1km southwest of PPA	Pollution-sensitive habitats are present and the site lies within the ZoI for atmospheric pollutants released from the operational stack.	Y
Split Hills and Long Hill Esker SAC **(001831)**	• Semi-natural dry grasslands and scrubland facies on calcareous substrates (*Festuco-Brometalia*) (* important orchid sites) [6210] https://www.npws.ie/protected-sites/sac/001831 (June 2018)	11.1km southwest of PPA	As above	Y
Mount Hevey Bog SAC **(002342)**	• Active raised bogs [7110] • Degraded raised bogs still capable of natural regeneration [7120] • Depressions on peat substrates of the *Rhynchosporion* [7150] https://www.npws.ie/protected-sites/sac/002342 (March 2016)	13.9km northeast of PPA	As above	Y
Wooddown Bog SAC **(0002205)**	• Degraded raised bogs still capable of natural regeneration [7120] https://www.npws.ie/protected-sites/sac/002205 (July 2023)	15km north of PPA	As above	Y
River Boyne and River Blackwater SAC **(002299)**	• Alkaline fens [7230] • Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion, Alnion incanae, Salicion albae*) [91E0]	16.6km northeast, >25km downstream of PPA	There is a direct hydrological link between both the PPA and the EGC and the SAC.	Y

	• River lamprey *Lampetra fluviatilis* [1099] • Salmon *Salmo salar* [1106] • Otter *Lutra lutra* [1355] https://www.npws.ie/protected-sites/sac/002299 (December 2021)	17.3km northeast, >25km downstream of EGC	The QI habitats and species are sensitive to waterborne pollution and spread of INNS (invasive non native species) arising in the construction and decommissioning phases (both within the designated site and functionally linked habitats). QI species utilising functionally linked habitats could be subject to indirect disturbance from visual / noise / vibration disturbance impacts. Pollution-sensitive habitats and species with indirect sensitivity are present. Lies within the potential ZoI for atmospheric pollutants released from the operational stack, as well as the ZoI for dust deposition in construction / decommissioning phases (to functionally linked habitats).	
River Boyne and River	• Kingfisher *Alcedo atthis* [A229]	16.6km northeast,	There is a direct hydrological link	Y

Blackwater SPA **(004232)**	https://www.npws.ie/protected-sites/spa/004232 (July 2024)	>25km downstream of EGC 17.3km northeast, >25km downstream of EGC	between the Power Plant Area and the EGC and the SPA. The SCI species of both the SAC and SPA are indirectly sensitive to waterborne pollution arising in the construction and decommissioning phases (both within the designated site and functionally linked habitats).	

[1] Summary description / **cross reference to NPWS website** is acceptable at this stage in the report
[2] Based on source-pathway-receptor: Direct/ indirect/ tentative/ none, via surface water/ ground water/ air/ use of habitats by mobile species
[3]if no connections: N

At this stage, none of the eight sites were excluded as the applicant took the approach of considering all possible impact source types and their applicability to the Power Plant Area and the Electricity Grid Connection respectively. For each impact source type, they then considered whether a pathway for an effect on European sites exists and the nature of any effect on relevant receptors, comprising QI, SCI or the ecological features/processes supporting them for which an impact pathway exists. This process effectively establishes the ZoI of the proposed development for each impact source, and any European sites (if any) within the ZoI.

The link between the site and five of the eight European sites is deemed to be on the basis that 'Pollution-sensitive habitats are present and the sites lie within the ZoI for atmospheric pollutants released from the operational stack'. The applicant notes that guidance from the UK, Environment Agency is that air quality impacts from stack emissions be assessed on European sites within 10km of a facility or 15km for major emitters defined as those with greater than 50 megawatt output, which would apply to the proposed development.

In table 2 below, all eight sites are listed.

Table 2

Site name **Qualifying interests**	**Possibility of significant effects (alone) in view of the conservation objectives of the site***	
	Impacts	**Effects**
Lough Ennell SAC **(Site Code 000685)**	PPA Construction Phase None PPA Operational Phase	PPA Construction Phase None PPA Operational Phase

• Hard oligo-mesotrophic waters with benthic vegetation of *Chara* spp. [3140] • Alkaline fens [7230]	QI habitats, or supporting habitats, of QI / SCI species. vulnerable to atmospheric nitrogen deposition, NOx and ammonia NH_3 (Airborne pollution impacts).	Annual average NH3 concentrations will exceed the most stringent critical level (1µgm-3) with or without the proposed development due to existing sources such as agriculture. However, it will not exceed 10% of the critical level of 1% annual average NH3 concentrations in combination effect with the Castlelost project (275M flexible gas plant c4.2km west of the Derrygreenagh site), which will be a maximum of 0.6% of the critical level. Therefore, the effect would not be significant.
Lough Ennell SPA **(004044)** • Pochard *Aythya ferina* [A059] • Tufted duck *Aythya fuligula* [A061] • Coot *Fulica atra* [A125] • Wetland and Waterbirds [A999]	<u>PPA Construction Phase</u> Disturbance of QI or SCI species as a result of increased noise, artificial lighting and/or the increased presence of personnel, plant and machinery both in designated site boundaries and functionally linked habitats. Loss of functionally linked Habitats <u>PPA Operational Phase</u> Disturbance of QI or SCI species as a result of increased noise, artificial lighting and/or the increased presence of personnel, plant and machinery both in designated site boundaries and functionally linked habitats.	<u>PPA Construction Phase</u> The SCI Tufted Duck is recorded in significant numbers in bogs adjacent to the PPA. Only one sixth of the Derryarkin bog would be temporarily unavailable to the Tufted duck, with large areas in other nearby bogs also available. Tufted duck is a common and widespread species in Ireland that is not only associated with SPAs. They typically feed 500m to 2km from their roost, while the site is 10.8km away. No impact anticipated. No effect anticipated due to separation distance and normal foraging range of Tufted Duck. <u>PPA Operational Phase</u> No effect anticipated as it is unlikely that any tufted duck recorded at the bog are part of the SPA population (as this is a common and widespread species of waterfowl, not just found in SPAs but across waterbodies in Ireland), and there are many alternative waterbodies in the wider geographic area.

	QI habitats, or supporting habitats, of QI / SCI species. vulnerable to atmospheric nitrogen deposition, NOx and ammonia (Airborne pollution impacts).	Stack Emissions - The three SCI species in the Lough Ennell SPA are not considered to be sensitive to stack emissions from the proposed development. Dust Emissions – The habitats within and immediately surrounding the Power Plant Area that could support SCI species are not sensitive to dust or other airborne pollutants in such a way that they would become unsuitable for these species.
	<u>EGC Construction Phase</u> Disturbance of QI or SCI species as a result of increased noise, artificial lighting and/or the increased presence of personnel, plant and machinery both in designated site boundaries and functionally linked habitats.	<u>EGC Construction Phase</u> All bog habitat in the vicinity of the Electricity Grid Connection is potentially suitable for tufted duck, pochard and coot (SCI species in the Lough Ennell SPA). They have recorded maximum foraging distances of 500m and the closest point of the EGC lies over 10km from the Lough Ennell SPA. The works will be limited in duration and staged, with abundant alternative pools and lakes in nearby bogs available for buffering any temporary displacement. No significant effect anticipated.
	Loss of functionally linked Habitats	Due to the separation distance from the SPA and the foraging range of the SCIs, the Tufted Duck and Coot recorded within the site are unlikely to be part of the SPA population and any functional habitat loss needs to be considered in the context of numerous undisturbed lakes and ponds in the bog landscape, which will continue to provide suitable supporting habitat of the SCI birds.
	Airborne pollution impacts on QI habitats, or supporting	The habitats within and immediately surrounding area

