



Development	Application received under Section 4 of the Development (Emergency Electricity Generation) Act 2022 (the Act) for a designated development located at West Offaly Power Station, Shannonbridge, in the townland of Cloniffeen, Co. Offaly
Location	West Offaly Power Station, Shannonbridge, in the townland of Cloniffeen, Co. Offaly
Planning Authority	Not Applicable
Planning Authority Reg. Ref.	Not applicable
Applicant(s)	The Electricity Supply Board.
Type of Application	Application under S.4 of the Emergency Electricity Generation Act 2022.
Planning Authority Decision	Not Applicable
Type of Application	Application to the Minister for Approval under s.7 of the Development

(Emergency Electricity Generation)
Act 2022

Observer(s)

.
Health and Safety Authority.
Transport Infrastructure Ireland.
Environmental Protection Agency.
Development Applications Unit,
Department of Housing Local
Government and Heritage.

Date of Site Inspection

16th December 2022, 27th February &
March 14th 2023

Inspector

Paul Caprani

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1.0 Background Information and Context to the Current Application

- 1.1.1. In September 2021, the Commission for Regulations of Utilities (the CRU) published an Information Note entitled: *Security of Electricity Supply Programme of Actions*. The Information Note set out the details of the projected shortfall in electricity generation capacity to meet future demand, alongside a number of measures to mitigate against such a shortfall. In support of this, the November 2021 Government Policy Statement on Security of Electricity Supply approved, amongst other matters, that “*the 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*”.
- 1.1.2. On foot of the above, EirGrid recommended that additional temporary emergency generation be procured to address the projected shortfall in generation capacity to meet demand.
- 1.1.3. The CRU applied to the Minister for the Environment, Climate and Communications (the Minister) under Article 28(10) of the European Communities (Internal Market in Electricity) Regulations 2005 S.I. 60/2005 Regulations for consent to direct EriGrid to procure the delivery of temporary emergency additional generation for the purposes of the provision of system services. The CRU received the consent of the Minister to direct Eirgrid to procure the delivery of this temporary delivery. Using the most expeditious means available, Eirgrid is seeking the delivery of circa 450MW of additional temporary emergency generation capacity for the period of winter 2023-24 to winter 2025- 26.

The Board should note the following important aspects of the procurement and operation of the temporary emergency generation:

- The emergency generation is temporary in nature.
- The capacity will only be brought online when existing, market-based generation capacity has failed or is imminently likely to fail to meet the system requirements.
- The temporary emergency generation capacity will not be an active participant in the wholesale electricity market.

- In calculating the future capacity requirements for Ireland, in both EirGrid’s Generation Capacity Statements (GCS) and in the forthcoming National Resource Adequacy Assessment, temporary emergency generation capacity will not be accounted for or calculated in the GCS, or as being available to provide such service into the future.
- In calculating the capacity volume requirements for auctions under the Capacity Remuneration Mechanism, temporary emergency generation capacity will not be included in the calculation of capacity requirements or as being available to provide such service into the future.
- At the point in time when new enduring capacity has removed the need for temporary emergency generation, these temporary units will cease operation and will be decommissioned and removed from their respective sites.

1.1.4. The application for the Temporary Emergency Generation (TEG) for the West of Offaly Power (WOP) Station at Shannonbridge was lodged with the Minister for the Environment Climate and Communications (The Minister) on February 17th 2023. An environmental assessment of the Designated Development will be carried out by the Board to ensure that the objectives of the EIA Directive are met. The designated development will involve construction works for the installation, subsequent operation and finally the decommissioning of eight Open Cycle Gas Turbines (OCGT) with a total output capacity (net output) of 264 MW. The emergency generator is to be located on a 9.22 hectare site within the existing WOP Power Station at Shannonbridge.

2.0 Legislative Basis for the Proposed Development

- 2.1.1. The current application is being made under the provisions of the *Development (Emergency Electricity Generation) Act 2022*. This legislation was enacted on October 29th 2022. It allows for development comprising of the installation of up to 450 megawatts of temporary emergency electricity generation plant at two sites (Shannonbridge and Tarbert generating stations¹).
- 2.1.2. As per S.3 of the Act, none of the provisions of the Planning and Development Act 2000 shall apply to the designated development.

¹ Or at alternative appropriate sites (as per Section 2(1) of the Act).

- 2.1.3. As per S.4 of the Act the applicant may apply to the Minister² for approval under S.7 to carry out the designated development.
- 2.1.4. S.5 of the Act states that the designated development shall be exempt from the provisions of the EIA Directive on the basis that the designated development is an exceptional case for the purposes of Article 2(4) of the Directive. The Minister shall arrange for the assessment of the designated development to be carried out by the Board and for ensuring that the objectives of the EIA Directive are met.
- 2.1.5. Under S.6 of the Act the Minister shall arrange for an assessment of the designated development to be carried out by the Board in accordance with the requirements of Part V of the European Communities (Birds and Natural Habitats) Regulations of 2011 in respect of Appropriate Assessment.
- 2.1.6. Under S.7 the Minister, having considered the Board assessment including any conditions/mitigation measures recommended by the Board, may decide to approve or refuse to approve the development. Before making a decision, the Minister shall give notice to the European Commission stating that the designated development is exempt from the provisions of the Environmental Impact Assessment Directive. A notice of the decision shall be published in *Iris Oifgiúil*.

3.0 Site Location and Description

- 3.1.1. The proposed development relates to an area of land within the confines of the former power station – West Offaly Power Station (WOP) to the south of the village of Shannonbridge, County Offaly. It is situated in the Townland of Clonifeen, less than 1 Km to the south of the village. The power station at Shannonbridge was constructed in 1965 and the original station was decommissioned in 2003. The current WOP station was granted permission in 2001 (a decision that was upheld on appeal by the Board in 2002 – see planning history below). The Board subsequently refused planning permission to convert the WOP Station for an electricity generation facility based on biomass in 2019. On the basis of the Board's decision, the power station ceased operation on 11/12/2020 in accordance with the conditions of the planning permission.

² Minister for the Environment, Climate and Communications

- 3.1.2. The former Power Station is located on an extensive site close to the County border between Offaly, Roscommon and Galway. Shannonbridge is a relatively small settlement with a population at the last census of 175. It is located on flat lowland (c38-40 m AOD). The main access road, the R357 runs to the northeast of the site and links Shannonbridge to the village of Cloughan further to the southeast.
- 3.1.3. The site of the proposed new power generation facility is located centrally within the northern confines of the existing power station and as such, the immediate environs of the site comprises of infrastructure, buildings, plants and artificial surfaces associated with the former power station. Beyond the power station and settlement, the wider landscape is characterised by extensive low-lying cultivated peatlands or cut over bogs. To the north and west, mixed woodland, scrub and grassland sits on top of the former ash disposal facility associated with the former power station. The former station site extends to the eastern banks of the River Shannon. However the western boundary of the current application site extends to within 120m of the banks of the river. The former power station site is approximately 35.5ha in area. The site of the current application before the Board encompasses an area 9.2 ha.
- 3.2. The former station during its operational phase comprised of a single boiler/turbine unit with an electrical output of 150 MW. Its main features incorporated a thermal generation plant and peat handling and storage facilities. The former station was fired on milled peat, with a support facility for firing standard refinery fuel oil. The peat fuel was supplied to the station by Bord na Móna and is delivered via a dedicated rail line and also by road from the extensive peatland areas in the vicinity, particularly to the east and north-east of the former power station. The residual ash that was produced from the combustion process was transported by Bord na Móna via a dedicated rail system to an assigned ash disposal facility within the area of peat extraction c.6km to the north-east. Ash was transported from the station to the disposal facility on Bord na Móna's narrow gauge rail system on purpose-built saddleback wagons. Fly ash and bottom ash were both disposed of at the facility. This site is operated and managed on behalf of ESB by Bord na Móna.
- 3.3. The station and ash disposal sites were subject to an IPPC Licence (Licence No. P0611-02) from the Environmental Protection Agency (EPA). The station was operated in accordance with the EU's Emission Trading Scheme (ETS), which limited and controlled greenhouse gas emissions from the electricity generating

plant. The former power plant operated under Greenhouse Gas Permit IE-GHG077-10385-4, which was administered by the EPA.