	habitats, of QI / SCI species.	that could support SCI species are not sensitive to dust or other airborne pollutants in such a way that they would become unsuitable for these species.
	<u>EGC Operational Phase</u> Mortality and injury from collision/electrocution with overhead lines; disturbance and displacement in proximity to overhead lines.	<u>EGC Operational Phase</u> None of the three species in the Lough Ennell SPA have high wing loadings and are, therefore, expected to show good evasive action when needed. Derryarkin and Ballybeg Bogs were covered in the wintering bird survey and Tufted Duck were recorded on the Roadstone Quary pond. The 220kV Overhead Line has the potential to result in collision injury / mortality of tufted duck for which the SPA is designated. SCI bird species may be displaced from suitable habitat by the proximity to the overhead lines. The actual number of collisions is likely to be limited, and combined with the small number of birds likely to be present in or commuting through the area around the Electricity Grid Connection. Further assessment is recommended on a precautionary basis.
	Disturbance of QI or SCI species as a result of increased noise, artificial lighting and/or the increased presence of personnel, plant and machinery both in designated site boundaries and functionally linked habitats.	Limited operational maintenance would have no effect on SCI species. Limited routine inspections and maintenance, which will be carried out during the day would not cause any material disturbance to nocturnal otter.
	Airborne pollution impacts on QI habitats, or supporting habitats, of QI / SCI species.	The habitats the could support SCI species are not sensitive to dust or other riparian pollutants.

Raheenmore Bog SAC **(Site Code 000582)** • Active raised bogs [7110] • Degraded raised bogs still capable of natural regeneration [7120] • Depressions on peat substrates of the *Rhynchosporion* [7150]	PPA Construction Phase None PPA Operational Phase QI habitats, or supporting habitats, of QI / SCI species. vulnerable to atmospheric nitrogen deposition, NOx and ammonia (Airborne pollution impacts).	PPA Construction Phase None PPA Operational Phase Annual average No_x concentrations will remain below the critical level together with the Castlelost project (as per the air quality modelling), with the Predicted Environmental Concentration or PEC being a maximum of 13.8% of the critical level. The short term NO_X concentrations will be a maximum of 11.9% of the critical level. Since the critical level will not be exceeded, no likely significant effect will arise from NO_X. It is therefore possible to conclude that no likely significant effect will arise on any European sites from stack emissions of the proposed Development.
Split Hills and Long Hill Esker SAC **(Site Code 001831)** • Semi-natural dry grasslands and scrubland facies on calcareous substrates (*Festuco-Brometalia*) (* important orchid sites) [6210]	Same as above	Same as above
Mount Hevey Bog SAC **(Site Code 002342)** • Active raised bogs [7110] • Degraded raised bogs still capable of natural regeneration [7120] • Depressions on peat substrates of the *Rhynchosporion* [7150]	Same as above	Same as above
Wooddown Bog SAC **(Site Code 002205)** • Degraded raised bogs still capable of natural regeneration [7120]	Same as above	Same as above

River Boyne and River Blackwater SAC **(Site Code 002299)** • Alkaline fens [7230] • Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion, Alnion incanae, Salicion albae*) [91E0] • River lamprey *Lampetra fluviatilis* [1099] • Salmon *Salmo salar* [1106] • Otter *Lutra lutra* [1355]	<u>PPA Construction Phase</u> Waterborne pollution impacts on QI habitats, or supporting habitats, of QI / SCI species.	<u>PPA Construction Phase</u> Soil / sediment, toxic and non-toxic fuel / oil spills and runoff could change water quality, smothering riverbeds, plants and habitats, and causing physical and physiological adverse impacts on aquatic organism. Metals, oils, fuels and construction materials could have lethal and sub-lethal effects on aquatic organisms and impact water pH, which may affect habitats such as alkaline fens.
	Disturbance of QI or SCI species as a result of increased noise, artificial lighting and/or the increased presence of personnel, plant and machinery both in designated site boundaries and functionally linked habitats	Otter, which have extensive home ranges, are likely to commute along and forage within the watercourses for which the discharge pipeline from the Power Plant Area would be located in the Mongagh River.
	Spread of invasive non-native species (INNS).	Potential to facilitate the dispersal of INNS through the introduction of seeds and plant fragments transported by construction machinery and clothing / footwear of construction workers, including from discharge pipe into the Mongagh / Castlejordan River.
	<u>PPA Operational Phase</u> Disturbance of QI or SCI species as a result of increased noise, artificial lighting and/or the increased presence of personnel, plant and machinery both in designated site boundaries and functionally linked habitats.	<u>PPA Operational Phase</u> Otter may commute and forage along nearby watercourses, but at a distance of 530m from the main PPA there is no potential for impact.
	Waterborne pollution impacts on QI habitats, or supporting habitats, of QI / SCI species.	There is potential for operational waterborne pollution generated in the PPA, for example through accidental

		distillate fuel spillages from the proposed tanks and pipeline, to enter local watercourses. The impacts described above for the construction phase could also occur from pollutants / sediment, metals, oils and fuel spills.
	Airborne pollution impacts on QI habitats, or supporting habitats, of QI / SCI species.	Dust Emissions - None of the waterbodies in close proximity to the PPA, that are in hydrological connectivity with the River Boyne and River Blackwater SAC and are potential functionally linked habitat for QI species, lie within the relevant 50m screening distance from the Power Plant Area for negative dust impacts.
	<u>EGC Construction Phase</u> Waterborne pollution impacts on QI habitats, or supporting habitat, of QI / SCI species.	<u>EGC Construction Phase</u> There are several hydrological connections via the Yellow River (Castlejordan) and Castletown Tara Stream. The QI species (river lamprey, atlantic salmon, otter) routinely range beyond designated site boundaries and can be impacted through water quality changes in functionally linked habitats. Requires further assessment.
	Disturbance of QI or SCI species as a result of increased noise, artificial lighting and/or the increased presence of personnel, plant and machinery both in designated site boundaries and functionally linked habitats. Airborne pollution impacts on QI habitats, or supporting habitats, of QI / SCI species.	Otter may commute along and forage within the watercourses, traversing the ECG. Access routes do not lie within the 50m screening distance for dust generation from the relevant waterbodies (River Yellow (Castlejordan) and Castletown Tara Stream) that are likely to be functionally linked to the River Boyne and River Blackwater SAC. Construction traffic will also be

		well below the threshold of 100 AADT that is used to screen development projects.
	EGC Operational Phase Pollutants in Surface water runoff could enter watercourses which traverse the EGC, eventually reaching the SAC.	EGC Operational Phase Operational vehicle movements within the EGC is likely to be minimal with substations being unmanned and periodic inspection / maintenance activities being restricted to 1 – 2 staff. This can be screened out as dust generation is likely to be exceedingly low and will not cause material ecological impacts.
River Boyne and River Blackwater SPA (Site Code 004232) • Kingfisher Alcedo atthis [A229]	PPA Construction Phase Waterborne pollution impacts on QI habitats, or supporting habitats, of QI / SCI species**.** Spread of invasive non-native species (INNS).	PPA Construction Phase Could have an effect on birds who forage on various species of small fish in slow moving clean rivers. Potential to facilitate the dispersal of INNS through the introduction of seeds and plant fragments transported by construction machinery and clothing / footwear of construction workers, including from discharge pipe into the Mongagh / Castlejordan River.
	PPA Operational Phase Waterborne pollution impacts on QI habitats, or supporting habitats, of QI / SCI species.	PPA Operational Phase Potential water quality impacts generated in the PPA, through accidental distillate fuel spillages entering local watercourses from the proposed tanks and pipelines are screened into the more detailed Stage 2 (NIS) on a precautionary basis.
	EGC Construction Phase Waterborne pollution impacts on QI habitats, or supporting habitat, of QI / SCI species.	EGC Construction Phase Same as PPA construction phase.
	EGC Operational Phase Pollutants in surface water runoff could enter watercourses	EGC Operational Phase The SPA is designated for Kingfisher. Due to the long distance to the EGC (over

	which traverse the EGC, eventually reaching the SPA.	25km), the scale and nature of surface water runoff and the potential for pollution or sediment runoff from operational site traffic on the Electrical Grid Connection, water pollution impacts on this species are screened out.
	Airborne pollution impacts on QI habitats, or supporting habitats, of QI / SCI species.	The total number of operational vehicle movements within the EGC is likely to be minimal, with substations being unmanned and periodic inspection / maintenance activities being restricted to 1 – 2 staff. Any resulting dust generation is likely to be exceedingly low and will not cause material ecological impacts.
	Likelihood of significant effects from proposed development (alone): **Yes**	
	If No, is there likelihood of significant effects occurring in combination with other plans or projects?	

Step 4 Conclude if the proposed development could result in likely significant effects on a European site

Based on the information provided in the Appropriate Assessment Screening Report, the site visit, and a review of the conservation objectives of European Sites and supporting documents, I consider that in the absence of mitigation measures beyond best practice construction methods, the proposed development has the potential to result in significant effects on the SCIs and QI's of 1) Lough Ennell SPA (004044); 2) River Boyne and River Blackwater SAC (Site Code 002299); and 3) River Boyne and River Blackwater SPA (Site Code 004232).

I concur with the applicant's findings that such impacts could be significant in terms of the stated conservation objectives of the three above named sites when considered on their own in relation to pollution related pressures and disturbance on QI's and SCIs.

It is not possible to exclude the possibility that proposed development alone would result in significant effects on the 1) Lough Ennell SPA (004044); 2) River Boyne and River Blackwater SAC (Site Code 002299); and 3) River Boyne and River Blackwater SPA (Site Code 004232) from effects associated with the construction of the proposed Power Plant Area and Electrical Grid Connection.

An appropriate assessment is required on the basis of the possible effects of the project 'alone.' Further assessment in-combination with other plans and projects is not required at screening stage.

With respect to the five other sites 1) Lough Ennell SAC (Site Code 000685); 2) Raheenmore Bog SAC (Site Code 000582); 3) Split Hills and Long Hill Esker SAC (Site Code 001831); 4) Mount Hevey Bog SAC (Site Code 002342) and 5) Wooddown Bog SAC (Site Code 002205), which were initially considered in the AA on the basis that 'Pollution-sensitive habitats are present and the sites lie within the ZoI for atmospheric pollutants released from the operational stack'. Having assessed them further in Table 2 above, I am satisfied that it is possible to conclude that no likely significant effects would arise on any of the five sites from stack emissions and no further assessment is necessary.

Significant effects cannot be excluded

In accordance with Section 177U of the Planning and Development Act 2000 (as amended) and on the basis of the information considered in this AA screening report, I conclude that it is not possible to exclude that the proposed development alone will give rise to significant effects on 1) Lough Ennell SPA (004044); 2) River Boyne and River Blackwater SAC (Site Code 002299); and 3) River Boyne and River Blackwater SPA (Site Code 004232) in view of the sites conservation objectives. Appropriate Assessment is required.

This determination is based on:

- The nature and scale of the proposed development/works.
- The hydrological connectivity between the application site and 1) River Boyne and River Blackwater SAC (Site Code 002299); and 2) River Boyne and River Blackwater SPA (Site Code 004232) and the potential for significant effects on QI habitats and QI species, by way of pollution, deterioration of water quality and damage of foraging habitats and species, and the spread of invasive non-native species.
- The potential for SCI's from Lough Ennell SPA (004044) to collide with the proposed overhead lines or to be displaced as a result of the overhead lines;
- The potential for ex-situ disturbance impacts on QI otter populations.

Appendix 3 - AA and AA Determination

The application includes an 'Appropriate Assessment Screening Report and Natura Impact Statement (NIS)' prepared by AECOM dated January 2024. The Screening for Appropriate Assessment is addressed in Appendix 2 above and the Appropriate Assessment and AA Determination are set out below.

Appropriate Assessment and AA Determination
The requirements of Article 6(3) as related to appropriate assessment of a project under part XAB, sections 177V of the Planning and Development Act 2000 (as amended) are considered fully in this section.

The proposed development is described in detail Section 2.0 of this inspector's report and in Section 1.2 of the 'Appropriate Assessment Screening Report Natura Impact Statement'. In summary, it would consist of a Combined Cycle Gas Turbine ('CCGT' - 540MW output) and Open Cycle Gas Turbine ('OCGT' – 170MW output) Thermal Power Plant, Electricity Grid Connection over 8km in extent, including 2 no. substations, and associated buildings, plant, site works, services and ancillary development.
 	
Taking account of the preceding screening determination, the following is an appropriate assessment of the implications of the proposed development, in view of the relevant conservation objectives of 1) Lough Ennell SPA (004044); 2) River Boyne and River Blackwater SAC (Site Code 002299); and 3) River Boyne and River Blackwater SPA (Site Code 004232) based on scientific information provided by the applicant.
 	
The information relied upon includes the following:
• Natura Impact Statement prepared by AECOM and all its appendices
  • Appendix A - Figures
  • Appendix B - Baseline Site Environment
  • Appendix C - Wintering Birds Survey Reports
  • Appendix D - Aquatic Baseline Report
  • Appendix E - Air Quality Modelling Data
  • Appendix F - Proposed Development and Overall Project
  • Appendix G - Traffic
  • Appendix H - Construction Environmental Management Plan (CEMP)
  Construction Traffic Management Plan
  Peat and Soil Management Plan (PSMP)
• Environmental Impact Assessment Report prepared by AECOM (and its appendices)
• Offaly County Development Plan 2021-2027
• Westmeath County Development Plan 2021-2027

I am satisfied that the information provided by the applicant is adequate to allow for the carrying out of an Appropriate Assessment. I am also satisfied that all aspects of the project which could result in significant effects are considered and assessed in the NIS and mitigation measures designed to avoid or reduce any adverse effects on site integrity are included and assessed for effectiveness.

Submissions/observations

No issues relating to Appropriate Assessment were raised in the submissions from Offaly County Council, prescribed bodies or members of the public.

NAME OF SAC / SPA (SITE CODE):

1) River Boyne and River Blackwater SAC (Site Code 002299); and

2) River Boyne and River Blackwater SPA (Site Code 004232)

Summary of Key issues that could give rise to adverse effects (from screening stage):

Construction and Decommissioning Phases

(i) Water Quality – Power Plant Area & Electricity Grid Connection

(ii) Visual and noise disturbance – Power Plant Area & Electricity Grid Connection

(iii) Spread of invasive non-native species – Power Plant Area & Electricity Grid Connection

Operational Phase

(iv) Water quality – Power Plant Area

3) Lough Ennell SPA (004044)

Operational Phase

(v) Collision with powerlines – Electricity Grid Connection

See Section 5 in NIS

Qualifying Interest features likely to be affected	**Conservation Objectives Attributes and Targets**	**Potential adverse effects** NIS Sections 5.1 and 5.2	**Mitigation measures (summary)** NIS Sections 5.1 and 5.2
River Boyne and River Blackwater SAC (Site Code 002299)			
Alkaline fens [7230]	Objective Maintain favourable conservation condition Attribute – Target • Habitat area – Stable or increasing • Habitat distribution – No decline Ecosystem Function • Soil nutrients – Maintain pH • Peat Formation – Maintain active formation	**Construction and Decommissioning Phases** Water Quality All QI species depend on adequate water quality through all stages of their life cycle so the release of soils and sediments, potential spillage of oils,	None specific to alkaline fens