4.0 Proposed Development

4.1. Pre-Construction Works

4.1.1. Pre-construction works will take place over a 6-week period and will primarily relate to site clearance works, including:

- Site levelling and removal of ornamental earthen mounds.
- Removal of landscaping trees and shrubs, including roots.
- Removal of lighting masts, street furniture etc.
- Filling of all underground voids, tanks, manholes, chambers etc.
- Removal of redundant underground cables, pipes and other services.
- Removal of concrete footpaths, internal roads and rail-tracks.
- Preparation / installation of Contractor's offices / welfare facilities.
- Connection of services / facilities to contractor's offices.
- Site perimeter fencing.

4.2. Demolition Works

4.2.1. The proposal will involve the demolition and removal of existing structures at the power plant. These structures include the removal of the overhead rising conveyor. The removal of wastewater sewerage infrastructure (above and below ground) as well as the underground septic tanks on site. A number of single storey buildings and other structures will be removed to facilitate the designated development. These include the electrical building, the contractor's office, the first aid room, the laboratory/office building and the railway service building. The list of structures to be demolished / dismantled is indicated on Figure 3 submitted with the application (Document 3b). The Contractor will manage the excavation and the safe disposal of this material to a suitably licenced waste disposal facility.

4.3. Designated Development for Power Generation

4.3.1. The designated development consists of the installation of eight open gas cycle turbine units (OCGT) together with ancillary infrastructure on the site. These 8 units (each with a capacity of c.35 MWe³), will have the capacity to generate 264 MWe (net output). The OCGT will operate in times of emergency only with a maximum running time of 500 hours per annum. When not in operation they will be on standby mode and will be commissioned only to meet emergency supply needs while complementing renewable power supply sources. The purpose of the development is to ensure security of supply and provide support to the electricity network when there is insufficient power generation to meet supply. The model proposed (LM2500Xpress) is considered to be most apt at achieving maximum output within a short period of time. It is anticipated that the plant will be in operation for approximately 5 years after which it will be dismantled and decommissioned from the site. It is anticipated that it will cease operations and be decommissioned at the end of 2028.

4.3.2. The individual components that make up the designated development and associated infrastructure include the following:

- 8 No. LM2500Xpress gas turbine generators⁴ using distillate oil only. Each will comprise of a single gas turbine and a single alternating current (AC) generator. Each of the generators and gas turbines will be equipped with weatherproof, acoustic enclosures with dedicated ventilation systems. The turbines and ancillary plant elements will have a containerised control module which will house the turbine controls and a containerised electrical module which will supply power to the turbines and their associated auxiliary systems. The turbines will use forced air-cooling radiators to dissipate heat when operational. No wet cooling system is required. The turbine module will be fitted with air filters modules and a turbine exhaust silencer.
- 8 No. Steel Exhaust Stacks, each 3.3m diameter and 30m in height. The exhaust gases from each gas turbine will be discharged to atmosphere through the stack. Each stack will incorporate emissions monitoring sampling

³ Megawatts of Electricity.

⁴ See Figure 2.1 of Environmental Report for the layout of a typical unit.

points and monitoring will take place as specified by the EPA in accordance with EPA standards.

- 2 No. 110kV Generator Step-up Transformers (GSUT).
- 2 No. Hypact compact switchgear units and associated surge arrestors.
- 8 No. LM2500Xpress gas turbine generators, using distillate oil only
- 2 No. GSUT protection relay panels
- 2 No. BOP Power Control Modules (BOP-PCM), each including:
 - 11.5 kV Medium Voltage Switchgear / Fuse Disconnecter
 - Low Voltage Auxiliary transformer –
 - 400 V Low Voltage Switchgear
 - 125 V DC System
 - Fire detection and extinguishers.
- 1 No. Plant Common Controller Module
- 2 No. Control Module LVRT
- 2 No. instrument compressors
- 2 No. CCW fin fan coolers
- Electrical Bulk Material (cable, cable trays, earthing and lightning protection material, conduit, lighting and small power)
- 2 No. Fuel Oil Unloading Modules
- Fuel oil forwarding and filtration system (with fuel oil, forwarding pump and fuel filters)
- Fuel oil heating system
- Fire protection system including fire water pumps.
- 3 No. Circular distillate oil storage tanks, concrete bunded, each with capacity of 1,690 tonnes (2,060m³). These tanks will comprise of three circular oil storage tanks contained in a concrete bund designed to store 110% of the volume of the tank. The tanks will have dimensions of 13.5m in diameter to 14.4m in height.

- 10 No. double-skin distillate oil storage tanks, each with capacity of 70 tonnes. These tanks will comprise rectangular steel structures and will be used along with the circular structures providing a total storage capacity of 5,770 tonnes. Distillate oil will be filtered to remove impurities prior to being pumped to each generator unit.
- Water storage tank
- Plant wastewater system with oily water separator
- Administration building
- Acoustic screens.

- 4.3.3. The 8 LM2500Xpress gas turbine generators will be connected to one of the two Generator Step-up Transformers (GSUT), which will export to the grid through cable connection to the existing 110kV substation located within the boundary of the WOP Station site. Surge arrestors will be connected to the transformers to suppress voltage spikes. Minor alterations may be required on the transition bay in the 110kV substation to facilitate this proposed electrical power export.
- 4.3.4. Water supply will be provided from the existing connection to the public water main. Water will be used for general domestic requirements and for firefighting purposes. A common firewater / storage tank of approximately 1,600m³.
- 4.3.5. In terms of surface water drainage, water collected on existing impermeable surfaces will continue to be collected in a slightly modified underground pipe network. The surface water runoff will be conveyed by the existing drainage network to the settlement pond prior to discharging to the River Shannon. Foul water from welfare facilities during the construction and operation phases will be collected in a sump and periodically removed from the site by road tanker. All chemicals and oils will be stored in suitably bunded areas and with weather protection.
- 4.3.6. A contractor will be responsible for the design and installation of the plant. Most of the new equipment will comprise of containerised elements, fabricated off site and delivered finished or for final assembly on-site. The major exception to this will be the plant pipe and cable route which will have to be fabricated on site. The construction of the proposed development will last approximately 5 months and is hoped to commence in May 2023 enabling the emergency generator to commence operation for the winter of 2023-2024.

4.3.7. Levels of employment will vary throughout the construction phase, with peak levels estimated to be 100. The construction compounds and laydown areas will be located entirely within the WOP Station site. The Contractor will be appointed to the role of Project Supervisor Design Process (PSDP) for the installation, commissioning and testing of all equipment including the gas turbines.

4.4. **Industrial Emission Licence**

4.4.1. The existing WOP Station and ash disposal facility (ADF) are specified industrial activities listed in the First Schedule to the EPA Act 1992 (as amended). The WOP Station and ADF are managed in accordance with its IE Licence P0611-02 and in accordance with the EU Emission Trading System (ETS) and associated Greenhouse Gas Permit as administered by the EPA. The Designated Development will be licensed by the EPA under the industrial emissions licensing process. An application will be made to the EPA to either review the existing IE Licence or for a new IE Licence for the operation of the Designated Development. As to when the IED Licence application will be lodged with the EPA, this information is not specified in the application.

4.5. **Decommissioning**

4.5.1. The operational life of the proposed development will be up to 5 years. After such time the plant will be disconnected, dismantled and removed from site. All potentially polluting materials including waste materials will be removed from the site.

5.0 **Documentation Submitted with the Planning Application**

5.1.1. The application was lodged in electronic form on February 17th 2023. It was accompanied by the following documentation.

- **A Covering Letter** which states that the applicant (ESB) is making this application under S4 of the (Electricity Emergency Generation Act) 2022 for approval.
- **A newspaper notice** published in the Irish Independent dated 17/02/23.
- **An Environmental Report** prepared in accordance with the provisions Article 7(2)(d) of the Development (Emergency Electricity Generation)

Regulations 2022. This Report includes relevant environmental information in relation to baseline conditions at the site and the potential environmental impacts that could arise as a result of the designated development. The Environmental Report identifies the two major potential impacts arising from the designated development as being noise and air pollution. However other potential environmental effects are also assessed in the report including:

- Biodiversity
- Population and Human Health
- Land, Soils and Geology
- Water
- Climate
- Material Assets
- Cultural Heritage
- Landscape and Visual
- Traffic and Transportation
- And Waste Management

5.1.2. The report also assesses the various potential interactions between the environmental factors listed above and also any potential cumulative impacts that might arise in conjunction with other developments planned, permitted or operational in the area.

5.1.3. A number of appendices are attached to the Environmental Report these include:

- Appendix A – Details of the Technical Team who contributed to the Environmental Report.
- Appendix B – Framework Construction and Environmental Management Plan (CEMP).
- Appendix C – Framework Construction Traffic Management Plan (CTMP).
- Appendix D - A Statement of Compliance with the provisions of Article 3(4) of SI 719 of 2023 which sets out the details of the information to be included in the application to the Minister.

- Appendix E- Details of the noise concept study and modelling undertaken as part of the noise analysis carried out.

5.1.4. The Environmental Report also contains 5 figures which detail the designated development and design:

- Figure 1 – Site Location Map
- Figure 2 – Site Layout Map
- Figure 3 – Dismantling and Demolition Plan
- Figure 4 – Generator Equipment Typical Elevation Details
- Figure 5 - Parking Office and Laydown Areas.

5.1.5. The Board will note that these are the only drawings submitted with the application. However, as the Planning and Development Act is being disapplied in this instance there would appear to be no requirement to comply with the specific requirements set out under Article 23 of the Planning and Development Regulations (2001) as amended in relation to the details to be supplied in the drawings submitted.

Under the provisions of Article 3(4) of SI 719 Of 2022 it is sufficient in any application made to the Minister that the following provisions are adhered to:

(e) a site location map sufficient to identify the land on which the designated development would be situated;

(f) a site or layout plan on which the site boundary of the designated development shall be clearly delineated;

(g) any site layout plans, drawings or other information required to describe the relevant features of the designated development;

5.1.6. It is my considered opinion that there is sufficient information in the figures present to provide the Board with adequate information as the layout and the nature and extent of the development.

- **A Stage 1 Appropriate Assessment Screening Report and a Natura Impact Statement.** This report identifies three sites the qualifying interests of which could potentially be adversely affect by the proposed development namely:
 - Middle Shannon Callows SPA (Site Code: 004096).
 - River Suck Callows SPA (Site Code: 004097).
 - River Shannon Callows SAC (Site Code 000216).

- **The Stage 2 NIS** provides a detailed assessment on these three sites identifying the main threats to the qualifying interests associated with the Natura 2000 Sites in question. A suite of mitigation measures, primarily through avoidance and design, are set out to counteract any potential adverse impacts, and it is concluded that, in light of the best scientific knowledge in the field, the competent authority has sufficient information to allow it to determine that the proposed development, individually or in combination with other plans or projects, will have no adverse effect on the integrity of any Natura 2000 Site in view of the Sites' conservational objectives.

6.0 Planning History

- 6.1.1. A more detailed planning history is provided in Table 1.2 of the Environmental Report. The main applications (all lodged by ESB) of relevance are set out below:

1965 – Shannonbridge Peat Fired station Unit 1 40 MW boiler – Granted

1976 – Shannonbridge Peat Fired station Unit 2 40 MW boiler - Granted

1882 - Shannonbridge Peat Fired station Unit 3 45 MW boiler - Granted

1993 (Offaly Co. Co. Reg. Ref – 9379) New 100m high multi flue concrete chimney and associated ductwork. Granted with conditions.

ABP Ref. PL 19.125575

- 6.1.2. This application sought to upgrade the existing power station from which had an existing output of 125 MW to an increased output of 150MW. This increased the tonnage of peat to be burned at the facility from 1.05 million tonnes per annum to 1.24 million tonnes per annum. The Board in its decision dated 12/02/2002 granted planning permission subject to 17 conditions.

Offaly Co. Co. Ref. – 01/1199. Planning permission granted for 110kV Station Control Building on 23/11/2001.

ABP Ref. 303108-18

- 6.1.3. Under ABP 303108, planning permission was sought for the continued operation of the Shannonbridge Power Station beyond the permitted date of 31st December 2020 and the phased transition of the station from peat burning to relying exclusively on renewable biomass for the production of energy. Changes in the handling facilities of

the fuel type was also proposed with the incorporation of two buildings 17m high and 15 m high for the intake and storage of biomass pellets. The transition phase would see both peat fuel and biomass being co-fired at the facility up to the end of 2027 and the exclusive use of biomass after that date. The biomass demand would be fuelled by both an indigenous and imported biomass supply.

- 6.1.4. The Board refused planning permission for two reasons. Firstly, it considered that the provision of a regionally significant power generating facility, dependent primarily upon the burning of a fuel imported into the facility, needs to be associated and aligned with strategic energy management, planning and renewable energy policies and plans in order to achieve balanced, orderly and sustainable development. The Board also expressed concerns in relation to the continued burning of peat as a fuel source up until the end of 2027. A second reason for refusal stated that the transportation movements generated in the sourcing of the biomass and in the distribution of end product, both nationally and globally together with the deficiencies in the regional road network to serve the ongoing delivery by HGVs of biomass to the plant, due to the extent of narrow road widths, bridge width restrictions, poor horizontal alignment, and structural condition would give rise to unsustainable transportation movements on a substandard regional road network and would endanger public safety by reason of traffic hazard and obstruction of road users.

6.2. Offaly Co Council Reg. Ref. 22/223⁵

- 6.2.1. Offaly Co Council granted planning permission for The Demolition of the Existing WOP Station (As approved under Offaly County Council Ref. 01/187/ An Bord Pleanála Ref. PI 19.125575 and all subsequent permissions); and the development and operation of electricity grid services — namely a Battery Energy Storage System (BESS) and a Synchronous Condenser (Sync Con). The Proposed Development comprises two distinct phases of activity. Phase I comprises the demolition of existing site structures (with a total footprint of c. 13,124 sq.m. and a total gross floor area of c. 28,000 sq.m.) including the former WOP Station, The Intermediate Peat Storage Building and Associated Fuel Management System; and ancillary buildings including: Electrical Building, Tippler Building and associated Control Room and Office, Screening Building, Lorry Unloading Building, Water Treatment Plant Building, Offices Building, Laboratory Building, Workshop and Maintenance

⁵ An identical application lodged under Reg. ref. 22/156 was deemed by the council to be incomplete.

Buildings, Oil Pumphouse, Electrics Rooms, Railway / Locomotive Service Building, Cooling Water, Pump House and Sewage / Foul Water Treatment Facility.

7.0 Policy Context

7.1. Climate Action Plan 2023 (CAP 2023)

- 7.1.1. Climate Action Plan 2023 is the second annual update to Ireland's Climate Action Plan 2019. This plan is the first to be prepared under the Climate Action and Low Carbon Development (Amendment) Act 2021, and following the introduction, in 2022, of economy-wide carbon budgets and sectoral emissions ceilings. The plan implements the carbon budgets and sectoral emissions ceilings and sets a roadmap for taking decisive action to halve our emissions by 2030 and reach net zero no later than 2050. It notes that rapid delivery of flexible gas generation is needed at scale and in a timeframe to replace emissions from coal and oil generation before the second carbon budget period.
- 7.1.2. Chapter 12 of the Plan specifically relates to electricity. Amongst the many measures set out to meet the challenge of meeting and managing the electricity demand is the is to deliver and accelerate a flexible system to support renewables and this includes the delivery "in the order of 2 GW of new flexible gas-fired power generation capacity". This will involve the CRU and EirGrid ensuring an adequate level of conventional dispatchable generation capacity and deliver at least 2 GW of new flexible gas-fired generation. It will facilitate the expansion the gas network to accommodate 2 GW of new gas-fired generation.

7.2. Policy Statement on Security of Electricity Supply (November 2021)

- 7.2.1. Ensuring continued security of electricity supply is considered a priority at national level and within the overarching EU policy framework in which the electricity market operates. It is expected that the majority of renewable energy generated by 2030 will be from wind and solar. These sources of renewable energy are variable in nature and therefore will require other technologies to both support their operation and provide electricity supplies when they are not generating. This will require a combination of conventional generation (typically powered by natural gas), interconnection to other jurisdictions, demand flexibility and other technologies such

as energy storage (e.g. batteries) and generation from renewable gases (e.g. biomethane and/or hydrogen produced from renewable sources). As more wind, solar, storage and interconnection is added to the system, conventional generation is expected to operate less, but sufficient conventional generation capacity will still be required. This conventional generation will spend much of its time in reserve for when needed – e.g. when required to balance the system in times of high demand and low wind/solar generation. It is anticipated that natural gas will form the vast majority, and more enduring, part of this conventional generation.

The Government has approved that:

- the 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 that existing conventional electricity generation capacity, including existing coal, heavy fuel oil and biomass fired generation, should be retained until the new conventional electricity generation capacity is developed in order to ensure security of electricity supply;
- the connection of large energy users to the electricity grid should take into account the potential impact on security of electricity supply and on the need to decarbonise the electricity grid;
- it is appropriate for 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 to support security of electricity supply;
- it is appropriate for additional natural gas transmission and distribution grid infrastructure to be permitted and developed in order to support security of electricity supply.