	• Groundwater levels – Maintain or restore to support habitat • Surface water flow – Maintain or restore • Water quality – Maintain adequate quality <u>Vegetation Composition</u> • Community diversity – Maintain variety • Typical brown mosses – Maintain adequate cover • Typical vascular plants – Maintain adequate cover • Native negative indicator species – Cover at insignificant levels • Non-native species – cover less than 1% • Native trees and shrubs – Cover less than 10% • Algal cover – Cover less than 2% <u>Vegetation Structure</u> • Vegetation height – at least 50% of live leaves / flowers more than 5 or 15cm above ground, based on type <u>Physical Structure</u> • Disturbed bare ground – cover not more than 10% • Tufa formations – disturbed proportion of cover less than 1%, where tufa present. • Indicators of local distinctiveness – No decline in distribution of rare or threatened species • Transitional areas between fen and adjacent habitats – Maintain adequate areas to support /protect alkaline fen ecosystem.	fuels or other construction chemicals, mobilisation of contaminants following disturbance to ground, or uncontrolled site run-off. Toxic and non-toxic pollutants, would have potential adverse effects. <u>Spread of invasive non-native species</u> Invasive species can be introduced into a location by contaminated plant, machinery and equipment which were previously used in locations that contained invasive species.	CEMP includes multiple mitigation measures. Invasive Species Action Plan to be implemented during construction. Plant and machinery will be inspected upon arrival and departure from site and cleaned / washed as necessary. Site hygiene signage will be erected.
Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion, Alnion incanae, Salicion albae*) [91E0]	<u>Objective</u> Restore favourable conservation condition <u>Attribute – Target</u> • Habitat areas – Stable or increasing • Habitat distribution – No decline • Woodland Size – stable or increasing <u>Woodland structure</u> • Cover and height – canopy cover at least 30% • Community diversity and extent – Maintain		

	• Natural regeneration – adequate seedlings, saplings and age of target species • Dead wood – At least 19 stems per ha of 20cm diameter • Veteran Trees – No decline • Indicators of local woodland distinctiveness – No decline in red listed, rare or localised species. • Indicators of overgrazing – all five indicators of overgrazing absent <u>Hydrology</u> • Flooding depth/height of water table – Appropriate regime for maintenance of alluvial vegetation <u>Vegetation composition</u> • Native tree cover – No decline • Typical species – at least 1 target species present and 6 positive indicator species present • Negative indicator species – species cover not greater than 10%		
River lamprey Lampetra fluviatilis [1099]	<u>Objective</u> Restore favourable conservation condition <u>Attribute – Target</u> • Distribution – restore access to all water courses to first order streams • Distribution of larvae – not less than 50% of sample sites with suitable habitat positive for larval lamprey • Population structure of larvae – at least 3 age/size classes present • Larvae density in fine sediment – Mean density in sites with suitable habitat more than $5m^2$ • Extent and distribution of spawning nursery habitat – No decline	**Construction and Decommissioning Phases** <u>Water Quality -</u> River lamprey and Atlantic salmon depend on rivers being in good hydrochemical condition along the entire river continuum from estuaries to spawning grounds. Large-scale release of fuels, oils and solvents and sedimentation could smother spawning gravels and nursery silts, affect reproduction and BOD, changing floral and faunal community composition, both of which are important in maintaining River Lamprey and Atlantic salmon populations.	<u>Water Quality -</u> Best practice pollution prevention measures set out in a live CEMP to implement the environmental commitments, which are set out in the EIAR and this NIS and any conditions. A Pollution Prevention Plan will be prepared. Reporting of environmental practice on-site, toolbox talks, daily briefings, an environmental notice, and signage, including
Salmon Salmo salar [1106]	<u>Objective</u> Restore favourable conservation condition <u>Attribute – Target</u> • Distribution – 100% of river channels down to second order available from estuary.		

	• Adult spawning fish – Conservation limit consistently exceeded • Fry abundance – Maintain or exceed abundance threshold. • Out migration smolt abundance – No significant decline. • No and distribution of redds – No decline due to anthropogenic causes • Water quality – At least Q4 water quality	Extreme pollution events can hinder access to preferred spawning grounds **Operational Phase (PPA)** <u>Water Quality -</u> Release of toxic and non-toxic pollutants, via foul wastewater discharge and surface water runoff (including accidental distillate fuel spillages from the proposed tanks and pipelines) may impact adjoining watercourses. All QI species in the SAC depend on adequate water quality through all stages of their life cycle.	ecological exclusion areas; All construction personnel to be made aware of sensitive ecological features present, general working procedures and mitigation measures.. No materials to be used that could lead to run-off containing heavy metals, sulphides, acids and fine clays. <u>Water Quality -</u> The CEMP will include a Pollution Prevention Plan (PPP), best practice to ensure no material aquatic pollution of surface waters and any downstream European sites, and the use of SuDs during the operational phase. CEMP will be updated to reflect any planning conditions imposed.
Otter *Lutra lutra* [1355]	<u>Objective</u> Maintain favourable conservation condition <u>Attributes</u> • Distribution • Extent of terrestrial, marine and river habitat • Couching sites and holts • Available fish biomass	**Construction and Decommissioning Phases** <u>Water Quality</u> Potential oil / fuel spillages, radioactivity, heavy metals, pesticides and polychlorinated biphenyl compounds	As per Water Quality mitigation for salmon and otter above for construction and demolition phase.

	The Target for all the above is – no significant decline Attribute – Target • Barriers to connectivity – no significant increase	[PCBs]), potential toxic spillages would have direct impacts. Visual and noise disturbance - Highly disturbing construction noise (arising from driven / impact piling) is assumed to have disturbance potential up to 100m from where it is carried out. No signs of otter were found near the proposed discharge point on the Mongagh / Castlejordan River, during aquatic ecology baseline surveys, while two signs of otter were recorded in watercourses traversing the Electricity Grid Connection. One potential holt last uses in 2022/23 was noted just outside the ECG boundary. Due to abundant and healthy fish populations, the Yellow River, and associated small streams and ditches are deemed to be generally suitable to otter and construction works in the PPA and EGC may temporarily disturb commuting / foraging otter, where they are undertaken within 30m of the Mongagh/Castlejordan River, Yellow River and Castletown Tara Stream.	Visual and noise disturbance – Elements of CEMP include: Construction works limited to daytime hours when the nocturnal Otter is least active. Cut off lantern lighting, will be kept to essential locations only with minimum brightness and power ratings. Drainage and attenuation ducts will restrict otter entry. Excavations near riverbanks will either be covered or fenced off at the end of each working day or include a means of escape for trapped animals.

		Piling and other construction activities will be involved in the construction of the 19 220kV pylon towers and 400kV loop-in substation, potentially within 100m of main watercourses. This requires mitigation. **Operational Phase** Water Quality - As per River lamprey and Salmon above	Water Quality - As per River Lamprey and Salmon above.
River Boyne and River Blackwater SPA (Site Code 004232)			
Qualifying Interest features likely to be affected	**Conservation Objectives** **Attributes and Targets**	**Potential adverse effects** NIS Sections 5.1 and 5.2	**Mitigation measures (summary)** NIS Sections 5.1 and 5.2
Kingfisher Alcedo atthis [A229]	Objective Maintain favourable conservation condition Attribute – Target • Population size – No significant decline in the long term • Productivity rate – sufficient to maintain population as stable or increasing • Spatial distribution of territories – No significant long term loss other than that occurring due to natural patterns of variation • Extent and quality of nesting banks – Sufficient area • Forage spatial distribution, extent, abundance and availability – sufficient locations, area and biomass to support population target • Water quality – overall good-high quality	**Construction and Decommissioning Phases** Water Quality Requires clean water in which to forage on various species of small fish (stickleback, minnow, chub). Species depend on adequate water quality through all stages of their life cycle so release of soils and sediments, potential spillage of oils, fuels or other construction chemicals, mobilisation of contaminants following disturbance to ground, or	Water Quality - Same as for River Boyne and River Blackwater SAC above.

	• Barriers to connectivity – no significant increase • Disturbance to breeding sites – levels that do significantly impact on breeding	uncontrolled site run-off. Toxic and non-toxic pollutants, would have potential adverse effects. <u>Spread of invasive non-native species</u> **Operational Phase** <u>Water Quality</u> - Kingfisher requires clean water in which to forage on various species of small fish (stickleback, minnow, chub). Release of toxic and non-toxic pollutants, via foul wastewater discharge and surface water runoff (including accidental distillate fuel spillages from the proposed tanks and pipelines) may impact adjoining watercourses.	<u>Spread of invasive non-native species</u> - Same as for River Boyne and River Blackwater SAC above <u>Water Quality</u> - Same as for River Boyne and River Blackwater SAC above.
Lough Ennell SPA (004044)			
Qualifying Interest features likely to be affected	**Conservation Objectives Attributes and Targets**	**Potential adverse effects** NIS Section 5.2.2	**Mitigation measures (summary)** NIS Section 5.2.2
Pochard *Aythya ferina* [A059]	<u>Objective</u> Restore favourable conservation condition <u>Attribute – Target</u> • Winter population trend – long term trend stable / increasing • Winter spatial distribution – sufficient available areas to support population target	No Pochard recorded during the wintering bird surveys and the vantage point surveys in the collision risk zone did not record any flight activity. There is still potential for bird strikes of the proposed overhead lines,	As good practice, to minimise risk of collision and electrocution of birds, transmission lines will be fitted with devices

	• Disturbance at wintering site – not to significantly impact population • Barriers to connectivity and site use – do not significantly affect access to SPA or other ecologically important sites outside the SPA • Forage spatial distribution, extent and abundance – sufficient locations and biomass available to support population target • Roost spatial distribution and extent – sufficient roosting habitats areas available	even though there is no evidence that the overhead line route represents functionally-linked habitat to any SPA.	such as flight diverters, hanging tags, and marker spheres, to make them more visible to flying birds. Adequate marking of power lines may reduce collision mortality by up to 78% compared to unmarked sites.
Tufted duck *Aythya fuligula* [A061]	Objective Restore favourable conservation condition Attribute – Target • Same as Pochard (see above)	None, as it is deemed unlikely that the tufted duck recorded on the roadstone quarry pond on two separate occasions and the assemblage recorded on Derryarkin Bog in the EGC area, is part of the designated SCI population in the Lough Ennell SPA, as designated sites for most wintering birds are likely to be associated with maximum foraging distances of between 500m and 2km from the SPA There is still potential for bird strikes of the proposed overhead lines, even though there is no evidence that the overhead line route represents functionally-linked habitat to any SPA.	
Coot *Fulica atra* [A125]	Objective Maintain favourable conservation condition Attribute – Target • Same as pochard (see above)	As per Pochard above	

Wetland and Waterbirds [A999]	Objective Maintain favourable conservation condition Attribute – Target • Habitats area – No significant loss • Wetland habitat quality and functioning – No significant impact other than from natural patterns of variation	There is still potential for bird strikes of the proposed overhead lines, even though there is no evidence that the overhead line route represents functionally-linked habitat to any SPA.	

The above table is based on the documentation and information provided by the applicant and I am satisfied that the submitted NIS has identified the relevant attributes and targets of the Qualifying Interests and SCIs of the three European sites.

Assessment of issues that could give rise to adverse effects view of conservation objectives

With respect to each of the matters addressed below, I note that none of the submissions on the application, having reviewed the NIS, raises any concerns in respect of the potential for the development to cause significant negative effects on the ecology or that it would represent a significant threat to protected or qualifying species of the nearby or hydrologically linked SACs or SPA's.

Construction and Decommissioning Phases

(i) Water Quality – Power Plant Area & Electricity Grid Connection

The potential for water quality impacts would arise is the case of the River Boyne and River Blackwater SAC (002299) and River Boyne and River Blackwater SPA (004232) both of which are hydrologically connected to the site but at a significant separation distance of c25km, which would offers potential for significant dilution of any potential pollutants.

Mitigation measures and conditions

I am satisfied that the application includes a comprehensive range of mitigation measures through the design of the development as well as specific measures for the construction, operational and decommissioning phases of the development as outlined in the NIS, the EIAR, and the CEMP that would include a specific Pollution Prevention Plan, while all workers would be made aware of sensitive ecological features through talks and signage. I am satisfied that the proposed measures would ensure that any emissions to surface water would not affect the downstream water quality in the European Sites.

Accordingly, the proposed mitigation measures are considered adequate to ensure that the integrity of the River Boyne and River Blackwater SAC (002299) and River Boyne and River Blackwater SPA (004232) would not be affected. The proposed mitigation measures should be applied as a condition of any grant of permission issued.

(ii) Visual and noise disturbance – Power Plant Area & Electricity Grid Connection

This potential impact refers specification to the Otter associated with the River Boyne and River Blackwater SAC (002299), which may be impacted by noise associate with piling at the PPA, the pylon towers and the 400kV substation, where the works are carried out within 100m of the Mongagh or Castlejordan Rivers.

Mitigation measures and conditions

The proposed Mitigation measures would include limiting works to daytime hours, when otter us least active, using lighting only where necessary, restricting access to drainage and attenuation ducts and fencing off work areas outside of work area hours.

Taking into consideration that the majority of the works would be carried out at a distance from the above mentioned waterbodies, the proposed mitigation measures are adequate to ensure that SCI species would not be significantly affected.

As stated previously in paragraph 16.8.20 in my 'Analysis, Evaluation and Assessment of Direct and Indirect Effects' on biodiversity, and due to the limited potential for effects on Otter, I am satisfied that the potential impacts on otter exclude a requirement for the seeking or issuing of a derogation licence at this time under the requirements of Regulation 54 of the European Communities (Birds and Natural Habitats) Regulations 2011-2021.

(iii) Spread of invasive non-native species – Power Plant Area & Electricity Grid Connection

Invasive species could be introduced by contaminated plant, machinery and equipment, that were previously used in locations that contained invasive species.

Mitigation measures and conditions

An Invasive Species Action Plan would be implemented during construction to ensure adequate mitigation measures to address any invasive species issues that may arise.

The proposed mitigation measure is considered adequate to ensure that the integrity of European sites would not be significantly affected.

Operational Phase

(iv) Water quality – Power Plant Area

The potential impacts are similar to the construction and decommissioning phases which included various pollutants entering the watercourses and eventually entering the River Boyne and River Blackwater SAC (002299) and River Boyne and River Blackwater SPA (004232).

Mitigation measures and conditions

The PPA would be the subject of a IPPC licence and discharges to surface water would be controlled under the terms of that licence.

For the remained of the development, the CEMP would include a specific Pollution Prevention Plan, as well as the use of SuDS measures during the operational phase of the development, which would be adequate to ensure that the integrity of European sites would not be significantly affected.

Operational Phase

(v) Collision with powerlines – Electricity Grid Connection

The potential impacts relates to qualifying interests of the Lough Ennell SPA (004044) which lies 10.8km northwest of the PPA and 11.1km north west of the Electricity Grid Connection.

Mitigation measures and conditions

While it was concluded that the foraging range of the species associated with Lough Ennell SPA is between 500m and 2km and the SPA lies between 10.8km to 11.1km from the application site and the birds recorded during the bird surveys are unlikely to be those associated with the SPA, nevertheless mitigation has been proposed in order to avoid or reduce the potential for bird strikes of overhead powerlines. The mitigation would take the form of the overhead lines being fitted with markers to make the more visible to flying birds, which is deemed to reduce collision mortality by up to 78% compared to unmarked lines.

Taking into account the scale of the development and the distance between the proposed overhead lines and Lough Ennell SPA the proposed mitigation measures are considered adequate to ensure that the integrity of European sites would not be significantly affected.