7.3. National Energy Security Framework April 2022

- 7.3.1. The National Energy Security Framework was prepared and adopted specifically in response to the Russian invasion of Ukraine and the implications for security of the EU and Ireland's energy security. The Framework notes 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. The Commission for Regulation of Utilities has statutory responsibility for ensuring security of electricity supply and is managing a programme of work to address this challenge which is being delivered in conjunction with the Department of the Environment, Climate and Communications and EirGrid.

- 7.3.2. It further notes that the continued supply of electricity to consumers in Ireland has not, to date, been impacted by the war in Ukraine. However, the situation is being monitored on a continuing basis by EirGrid. The level of dispatchable electricity generation capacity needs to increase significantly over the coming years in order to reliably meet the expected demand for electricity. The Commission for Regulation of Utilities, which has statutory responsibility for ensuring security of electricity supply, is managing a programme of work to address this challenge. This includes a programme of actions for the security of electricity supply. Chief amongst them in order to meet growing demand, replace retiring generators and support additional penetration of renewables, it is necessary to procure and deliver at least 2000MW of additional flexible gas-fired generation capacity by 2030 at the latest. This will be required in addition to procuring and delivering additional battery storage, low and zero-carbon system services, demand-side units and the delivery of additional interconnection capacity in the same period. Investment of this type, and at this scale, is critical to ensuring a secure transition and reaching our ambitious 2030 targets. EirGrid and the Department of the Environment, Climate and Communications are working closely with the Commission for Regulation of Utilities to implement this programme for work. The war in Ukraine and the potential for supply constraints has highlighted the need to urgently progress this work as a priority.

7.4. Other Energy Sector Reports

7.4.1. All-Island Generation Capacity Statement 2022-2031 (Eirgrid, SONI)

The 2022 statement predicts a challenging outlook with capacity deficits identified during the 10 years to 2031. In the short term, deficits will increase due to the

deteriorating availability of power plants. The deficits are expected to reduce as new capacity comes forward. Further new electricity generation will be required to secure the transition to high levels of renewable electricity.

The CRU has directed EirGrid to procure Temporary Emergency Generation to help mitigate the risks presented by the security of supply challenges. This generation can only be used in emergency situations and is not intended to be available to meet growing and enduring demand due to social or economic growth.

7.4.2. CRU Information Paper, Security of Electricity Supply – Programme of Actions (Sept 2021)

Key elements in the programme of actions of the CRU, in cooperation with EirGrid, DECC, the energy industry and other stakeholders, include the procurement of additional temporary emergency generation capacity. Some of the measures outlined are temporary and will be unwound as soon as possible, on delivery of other measures.

7.5. Regional and Local Policy

Regional and Spatial Economic Strategy for the Eastern and Midland Region

- 7.5.1. RPO 10.20: 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.

Offaly County Development Plan

- 7.5.2. Chapter 3 of the plan relates to Climate Action and Energy.
- 7.5.3. CAEP-04 It is Council policy to support EirGrid's Implementation Plan 2017 – 2022 and Transmission Development Plan 2019 and any subsequent plans prepared during the plan period that facilitate the timely delivery of major investment projects subject to appropriate environmental assessment and the outcome of the planning process.

8.0 Submissions and Observations

8.1 Submission from the Health and Safety Authority

- 8.1.1. This submission received by the Board on March 7th notes the following. It confirms that the Health and Safety Authority (HSA) is the Central Competent Authority under the Chemicals Act (Control of Major Accident Hazards Involving Dangerous Substances) Regulations 2015 (S.I. 209 of 2015) and presents the following technical advice in response to a notice sent under Article 215 of the Planning and Development Regulations 2001 (as amended).
- 8.1.2. The HSA can confirm that the designated development will constitute a new COMAH establishment, in the lower tier category, due to the quantity of distillate oil being stored at the establishment. The designated development will exceed the lower tier threshold defined in Schedule 1 Part 2 of the Chemical Act (Control of Major Accident Hazards Involving Dangerous Substances) Regulations 2015. Accordingly, the operator of the establishment is required to prepare and provide to the HSA for review, a Land Use Planning Risk Assessment in line with the requirements set out in the Guidance on Technical Land Use Planning Advice. Furthermore, the applicant is required to adhere to the legislative requirements for Lower Tier establishments, which are set out in the Chemicals Act (Control of Major Accident Hazards Involving Dangerous Substances) Regulations 2015.

8.2 Submission from Transport Infrastructure Ireland

- 8.2.1. In its submission dated February 20th 2023 TII indicated that it wishes to advise that it has no specific observations to make in relation to the designated development at Shannonbridge.

8.3 Submission from the Development Applications Unit Department of Local Government and Housing.

This submission notes the proximity of the Power Station to a number of designated Natura 2000 sites. It is noted that some of the wintering waterfowl which are of special conservation interest to the SPA are known to feed, roost and commute in

the vicinity of the site. The Department recommends the following in relation to AA issues:

- It is recommended that where possible that in order to avoid cumulative impacts, that the construction of the designated development and other developments in the area are staggered so that multiple construction of projects do not occur simultaneously.
- Acoustic walls should be constructed as per the specifications outlined in Appendix E of the Concept Study submitted with the Environmental Report. The walls must be in place for the demolition, construction and decommissioning phases.
- The existing surface water management system must be in suitable working order prior to works commencing on site. All mitigation measures, including hydrocarbon interceptors and silt fences must be subject to periodic inspection and maintenance.
- Having regard to the amount of distillate oil to be stored on site, all mitigation measures to avoid hydrocarbon spillage must be strictly adhered to. Hydrocarbon spillage collection must be suitably sized.
- The wheel-wash to be installed must be subject to periodic inspection and maintenance.
- It is stated that during the operational phase the air emissions have the potential to harm species of flora at nearby habitats. However it is noted that the plant will operate as an emergency plant with a maximum of 500 hours per annum and this will significantly restrict emission limits to air.
- All mitigation measures outlines in S.5.2 of the NIS must be implemented in full.

In relation to the Environmental Report the Department notes the following:

- The Board should have regard to the most recent relevant guidance in relation to artificial lighting and its potential to impact on adjacent Natura 2000 sites.
 - o *EUROBATS Series No. 8 publication, Guidelines for consideration of bats in lighting projects, (UNEP/EUROBATS Secretariat (2018))*
 - o *Guidance Note 01/21 The Reduction of Obtrusive Light at Night (Institute of Lighting Professionals (2021))*

- *Guidance Note 08/18 Bats and Artificial Lighting in the UK - Bats and the Built Environment Series (Bat Conservation Trust/Institute of Lighting Professionals (2018))*
- The Department also recommends that LED lighting with warmer colours (with CCT values at or below 3000k) be specified where possible. Where is it found that the proposal is impacting on adjacent Natura 2000 Sites through light spillage, corrective action must be taken.
- The proposed development must be subject to all EPA licensing requirements including any amendments to the existing licence.
- Finally it is stated that all mitigation measures outlined in the Environmental Report must be strictly adhered to.

8.4. Submission from the Environmental Protection Agency

The Agency notes that the existing facility is licensed by the EPA under an Industrial Emissions Licence (Register No. P0611-02). The licence was issued on 26/09/2013 and amended on 06/01/2014 to give effect to the requirements of the Industrial Emissions Directive (2010/75/EU). The proposed activity requires an Industrial Emissions Licence because it involves the combustion of fuels in installations with a total rated thermal input of 50 MW or more. It is also noted that there were 2 amendments to the existing licence in 2015 and 2018 respectively.

The Agency does not have a licence application/ licence review application on-hand at this time in relation to the designated development. As part of it's consideration of any licence all matters to do with emissions to the environment from the activities proposed as identified in the licence review application documentation including environmental report,

consultation documents and submissions or objections will be assessed by the Agency. It is likely having regard to the conclusions the AA screening report in the documentation submitted, that AA will have to be considered by the Agency as part of any consideration of a licence application/licence review application.

The documentation should adequately address the potential impacts of emissions to air from the proposed activity and the potential for cumulative effects due to emission sources from any other activities. The NIS should adequately address whether any parts of the proposed activity with potential for likely significant effects, will in fact

adversely affect the integrity of European Sites with respect to the conservation objectives identified, and describe any proposed mitigation measures to avoid adverse effects on the integrity of European Sites.