In-combination effects

The applicant carried out an in combination assessment in section 6.0 of the NIS, which included an assessment of the separate elements of the overall project, being the Power Plant Area, Electricity Grid Connection and Gas Connection Corridor, as well as other significant projects within 2km of the site, during the construction, operation, and decommissioning phases.

The applicant has demonstrated satisfactorily that no significant residual effects will remain post the application of mitigation measures and there is therefore no potential for in-combination effects, between the individual elements of the proposed development being the Power Plant Area, Electricity Grid Connection and Gas Connection Corridor. It notes that the Gas Connection Corridor will be subject to separate consenting applications which will be made by GNI and it would need to deliver similar mitigation to protect European sites and ensure that no residual in-combination effects are present.

Similarly, with respect to other project, five projects were identified that could have in combination effects together with the overall project. The construction of the 275MW LEL Castlelost GIS Gas turbine project is completed as of 2025 (Ref. PL2/21/515), while the proposed importation of soil and stone on a site in close proximity to the site of the PPA was refused permission in 2024 under P.A. Reg. Ref. 23/277. An application for a proposed sand and gravel pit was withdrawn (P.A. Reg. Ref, 22/60051). The fourth application related to an existing operational biomass facility, to the north of the PPA site where 6km of linear log storage space with capacity equating to 31,320 tonnes of wet logs may be stored until the 31st of December 2030. The final application referenced was a wind monitoring mast under P.A. Reg. Ref 19/176. The NIS concluded that as there are no anticipated significant risks from the proposed development or other plans or projects, that there would be no significant in-combination impacts which pose a significant risk to European sites.

Section 3 of this report sets out a comprehensive planning history of the wider area and a number of applications, which are not referenced in the AA screening or were submitted after this application was submitted to the Commission, but have been granted permission

could be considered relevant. In particular I note that a solar farm is under construction as of March 2026 at the Rhode Green Energy Park, but would be completed by the time that this project would commence and would not act in combination.

Since this application was submitted, permission has been granted within the Rhode Energy Park for the construction of 2 no. 500m x 120m x 34m high domes to store carbon dioxide as a means of generating electricity. In granting permission under P.A,. Reg. Ref. 24/60289 Offaly County Council conclude that a screening exercise for an Appropriate Assessment has been carried out and it has been deemed that the development is unlikely to have significant effects on any European sites..

I am satisfied that in-combination effects has been assessed adequately in the NIS and I a further satisfied that that there would be no significant in-combination impacts which pose a significant risk to any European site, either as part of the overall project or with other planned or permitted projects in the area.

Findings and conclusions

The applicant's NIS determined that following the implementation of proposed mitigation measures, that no significant effects are likely from the construction and operation of the proposed development, either alone or in combination with any other plans or projects on Natura 2000 sites (European Sites), their features of interest or conservation objectives. The NIS concluded that the proposed development would not adversely affect the integrity of European sites.

Based on the information provided, I am satisfied that adverse effects arising from aspects of the proposed development can be excluded for the European sites considered in the appropriate Assessment. I am satisfied that the mitigation measures proposed to prevent adverse effects have been assessed as effective and can be implemented. They would prevent any residual effects and, as such, I am satisfied that there will be no significant in-combination effects.

Reasonable scientific doubt

I am satisfied that no reasonable scientific doubt remains as to the absence of adverse effects.

Site Integrity

The proposed development will not affect the attainment of the Conservation objectives of the River Boyne and River Blackwater SAC (Site Code 002299) and River Boyne and River Blackwater SPA (Site Code 004232) and Lough Ennell SPA (004044). Adverse effects on site integrity can be excluded and no reasonable scientific doubt remains as to the absence of such effects.

Appropriate Assessment Conclusion: Integrity Test

In screening the need for Appropriate Assessment, it was determined that the proposed development could result in significant effects on the River Boyne and River Blackwater SAC (Site Code 002299) and River Boyne and River Blackwater SPA (Site Code 004232) and

Lough Ennell SPA (004044) in view of the conservation objectives of those sites and that Appropriate Assessment under the provisions of S177U was required.

Following an examination, analysis and evaluation of the NIS all associated material submitted and taking into account the submissions and observations received, I consider that adverse effects on site integrity of the River Boyne and River Blackwater SAC (Site Code 002299) and River Boyne and River Blackwater SPA (Site Code 004232) and Lough Ennell SPA (004044) can be excluded in view of the conservation objectives of these sites and that no reasonable scientific doubt remains as to the absence of such effects.

My conclusion is based on the following:

- The nature, scale and extent of the proposed development; the location of the site at a significant distance from European Sites; and its limited hydrological connectivity with the European Sites.
- Detailed assessment of construction and operational impacts.
- The proposed development would not affect or delay the attainment of the conservation objectives for the qualifying interests of the River Boyne and River Blackwater SAC (Site Code 002299), the River Boyne and River Blackwater SPA (Site Code 004232) and Lough Ennell SPA (004044).
- The proposed development would not prevent or delay the restoration of favourable conservation condition for the following qualifying interests: River Lamprey, Salmon, Pochard or Tufted Duck.
- The effectiveness of mitigation measures proposed in the Natura Impact Statement, the Construction & Environmental Management Plan, and the Environmental Impact Assessment Report.
- The application of planning conditions to require that all relevant mitigation and monitoring measures shall be implemented.

Appendix 4 - WFD Impact Assessment Stage 1: Screening			
Step 1: Nature of the Project, the Site and Locality			
An Commission Pleanála ref. no.	**ABP-319023-24**	**Townland, address**	Townlands of Knockdrin, Derrygreenagh, Derryarkin, Derryiron, Ballybeg, Coolcor, Barrysbrook, Clonin, Togher and Coole, Co. Offaly
Description of project		10-year planning permission to develop a Combined Cycle Gas Turbine ('CCGT' output 540MW) and Open Cycle Gas Turbine ('OCGT' output 170MW) Thermal Power Plant, a 220kV tail substation, hybrid transmission of overhead line and 220 kV underground cable to a proposed 400kV loop-in substation, and associated buildings, plant, site works, services and ancillary development. Appendix 12C of the EIAR contains a Water Framework Directive Screening Assessment.	
Brief site description, relevant to WFD Screening,		The Proposed Development and Overall Project is within the Boyne WFD Catchment, extends across nine WFD surface water bodies and also extends across three WFD groundwater bodies. The linear site is located entirely within county Offaly and starts at the county boundary between counties Offaly and Westmeath, c3.1km southeast of Rochfordbridge, County Westmeath, where a proposed surface water pipe serving the power plant would flow	

	northwards for a distance of c450m from an attenuation tank adjacent to the proposed power plant area (PPA), where it would discharge into the Mongagh River (Castlejordan_020 (WFD ID: IE_EA_07C040100). From the Mongagh River, the site extends generally southwards for a distance of c8.8km, where is ends immediately north of the east to west flowing Grand Canal Main Line West (Barrow) (WFD ID: IE_14_AWB_GCMLW). It is proposed that the process water from the PPA would be piped from the power plant for a distance of 3km, from the point it leaves the PPA site and crosses the R400. The line would run southwestwards and southwards along the northwestern and western site boundaries before crossing a road that provides access to a quarry, windfarm and piggery, where it would be discharged into the Yellow River (Yellow (Castlejordan)_020 (WFD ID: IE_EA_07Y020100). The process water that would be discharged would include treated wastewater from the proposed wastewater treatment system serving the power plant area. Wastewater holding tanks are proposed to be installed at each of the 220kV and 400kV substations. The holding tanks are to be periodically emptied and the effluent disposed of offsite at an authorised facility. It is proposed that the water to serve the site will be extracted from groundwater in the north eastern corner of the PPA site via two boreholes that would feed water directly to the raw water tank within the PPA.

	The point where the proposed overhead line would be undergrounded at the proposed interface compound is located close to the Tara Stream that flows north eastwards into the Yellow River. The proposed development will require the construction of several new sections of floating tracks and solid tracks, as well as the upgrade of existing tracks/roads, with surface water to runoff into drainage channels along the sides of these tracks. The area is relatively flat and has little to no elevation. The site consists predominantly of brownfield former industrial peatlands, with many manmade drainage channels in the area directing water to the watercourses described above. The only non-bog area is the location of the proposed 400kV substation at the southern end of the site
Proposed surface water details	<u>Power Plant Area</u> A network of surface water pipes would be laid around the power plant area to capture water runoff from the proposed buildings, as well as from the proposed impermeable hard surfaces areas around the buildings that make up the main road and footpath network within the PPA site. All water would flow to an attenuation tank before being piped in a northwards direction for a distance of c460m, where it would discharge into the Mongagh River. The surface water would be passed through a silt trap and class 1 hydrocarbon interceptor prior to entering the attenuation system. The attenuation requirements have been identified of 4,569m^2 to 6,550m^2 and the runoff rate would be 2l/s/ha. <u>220kv Substation</u>

	It is proposed to install a piped surface water collection system along the roads and hard surfaced areas of the 220kv substation compound on the western side of the R400. The Site Drainage Plan 220kV Compound Drawing (Sheet 2 of 4) indicates that the water will be discharged via an attenuation system to a local drain outlet outside of the red lined site area, to the north of the site. The land to the immediate north is within the blue lined area under the control of the applicant. The surface water would pass through a silt trap and hydrocarbon interceptor before entering the attenuation system. Attenuation requirements have been identified of 242m³ to 338m³ and the runoff rate would be 2l/s/ha. <u>400kv Substation</u> It is proposed to install a piped surface water collection system along the roads and hard surfaced areas of the 400kv substation at the southern end of the site. The Site Drainage Plan 400kV Compound Drawing (Sheet 3 of 4) indicates that the water would be discharged via an attenuation tank system into a local drain to the east of the site. The surface water would pass through a silt trap and hydrocarbon interceptor before entering the attenuation system. Attenuation requirements have been identified of 572 m³ to 810 m³ and the runoff rate would be 2l/s/ha. <u>Roads / Tracks</u> The proposed development would require the construction of several new sections of floating road and solid tracks as well as the upgrade of existing roads, to provide access to erect the pylons, and the typical cross section drawing submitted as part of the

	application indicate that surface water will run-off into drainage channels along the sides of tracks.
Proposed water supply source & available capacity	Power Plant Area It is proposed that water to serve the PPA site would be extracted from a borehole and in the north eastern corner of the powerplant site area. The applicant has provided details in Chapter 12 addresses 'Water' and Appendix 12D to the Water Chapter of the EIAR titled 'Groundwater Yield Report'. Table 12-12 of Chapter 12 states that a 2008 test at well ID PW1 indicated that it had a pumping rate of 605cubic metres per day at a drawdown level of 5.24m, while a seven day constant test in 2023 of the same well indicated a pumping rate of 1,008 cubic metres at a drawdown level of 8.78m. This well was drilled to a depth of 65m. At paragraph 16.5.83 of Chapter 16 'Material Assets' it states that water requirements for the Proposed Development and Overall Project is 720m3/d. Chapter 5 of the EIAR 'The Proposed Development and Overall Project' states that groundwater will be abstracted and stored in a raw water tank, which will include a reserve section for fire water. It will have a capacity of 7,850 cubic metres gross. The raw water will be treated to provide portable and demineralised water and two other tanks of the same capacity of 7,850 cubic metres gross, will hold the demineralised water. 220kv Substation and 400kv Substation No water supply details have been provided for the buildings within the 220kv and 400kV substation compounds and while they would only be occupied periodically, they are

	proposed to have toilet facilities, so would have a requirement for water supply. I am satisfied that this matter could be addressed by way of a condition if the Commission is minded to grant permission. Appendix 12D states that 'The purpose of this investigation is to provide additional information on an existing groundwater borehole (subsequently referred to as PW1) onsite for purposes of replacing the existing onsite groundwater supply borehole, referred to as the "Hostel Well" and of meeting the water requirements of a proposed energy generation plant'. It also notes that 'The borehole PW1 was completed, developed and test pumped in 2008 to determine the deployable yield, which was determined at the time of testing to be 630 m3/day'.
Proposed wastewater treatment system & available capacity, other issues	The occupied areas of the site would be the power plant area, which would be continuously occupied and the 220kv and 400kv substations which would be infrequently occupied. <u>Power Plant Area</u> As detailed in the 'Drainage Engineering Assessment report', it is proposed to install a wastewater treatment plant, with a population equivalent (pe) of 60, to treat effluent arising from the power plant area. it is proposed that the wastewater would be processed through a Tricel Maxus (or similar) system, which includes a 10,800 litre primary settlement and buffer tank which feeds the 2No. Mars 5,000 litre treatment plant. Post treatment, the effluent would be pumped to a sand filter before discharging to a process water tank from

	where it would be discharged, with other process water by c3.km of pipe to the Yellow River. 220kv Substation It is proposed to have sanitary facilities in both the IPP control room and the GIS buildings on site and effluent from it would flow to a holding tank within the site. From there the wastewater would be periodically emptied and the effluent disposed of offsite at an authorised facility 400kv Substation It is proposed to have sanitary facilities in two of the three proposed buildings and effluent therefrom will also flow to a holding tank within the site. From there the wastewater would be periodically emptied and the effluent disposed of offsite at an authorised facility.
Others?	Not applicable

Step 2: Identification of relevant water bodies and Step 3: S-P-R connection						
Identified water body	**Distance to (m)**	**Water body name(s) (code)**	**WFD Status 2019-2024**	**Risk of not achieving WFD Objective e.g.at risk,**	**Identified pressures on that water body**	**Pathway linkage to water feature (e.g. surface run-off, drainage, groundwater)**

				review, not at risk		
River Waterbodies						
River Waterbody	0m	Castlejordan_20 (IE_EA_07C040100)	Moderate (Monitoring)	Review	No pressures	Surface water discharge pipe from the PPA would discharge into the Mongagh river at northern end of site, c500m from PPA
River Waterbody	0m	Yellow (Castlejordan)_20 (IE_EA_07Y020100)	Moderate (Monitoring)	Not At risk	No pressures	Not directly hydrologically linked, but process water pipe from the PPA would travel c3km by pipe and would discharge into into this waterbody (the Yellow River) c1.75 linear km south of the PPA
River Waterbody	0m	Yellow (Castlejordan)_10 (IE_EA_07Y020070)	Poor (Monitoring)	At risk	Nutrients, Agriculture	This waterbody ends c20m upstream of the point where the process pipe

						described above would discharge into the Yellow River.
River Waterbody	20m	Castletown Tara Stream_010 (IE_EA_07C080190)	Poor (Monitoring)	At risk	Nutrients, Organic Peat	This waterbody ends c20m upstream of the point where the process pipe described above would discharge into the Yellow River.
River Waterbody	0m	Esker Stream_010 (IE_SE_14E010100)	Moderate (Modelling)	Review	No pressures	The Esker stream runs beneath part of the existing elevated rail track where it is proposed to lay underground cables. The stream crossing would occur c35m south of the proposed cable interface compound.
River Waterbody	100m	Grand Canal Main Line West (Barrow) (IE_14_AWB_GCMLW)	Good (Monitoring)	Review	No pressures	The looped in underground line will come within c100m of the northern side of the canal bank, at the southernmost end of the overall site
The 3 River waterbodies below are outside the catchment of the planning application but interact with the identified route corridor for the proposed gas pipeline that does not form part of the current application						