8.5. Submission from Offaly County Council

- 8.5.1. Within the context of the critical need for temporary emergency electricity generation over the next number of years and the established electrical infrastructure located at West Offaly Power Station, Shannonbridge, Co.Offaly, Offaly County Council (OCC) have no objection to the proposed designated development, as outlined in the associated application documentation.
- 8.5.2. OCC notes the assessments contained within the Environment Report and Natura Impact Statement submitted with the application, and in particular, the mitigation and monitoring measures outlined with respect to the proposed designated development.
- 8.5.3. OCC considers that in the event that An Bord Pleanála grant permission for the proposed designated development, a condition should be attached specifying that all the mitigation and monitoring measures set out in the submitted Environmental Report and Natura Impact Statement, shall be implemented in full.

9.0 Assessment

9.1. Introduction

- 9.1.1. Article 8 of the Development (Emergency Electricity Generation) Regulations, 2022 requires an assessment to be carried out by the Board for the purposes of ensuring that the objectives of the Environmental Impact Assessment are met and shall identify the likely main effects on the environment of the designated development. S8(2) specifies that the assessment shall include an examination, analysis and evaluation by the Board in an appropriate manner of the main likely effects of the designated development on the following factors:
 - (a) Population and human health
 - (b) Biodiversity with particular attention to species protected under the habitats and birds directive.
 - (c) Land, soil, water, air and climate

(d) Material assets, cultural heritage and the landscape

(e) The interaction between the above factors.

9.1.2. In accordance with the provisions and requirements of Article 8 of the Regulations, the sections set out below examine the designated development in accordance with the environmental factors set out above.

9.1.3. I have carried out an examination on the information on file presented to me in conjunction with the issues raised submissions and the memo received by the Board from the consultant ecologist, Mr Tom O Donnell received by me on March 24th 2023 (memorandum attached). This assessment is based on the information contained in the application, the submissions and observations received by the Board, and the memorandum received from the consultant ecologist.

9.2. **Alternatives**

9.2.1. In developing the proposal before the Board, the applicant considered a number of alternatives. In relation to the do-nothing scenario, the report notes that if the proposed emergency generation does not proceed, there is a clear risk that power outages could occur due to the forecasted system demand and the potential shortfall forecasted in the electricity generated which was identified in the EirGrid Generation Capacity Statement. This could have a significant adverse effect in terms of energy requirements and supply at home, at work, for commercial developments and industry. This point is readily acknowledged in the submission from the Planning Authority.

9.2.2. In terms of the range of technology available, the Environmental Report notes that this was limited on the basis that (a) any technology would be required to be installed quickly, (b) would meet demand requirements and (c) would be required to meet emissions controls and relevant legislation. The technology type was also limited to plant which is temporary in nature and the technology was also required to be 'dispatchable generation'⁶.

9.2.3. Based on the above, the applicant identified that the preferred power generation plant demonstrated a timeline which can potentially achieve delivery by the target

⁶ Power generation that was available at any given moment, according to the systems needs. This ruled out more renewable forms of energy such as wind and solar.

date, therefore EirGrid proceeded to negotiate with OEM as the preferred supplier of the electricity generation plant technology.

9.2.4. In terms of site selection, the preferred site at Shannonbridge (and the other selected site at Tarbert – the subject of a sister application under ABP-315838-23) were chosen in the context of 18 selected sites. The four main criteria which determined the suitability or otherwise of the sites included:

- Grid connection and the ability to export power generation from the site.
- Fuel connection available (Gas or Distillate Oil)
- General suitability of the land to accommodate the power generation equipment and the availability of the site from the landowner.
- The ability to obtain an EPA licence.

There was a general presumption in favour of the use of existing power generation sites, in order to avoid the development of new greenfield sites. A number of suitable sites were selected on the above basis, and subsequent to this, the sites were assessed against additional criteria including:

- Details of existing connection agreements and other market obligations
- Details of future potential connection agreements and other potential market obligations
- Details of the potential electricity generation that can be expected from each site;
- Ability to meet the target date of the 1st October 2023 and operate for a minimum 3-year duration;
- Access to details of the sites existing IPCC licensed site;
- Access to details of network constraints, that may restrict full export of power; and
- Feasibility of making the required transmission connections without adverse impact on the existing generation plant output.

Both the Shannonbridge and the Tarbert Sites were considered to have satisfied the main and sub-criteria referred to above and were selected on that basis. The preferred sites were selected on account of the short-term emergency nature of the plant technology required, by means of procuring the plant and equipment to meet

the need arising, and the suitability of the site based on the multi-criteria analysis referred to above. The analysis of the alternatives available and the rationale for selecting the Shannonbridge site was in my view, reasonable, logical and robust.

9.3. Air Quality and Climate

- 9.3.1. The proposed development has the potential to adversely impact on sensitive receptors located in the vicinity. These sensitive receptors include humans and sensitive nature conservation habitats (inc. flora) and species. The Environmental Report submitted with the application includes a detailed air dispersion model which predicts emissions to make certain that the appropriate stack heights are constructed in order to ensure that no adverse impacts arise in terms of air pollution. Impacts in terms of air pollution can also arise from both construction and demolition activities undertaken on site. Fugitive dust in the form of PM₁₀ is of particular concern during this phase. Of lesser concern during the construction/demolition phase, are air emissions from vehicles travelling to and from the site.
- 9.3.2. Air pollution legislation in Ireland is primarily based on the CAFE Directive⁷ which came into force in 2008 and was transposed into Irish legislation under SI 180 (Air Quality Standard Regulations) of 2011. The latter Regulations adopted the Standards set out in the Directive. The limit values set out for the protection of human health are set out in Annex 11b of the Directive⁸ and are summarised in the Table 1 below.

Table 1: Limit Values for the Protection of Human Health contained in Annex 11b of the Directive

Averaging Period	Limit Value
Sulphur Dioxide (SO ₂)	
1 Hour	350 µg/m ³ not to be exceeded more than 24 times a calendar year
1 day	125 µg/m ³ not to be exceeded more than 3 times a calendar year
Nitrogen Dioxide (NO ₂)	
1 Hour	200 µg/m ³ not to be exceeded more than 18 times in a calendar year

⁷ Clean Air for Europe Directive

⁸ Schedule 11 of the Air Quality Standard Regulations

Calendar year	40 µg/m ³ (not to exceed 30µg at ecological receptors)
Benzene	5µg/m ³
Carbon Monoxide	10 mg/m ³
Lead (Calendar year)	0.5 µg/m ³
PM ₁₀	50µg/m ³ not to be exceeded more than 35 times a calendar year
Calendar Year	40µg/m ³
PM _{2.5}	25µg/m ³

Annex XIII of the Directive sets out critical levels of air pollutants for the Protection of Vegetation and these levels are set out in Table 2 below:

Table 2: Limit Values for the Protection of Vegetation contained in Annex 11b of the Directive.

Averaging Period	Critical Level
Sulphur Dioxide (SO ₂) Calendar Year and Winter (Oct 1 st to March 1 st)	20 µg/m ³
Oxides of Nitrogen (NO _x) Calendar Year	30 µg/m ³ per calendar year

9.3.3. I note that the Environmental Report submitted also includes in Table 4.2, the impacts at ecological receptors in the context of appropriate Environmental Assessment Levels (EAL's) for nitrogen deposition, referred to as critical loads (CL's). These critical loads have been sourced from Air Pollution Information System (APIS) based on habitats and species identified within the relevant Conservation Objective Reports. These are set out in the Table below:

Table 3: Critical Nitrogen Loads for Habitats and Species:

Habitat/ Species	Critical Nitrogen Load (kg/N/hr/yr)
Meadows	10
Grassland	15
Bog	5
Geyer's Whorl Snail	15
Woodland	10
Turlough	3

Demolition and Construction Phase Emissions

9.3.4. It is anticipated that during the demolition and construction phases of the designated development, construction activities will have the potential to generate dust and finer particulate (PM₁₀ & PM_{2.5}) emissions that could have an impact on, and effect sensitive receptors located close to the site boundary. However, I consider that air emissions during the construction and demolition phase can be adequately controlled through appropriate mitigation measures which are outlined in both the Environmental Report and the Framework Construction Environmental Management Plan (CEMP) - Appendix B of the Report. The fact that the proposed designated development is located centrally within the larger former power station site, severely limits the potential for fugitive dust emissions to escape beyond the boundary of the power plant thereby limiting the effect on sensitive receptors beyond the boundary. In the vast majority of time fugitive dust is deposited within 50m of the source. The nearest dwellings and therefore sensitive human receptors, located to the north east of the site are c.190m away.

9.3.5. A host of mitigation measures to control fugitive dust pollution are set out in Table 4.17 of the Environmental Report and Section 3.1.1. of the CEMP. In summary this mitigation measures involve:

- Preparation of a Dust Management Plan (DMP)
- Recording and addressing all dust and air quality complaints.
- Locating dust generation activities and machinery furthest away from sensitive receptors.
- Mitigation measures to specifically address dust emissions from operating vehicles and machinery (covering vehicles using transport materials).
- Incorporating suitable dust suppression measures during construction operations (water spray, using enclosed chutes, conveyors and skip coverings).
- Revegetating soil stockpiles as soon as practicable.
- Placing sand and aggregates in bunded area and prevent stockpiles from drying out.
- Use of water assisted dust sweepers. Avoid sweeping dry areas.
- Inspect on-site haul routes for integrity and instigate necessary repairs to the surface as soon as reasonably practicable.

- Record all inspections of haul routes and any subsequent action in a site logbook.
- Implement a wheel washing system (with rumble grids to dislodge accumulated dust and mud prior to leaving the site when reasonably practicable).

9.3.6. The above are standard, practical and effective mitigation measures in minimising fugitive dust generation during construction activities. I am satisfied that with the employment of these measures, the proposed development will not give rise to any adverse impacts in terms of air pollution during the construction and demolition phase.

Operational Phase

9.3.7. The operational phase is perhaps of greater significance in terms of generating air pollution. The burning of distillate diesel will give rise to emissions of nitrogen oxides (NO_x), nitrogen dioxide (NO₂), sulphur dioxide (SO₂), carbon monoxide (CO), particulate matter with an aerodynamic diameter of <2.5µm in diameter (PM_{2.5}), which all have the potential to harm species of flora at nearby habitats and nearby human health receptors. The Environmental Report provides details of air dispersion modelling which was undertaken to assess the air quality implications arising from the burning of distillate diesel on the human and ecological receptors within 15km of the site. The assessment also considers the annual rate of nitrogen deposition at the nearest relevant sensitive ecological receptors. The model source input data is set out in Table 4.3 of the Report. The information provided is derived from proposed stack emission monitoring reports from each of the open cycle gas turbines. As can be expected, the emissions from each of the gas turbines will be identical and are summarised in the Table 4 below:

Table 4: Data for Individual Stack Emissions

Release Height	30
Stack diameter	3.3
Temperature (°C)	528.6
Exhaust Mass Flow (kg/s)	91.3
Exhaust Volume Flow (Nm ³ /h) ⁹	255069
NO _x Emission concentration(mg/Nm ³)	199.2

⁹ Unit for volumetric flow rate of air or gas at a temperature of 0 °C and pressure of 101,3 kPa, expressed in cubic metres per hour.

SO ₂ Emission concentration(mg/Nm ³)	56.6
CO Emissions concentration(mg/Nm ³)	31.1
PM ₁₀ Emissions concentration (mg/Nm ³)	17.0
NO _x Emission rate (g/s)	14.11
SO ₂ Emission rate (g/s)	4.01
CO Emission rates (g/s)	2.21
PM ₁₀ Emission rates (g/s)	1.20

9.3.8. The model predicts the contribution of emissions of NO_x, SO₂, CO, PM₁₀ and PM_{2.5} to annual mean concentrations at the receptors listed in Table 4.4 and Table 4.5 of the Environmental Report. The receptors identified, all within a 15km radius of the designated development include, 48 sensitive nature conservation sites (located within SAC' and SPA's) and a total of 55 human health receptors (these includes residential properties, schools and 1 nursing home).

Background Concentrations

Background concentrations were sourced from EPA monitoring data for monitoring locations included EPA Zone D, which is used to represents rural locations. These background concentrations for Zone D are set out below¹⁰:

Table 5: Background Air Pollution Concentration Levels in Zone D.

Pollutant	Averaging Period	Concentration (µg/m ³) or Deposition Rate (kg/ha/yr)
NO ^x	Annual mean	14.2
NO ₂	Annual Mean	7.5
	1-hr	15.0
SO ₂	Annual mean	4.2
	1-hr	8.4
	24-hr	8.4
N Deposition	Annual Rate	12.1 kg/ha/yr
CO	8 hr rolling	0.3
PM ₁₀	Annual Mean	11.9
	24hr	23.8
PM _{2.5}	Annual mean	8.7

¹⁰ Further monitoring data for individual stations within the midlands (Emo Court, Birr, Castlebar, Carrick on Shannon, Kilkitt and Edenderry) are set out in Tables 4.9 to 4.14 of the Environmental Report. The average of the background concentrations presented for each of the stations, are similar to the figures presented in Table 5 in my report.

- 9.3.9. It is apparent when comparing the information contained in the above Table with the limits and standards set out in Table 1 above that the background concentration levels are, generally well within the limits set out in the CAFÉ Directive¹¹.
- 9.3.10. Meteorological data was derived from the weather station at Gurteen College c.26 km to the south of the site¹². It was selected as being the most representative site for the study area. The surface roughness of the study area was set at 0.3, while the surrounding terrain and the buildings within the former power station site, were also incorporated into the dispersion modelling exercise in order to estimate as accurately as possible, the dust deposition rate arising from the designated development on the surrounding area. Details of the NO_x and NO₂ which were converted to NO and N Deposition rates (kg/N/ha/yr) are also set out in the modelling exercise undertaken.

Main Likely Effects

- 9.3.11. A dispersion modelling assessment has been undertaken with reference to EPA - AG4 guidance and other UK guidance¹³. The assessment method has accounted for generator emissions data, five years of representative meteorological data, variation of local terrain, the effect of building downwash from the neighbouring West Offaly Power Station buildings, and representative air quality sensitive receptors. The contribution to pollutant concentrations and deposition rates has been added to the background contribution to provide an estimate of total pollutant concentrations and deposition rates. These values can then be directly compared to the relevant AQSs. The results of the modelling assessment are contained in Table 4.15 (impact on human health receptors) and Table 4.16 (ecological receptor locations).
- 9.3.12. The results of the human health assessment provided in Table 4.15 demonstrate the following:
- The contribution of pollution specifically attributed to the designated development to annual mean PM₁₀ and PM_{2.5}, and 8-hour CO is less than 1% of the relevant AQSs at the worst affected receptors.

¹¹ The only exception to this relates to N deposition where background concentrations already exceed the critical values for N with the exception of limits for the Geyer's Whorl Snail.

¹² The station at Gurteen does not include data on cloud cover and missing hours of that parameter were taken from the meteorological station at Shannon Airport for the same years.

¹³ UK EA and IAQM / EPUK guidance.

- The contribution of pollution specifically attributed to the designated development to annual mean NO₂ is less than 2% of the AQS and to 24-hour PM₁₀ it is less than 8% of the AQS.
- The contribution of pollution specifically attributed to the designated development to 1-hour SO₂ is less than 24% of the AQS and 24-hour SO₂ is less than 27% of the standard.
- With the addition of the background concentrations, the predicted overall environmental concentration for annual mean NO₂, PM₁₀ and PM_{2.5}, 24-hour mean PM₁₀ and SO₂, 8-hour CO and 1-hour SO₂ are well below their respective AQS to the extent that the effect of impacts is not considered significant in accordance with the various EPA and UK guidance documents.
- The only impacts which could potentially be described as 'significant' relates to emissions of NO₂ from the designated development which peaks at 75% of the AQS at receptor R1, (the rear of the closet dwelling house to the designated development, at St Kieran's Park c. 190 m from the boundary of the site). A slightly lower but nevertheless significant contribution of NO₂ will also be experienced at a dwelling house (R2) on the R357 approximately 320m from the boundary of the site. While under a worse case scenario, the AQS's set out in the legislation are not breached or exceeded, the predicted impact specifically attributed to the designated development at these two locations cannot be screened out as 'insignificant' in line with criteria set out in EPA - AG4 or the various British guidance in respect of air pollution. The background concentrations of NO₂ were recorded as being 7.5 µg/m³ (annual mean) and 15.0 µg/m³. The AQS for 1-hour NO₂ is based on a 200 µg/m³ concentration not being exceeded more than 18 times in a calendar year. In this assessment, it has been assumed that the 500 hours of operation could occur on any hour of the calendar year and therefore coincide with the worst hourly meteorological conditions at each receptor. Further analysis carried out in the air pollution section of the Environmental Report has indicated that the probability of worst meteorological conditions on which the modelling was undertaken, coinciding with the operation of the power generating plant is extremely unlikely. So much so that the predicted environmental

contribution arising from the designated development being 50% or more of the AQS in terms of NO₂ is calculated as being less than 0.06%. The probability of NO₂ emissions from the proposed development as being classed as a significant impact is therefore negligible. It can be reasonably concluded therefore in my opinion, that the impact of the designated development on the baseline air environment will not be significant.