River Waterbody	0m (from GCC)	Castlejordan_010 (IE_EA_07C040050)	Poor (Monitoring)	At Risk	Agriculture, Nutrients, Organic, UR, UWW, Peat	This waterbody joins Castlejordan_20 c 440m downstream from the point where the process water would be discharged into the Yellow River. The GCC would pass directly over the stream at some point yet to be determined c3.35km north west of the PPA.
River Waterbody	0m (from GCC)	Rochfortbridge Stream_010 (IE_EA_07R040300)	Moderate (Monitoring)	At Risk	Nutrients, Organic, Peat	The GCC would pass directly over the stream at some point yet to be determined c6.15km north west of the PPA
River Waterbody	0m (from GCC)	Brosna_040 (IE_SH_25B090200)	Moderate (Monitoring)	At Risk	Morphological, HYMO	The GCC would pass directly over the stream at some point yet to be determined c8.6km north west of the PPA
Groundwater Bodies						

Groundwater waterbody	Underlying majority of the site from its northern end to the L1010 Local road where the underground power line would pass under the road. It also underlies the majority of the route of the GCC extending c 7.2km north west of the PPA.	Athboy (IE_EA_G_001)	Good	Not at risk	No pressures	Poorly productive bedrock
Groundwater waterbody	Extends from the L1010 south to Grand Canal (c1.5km north to south)	Daingean (IE_SE_G_049)	Good	Review	No pressures	Poorly productive bedrock

Groundwater waterbody	The northern most part of the proposed GCC runs through this area for c1.7km.	Clara (IE_SH_G_240)	Good	Not at risk	No pressures	Poorly productive bedrock

Step 4: Detailed description of any component of the development or activity that may cause a risk of not achieving the WFD Objectives having regard to the S-P-R linkage.

CONSTRUCTION PHASE

No.	Component	Water body receptor (EPA Code)	Pathway (existing and new)	Potential for impact/ what is the possible impact	Screening Stage Mitigation Measure*	Residual Risk (yes/no) Detail	Determination** to proceed to Stage 2. Is there a risk to the water environment? (if 'screened' in or 'uncertain' proceed to Stage 2.
1.	Surface	Castlejordan_20	Yes (hydrological connection to River Boyne and River Blackwater SAC and SPA)	Demolition and Construction (excluded water abstraction) (hereafter D&C)	Yes - CEMP (Appendix 5A of EIAR)	No	Screened out
			Yes (as above)	Pipes for water abstraction and 2 discharge pipes	Silt Controls, CEMP	No	Screened out

				(hereafter pipes)	(Appendix 5A of EIAR)		
			Yes (as above)	Construction of EGC including lines and substations (hereafter EGC)	Silt Controls, CEMP (Appendix 5A of EIAR)	No	Screened Out
			Construction and operation of Cas Connection Corridor (hereafter GCC)	Yes – pipes crossing waterbody	Yes - Directional drilling when crossing waterbody, temporary soil storage. CEMP (Appendix 5A of EIAR)	No	Screened Out
2.	Surface	Yellow (Castlejordan) _20	Yes (hydrological connection to River Boyne and River Blackwater SAC and SPA)	Demolition and Construction (excluded water abstraction)	Yes - CEMP (Appendix 5A of EIAR)	No	Screened out
			Yes (as above)	Pipes for water abstraction and 2 discharge pipes	Silt Controls, CEMP (Appendix 5A of EIAR)		
			Yes (as above)	EGC	Silt Controls, CEMP	No	Screened Out

					(Appendix 5A of EIAR		
			None	GCC	None	No	Screened Out
3.	Surface	Yellow (Castlejordan) _10	None (it is upstream of the outfall from the surface water pipe)	None	None	No	Screened out
			None	EGC	None	No	Screened Out
			Construction and operation of Cas Connection Corridor (hereafter GCC)	Yes – pipes crossing waterbody	Yes - Directional drilling when crossing waterbody, temporary soil storage. CEMP (Appendix 5A of EIAR)	No	Screened Out
4.	Surface	Castletown Tara Stream_010	Yes (hydrological connection to River Boyne and River Blackwater SAC and SPA)	D & C Pipes	None None	No No	Screened out Screened out
			Yes (as above)	EGC	Silt Controls, CEMP	No	Screened Out

					(Appendix 5A of EIAR		
			None	GCC	None	No	Screened Out
5.	Surface	Esker Stream_010	Yes (as above)	D & C Pipes	None None	No No	Screened out Screened out
			Yes (underground cables will be laid above the stream)	EGC	Silt Controls, CEMP (Appendix 5A of EIAR	No	Screened Out
			None	GCC	None	No	Screened Out
6.	Surface	Grand Canal Main Line West (Barrow)	Yes (hydrological connection to River Boyne and River Blackwater SAC and SPA)	D & C Pipes	None None	No No	Screened out Screened out
			Yes (as above)	EGC	Silt Controls, CEMP (Appendix 5A of EIAR	No	Screened Out
			None	GCC	None	No	Screened Out
7.	Surface	Castlejordan_010	Yes (as above)	D & C Pipes	None None	No No	Screened out Screened out

8.	Surface	Rochfortbridge Stream_010	Yes (as above)	D & C Pipes	None None	No No	Screened out Screened out
			None	EGC	None	No	Screened Out
			Construction and operation of Cas Connection Corridor (hereafter GCC)	Yes – pipes crossing waterbody	Yes - Directional drilling when crossing waterbody, temporary soil storage. CEMP (Appendix 5A of EIAR)	No	Screened Out
9	Surface	Brosna_040	Yes (as above)	D & C Pipes	None None	No No	Screened out Screened out
			None	EGC	None	No	Screened Out
			Construction and operation of Cas Connection Corridor (hereafter GCC)	Yes – pipes crossing waterbody	Yes - Directional drilling when crossing waterbody, temporary soil storage. CEMP (Appendix 5A of EIAR)	No	Screened Out
10.	Ground	Athboy	Yes (due to location and	1 - Demolition and Construction	Yes - CEMP		

			abstraction of water)	(excluding water abstraction	(Appendix 5A of EIAR)		
				EGC	Embedded mitigation from CEMP in Appendix 5 of EAIR	No	Screened Out
			None	GCC	None	No	Screened Out
11.	Ground	Daingean	Yes (part of site is located over this GW body)	None	None	No	Screened out
12.	Ground	Clara	Yes as above)	None	None	No	Screened out
13.	SAC	Raheenmore Bog	None as it is elevated above the level of the proposed development	None	None	No	Screened out
14	SPA	River Boyne and River Blackwater	Yes, hydraulically via surface waterbodies referred to in 1-9 above.	None	None	No	Screened out
15	SAC	River Boyne and River Blackwater	Yes, hydraulically via surface waterbodies referred to in 1-9 above.	None	None	No	Screened out

OPERATIONAL PHASE							
1.	Surface	Castlejordan_20	Yes (hydrological connection to River Boyne and River Blackwater SAC and SPA)	Surface water will discharge to Mongagh River (Castlejordan_20)	Attenuation tank, interceptor, silt trap, bunded fuel area Discharge to be operated under Industrial Emissions Licence using appropriate treatment systems Discharge rates would be intermittent and controlled. Environmentally sensitive design used, with outfalls	No	Screened out

					setback from bank with no hard structures in the watercourses including channel banks.		
2	Surface	Yellow (Castlejordan)_20	Yes (hydrological connection to River Boyne and River Blackwater SAC and SPA)	Treated effluent from the water treatment plant, treated foul water	Discharge to be operated under Industrial Emissions Licence using appropriate treatment systems. Discharge rates would be intermittent and controlled. Environmentally sensitive design used, with	No	Screened out

					outfalls setback from bank with no hard structures in the watercourses including channel banks.		
10	Ground	Athboy	Yes (due to location and abstraction of water)	Water Abstraction	None ,as pump text showed daily rate of abstraction would not impact as recharge rate was sufficient.	No	Screened out
DECOMMISSIONING PHASE							
5.		All sites	None	GCC	None	No	Screened Out