In terms of the potential impact of the designated development on ecological receptors, the modelling undertaken as part of the assessment demonstrates the following:

- The vast majority of ecological receptors will experience insignificant impacts. The proposed power generation plant will contribute a negligible increase in air pollution levels, in the vast majority of case less than 1% of the AQS's. There is one exception relating to NO_x concentrations in the area of lowland hay meadows within the River Shannon SAC, c850m north west of the subject site. The contribution of NO_x from the process results in an overall contribution of well below the AQS's at only 49% of the maximum value permitted¹⁴.
- In terms of more general Nitrogen deposition, as already mentioned, the background concentrations on N nationally already exceed the limits set out. The results of the modelling indicate that the contribution of Nitrogen which can be specifically attributed to the power generation process on-site is infinitesimal - ranging from 0.00 µg/m³ to 0.07 µg/m³.

Residual Impacts

9.3.13. On foot of the modelling presented in the environmental report, it is apparent that the designated development will have no discernible impact on ecological receptors in the area, and particularly those associated with Natura 2000 sites in the vicinity. In respect of human receptors, the contribution of NO₂ from the process peaks at 75% of the AQS at receptor 1. With the addition of the background concentrations overall potential NO₂ levels could exceed 80% of the permitted AQS's at receptor R1 and R2, while this will not exceed the AQS's set out in the legislation, it cannot at the same time be deemed as insignificant. However, the critical factor in assessing the

¹⁴ The background concentration of NO_x is 14.2µg/m³ the predicted additional NO_x derived specifically from the process amounts to an additional 0.49 µg/m³ resulting in an overall quantity of 14.69 µg/m³. This is just less than 50% of the AQS value of 30µg/m³.

impact relates to the limited operation of the power plant. The plant will operate for a maximum of 500 hours per year (ie 5.7% of the year). The probability of the power plant operating and it coincides with a worst case scenario in terms of pollution deposition rates is calculated as 'negligible'. Furthermore, the key consideration in my view, is that even under a worst-case scenario the air pollution modelling indicates that the proposal will in no instance breach the AQS of 200 µg/m³, notwithstanding the fact that the legislation permits an exceedance of this value up to 18 times per year. The rural location of the power station where existing background levels of air pollution are low, is appropriate as this ensures that the AQS limits are adhered to and thus the proposal will not pose a risk to ecological or human receptors in the vicinity. The proposal development therefore will have an acceptable environmental impact, on the basis that it can be screened as insignificant in terms of air pollution. I am satisfied that air quality standards can be achieved based on the analysis undertaken in the Environmental Report. Adherence to the Air Quality Standards will be a matter for the EPA, and as stated in the submission received from the Agency; during the operational phase this issue will be covered and monitored by any licence granted by the EPA.

Conclusion

I have considered all of the application documentation and submissions received, and I am satisfied that impacts in relation to air quality would be satisfactorily avoided, managed and mitigated by the measures which form part of the proposed scheme and by appropriate conditions. I am satisfied that the proposed development would not have any unacceptable direct, indirect or cumulative impacts in terms of air emissions.

9.4. Noise

- 9.4.1. Noise and vibration is a relevant issue in terms of demolition and construction process and the operational phase.

Baseline Environment

- 9.4.2. The baseline noise environment has been established with reference to the data collected and submitted to the EPA as per the annual compliance measurements undertaken as part of the Licence when the plant was operational, for 2 of the noise sensitive receptors - NSR 1 – the rear façade of the dwelling at St. Kieran's Park

c190m to the north east of the site and NSR 2- dwelling located to adjacent to the R357 and the access leading to the site to the north west. The sound levels recorded at both locations are indicated in Table 4.25 of the report. The dominant source at both locations was attributed to traffic. A further baseline study was carried out at NSR 2 in November 2021¹⁵. It shows that, when the plant was operational, dB(A)_{L_{Aeq}} (30 mins) ranged between 55 and 64 dB(A), the latter survey recorded a lower level between 43 and 53 dB(A).

Construction and Demolition Phase

9.4.3. During the construction phase, noise levels are likely to be highest during the initial period where louder activities such as earth movements are likely to take place. As the construction phase develops, noise levels are expected to reduce as less noisy work involving plant installation and internal works take over. Construction phase works will take place over a minimum of two eight hour shifts per day and on occasions, three eight hour shifts per day, seven days a week, during construction and commissioning phases. The construction phase will last up to 8 months. It is clear from the baseline environment surveys that the nearest NSR fall within the threshold of 'Category A' with regards to BS5228 ABC criteria presented in Table 4.28 with an assessment value of 65dBA. This is the most stringent category in BS 5228. These criteria is set out in Table 6 below:

Table 6: Criteria in BS 5228 for Noise Generation During Construction Phase

Period	Time	BS 5228 Criteria Category A
Night-time	23:00 – 07:00	45
Evenings and Weekends	19:00 - 23:00 Weekdays 13:00 – 23:00 Saturdays 07:00 – 23:00 Sundays	55
Daytime	07:00 – 19:00 Weekdays 07:00 – 13:00 Saturdays	65

The Table 7 below provides details of the quantity of each item, their estimated percentage on-time and the resulting corrected sound power levels associated with each type of plant item.

¹⁵ Post closure of the Power Station

Table 7: Details of Construction Activities and Associated Sound Power Levels

Phase	Construction Activity	Plant	Quantity	Sound Power Level (dBA)	Percentage time operational
Demolition	Site Clearance	Tracked excavator 22t	1	106	50%
	Breaking up concrete	Pulverised mounted on excavator 147 30	2	107	50%
	Distributing materials	Articulated dump truck 25t	1	109	50%
	Breaking up concrete	Hand-held hydraulic breaker 20kg	1	121	25%
Construction	Formwork	Angle grinder	1	108	50%
	Concrete pour	Concrete pump	1	106	50%
		Vibrating poker	1	106	
	Distributing materials	Articulated dump truck 25t	1	109	50%

9.4.4. Specialist environmental noise level modelling software “CadnaA” was used to predict construction noise levels at receptors. Construction vehicles moving between the main access road between R357 and the construction area were represented by a line source. The line source was configured using a representative heavy good vehicle (HGV) spectrum and maximum pass-by sound power level taken from BS 5228 reference C.2.34. An on-time correction was applied to account for the non-continuous nature of these vehicle movements based on the peak number of HGV expected 38 per day.

The following assumptions and CadnaA settings were used:

- All land is assumed to be flat; ground topography information was not available for this assessment.
- Ground absorption = 1.0 (Soft) - for grass areas around power station boundary.
- Ground absorption = 0.0 (Hard) - for the plant area;
- Reflection order = 3;

Sound level calculations have been undertaken in accordance with *ISO 9613-2:1996 Acoustics - Attenuation of sound during propagation outdoors - Part 2: General method of calculation*.

Main Likely Effects – Construction Phase

The predicted noise level at each of the receptors are set out in Table 8 below:

Receptor	Separation distance to boundary of site	Predicted demolition noise level LAeq,T dB		Predicted Construction Noise level LAeq,T dB	
		1.5 m height	4 m height	1.5 m height	4 m height
NSR 1	188m	53	54	48	49
NSR 2	392m	47	49	43	44
NSR 3	255m	47	49	42	43
NSR 4	326m	47	49	42	44

In terms of compliance with guidelines and standards, the table indicates the level of compliance with the most sensitive receptors in the vicinity.

Table 9: Compliance with NRA and BS 5228 Standards

	Daytime		Evening and weekend		Night-time	
	Below BS 5228 Cat A limit	Below NRA Guidelines	Below BS 5228 Cat A limit	Below NRA Guidelines	Below BS 5228 Cat A limit	Below NRA Guidelines
Reference Value	65 dB _{LAeq}	70 dB _{LAeq}	55 dB _{LAeq}	60-65 dB _{LAeq}	45 dB _{LAeq}	n/a
Demolition Phase	Yes	Yes	Yes	Yes	No	-
Construction phase	Yes	Yes	Yes	Yes	No	-

- 9.4.5. It is apparent from Table 9 that predicted construction levels are compliant with both the NRA standards and with the more stringent BS 5228 criteria in the daytime, evening and weekend periods which cover the two eight hour shifts outside the night-time period. A suite of mitigation measures will be included during the construction period, these are set out in detail in S.4.3.6 of the Environmental Report and will include the fitting of mufflers and silencers pneumatic percussive tools and the incorporation of sealed acoustic covers or enclosures on machines. Best practice will be incorporated on site to limit noise and vibration propagation.
- 9.4.6. Notwithstanding these mitigation measures the night-time period the noise levels could exceed the criteria set out under the BS 5228 Category A limit. In this instance there are two options open to the Board, it could consider restricting construction activity to day time and evening time only by way of condition. Alternatively, as suggested in the Environmental Report, it could confine all night time activity to that associated to low construction noise activities. In this regard the Board could consider imposing a condition requiring all construction activities to be carried out during the night-time period not to exceed 45 dB(A) at the nearest noise sensitive

receptor. Having regard to the need to develop the designated development as an emergency measure together with the relatively short term nature of the construction activities to take place on site, I consider the Board could incorporate a condition, permitting night time construction activity provided it complies with the 45 dB(A) limit stipulated.

- 9.4.7. In respect of construction traffic on existing roads, peak construction traffic associated with the designated development is expected to total 38 two-way HGV movements per day. This equates to a 2% increase in total flows per day on R357 over the baseline, although the overall the percentage of HGVs is forecast to increase to 8%. Assuming average speeds remains unchanged, a 2% increase in traffic and a 8% increase in HGV's will have an negligible increase in noise generation in the order of 0.6 dB(A) which is considered imperceptible.

Main Likely Effects - Operational Phase

- 9.4.8. The EPA's noise assessment guidelines (NG4) provides criteria for use in noise assessments including defining areas that can be classed as 'quiet areas' and those listed as "low background noise areas'. The Environmental Report concludes that the proposed development does not meet the criteria to be classed as a quiet area¹⁶ or as a "low background noise area" based on the baseline noise levels recorded and the NSR's in the vicinity. Therefore, to assess the impact of the Designated Development with regard to operational noise, the 'All other Areas' criteria have been adopted. The noise level criteria to be applied to the operational phase are as follows:

Daytime Noise Criterion dB _{L_{Art}} (0700-1900)	Evening Noise Criterion dB _{L_{Art}} (1900-2300)	Night-time Noise Criterion dB _{L_{AeqT}} (2300-0700)
55 dB	50 dB	45 dB

- 9.4.9. The L_{Art} rating indicates that tonal and impulsive characteristics for noise propagation has been taken into consideration (although tonal and impulsive noise sources are not anticipated during the operational phase). The operation of the designated

¹⁶ It is not altogether clear on what basis the subject site has not been classed as a quiet area under the criteria specified by the EPA. NG4 sets out a number of criteria which defines a quiet area, the only criteria which would appear to apply to the subject site, would be the sites location within 3km of the any local industry. Bridgeway Engineering is located to the immediate north of the subject site, at it appears that it may on this basis that a quiet area designation does not apply, although this is not specified on the information submitted.

development may be required at any stage and therefore can be considered a 24/7 operation, with the power plant being potentially called into action anytime throughout a 24 hour period. The noise criterion of 45 dB $L_{Aeq,T}$ for the night-time at the nearest NSR location has been adopted. Compliance with this night-time criterion will therefore ensure compliance with the higher criteria for daytime and evening periods.

9.4.10. To determine the potential noise impact of the designated development on the NSR locations identified, all significant operational noise sources have been included in a 3D noise model. It is reiterated that it is not anticipated that during the operational phase, noise sources will be tonal or impulsive in nature.

9.4.11. In order to ensure that the 45 dB $L_{Aeq,T}$ night time limit is complied with, a series of acoustic screens are proposed at different locations around the proposed 8 open gas cycle turbine units. The locations of the screens are indicated in Figure 4.8 of the Environmental Report. They include:

- 8m high, 155m long acoustic barrier to the northwest boundary near the generators.
- 11m high, 70m long acoustic barrier also on the northwest boundary.
- 3m high, 20m long to the west of the site adjacent zone 3 laydown.
- 9m high, 45m long adjacent to zone 7 office-1 area.
- 12m high, 90m long south of the emergency generators.

Details of the noise modelling undertaken is contained in Appendix E 'Noise Concept Study'. The predicted noise levels at the various noise receptors are set out below:

Table 10 Noise Levels at Noise Sensitive Receptors

Receptor (Human - NSL)	Normal Operation dB(A)	Transient Operation dB(A)	Noise Limit dB(A)
NSL 1	38.6	32.7	45
NSL 2	42.7	36.1	45
NSL 3	42.5	37.8	45

Table 11 Predicted Noise Levels at Ecological Receptors:

Receptor	dB(A)
R1	37.7
R2	42.5
R3	31.7

R4	40.1
R5	27.7
R6	27.8
R7	28.5
R8	26.4
R9	26.3
R10	22.6

Residual Impacts

9.4.12. The modelling therefore undertaken includes iterative designs involving acoustic barriers that would meet the more stringent NG4 night-time operational criteria. The NPWS submission requests that the noise limits be strictly adhered to, so as to ensure that species, particularly otter not be disturbed. The noise mitigation strategy, proposed is considered to be the application of best available technology, based on this technology I conclude that the limits stipulated can be adhered to and will not result in disturbance outside the site. Additional noise mitigation measures will also be employed during the operational phase, these will include silencers, attenuators and the incorporation of low noise plant wherever possible. With the implementation of the acoustic barriers the operational noise impact can be defined as being 'not significant and short-term'. It will only operate for a maximum of 500 hours per annum of a maximum of 5.7% of the time on any given year over a 5-year period. The Board will also note that the designated development is required to be licensed by the EPA under the industrial emissions licensing process. An application to review the existing IE licence will be made to the EPA to reflect the changes to power generation introduced by the designated development. Therefore, once the Board is satisfied that requisite noise levels as set out in the various guidelines can be met, the limits and monitoring arrangements during the operational phase will be set under any EPA licence, should it be issued to the applicant for the designated development.

Conclusion

I have considered all of the application documentation and submissions received, and I am satisfied that impacts in relation to noise propagation would be satisfactorily avoided, managed and mitigated by the measures which form part of the proposed scheme and by appropriate conditions. I am satisfied that the proposed

development would not have any unacceptable direct, indirect or cumulative impacts in terms of noise.

9.5. Biodiversity

Baseline Environment

- 9.5.1. The site comprises a mixture of existing infrastructure (roads, hardstanding and auxiliary buildings) with limited natural habitat present. The area of natural habitat within the former power station comprising several small areas of landscape planting / grassland with young / immature planted trees. Some areas of recolonising bare ground are also present. The applicant conducted a walkover of the site and in particular the laydown areas where the parking, office and the proposed 8 open gas cycle turbine units are proposed to be located. It comprises of hardstanding with some marginal recolonisation within the cracks of the hardstanding and along the periphery of the landing area. The habitat survey undertaken did not identify any areas of notable ecological value. Whilst it is recognised the survey was conducted outside the preferred survey window, this is considered unlikely to have significantly limited the identification of habitat categories or likely habitats of note as sufficient vegetation was present to determine habitats.

Main Likely Effects

- 9.5.2. The potential impacts of the designated development on the surrounding Natura 2000 sites are described and assessed in a separate section of my report below. This section of my report solely focuses on the impact of the proposed development on the ecology and biodiversity within and surrounding the site. The 2018 application¹⁷, in the biodiversity chapter in the EIAR, it was noted that the only important areas of ecological importance was the areas of mixed broadleaf woodland along the River Shannon, which are located beyond the site boundary and will not experience any direct impact as a result of the development.
- 9.5.3. Several buildings and structures on site which will be demolished / dismantled as part of the proposal have the potential to host bat populations. The majority of these buildings were the subject of a bat survey in December 2021 and January 2022. The survey concluded that none of the buildings or trees located within the site have any

¹⁷ West Offaly Power Station Transition to biomass under Reg Ref. 303108-18

realistic potential to support bat roosts due to the absence of suitable roosting features. Other buildings outside the site, (but within the overall power station lands) were identified as having the potential to host bats. These buildings will remain in situ and do not form part of any of the demolition works proposed. The report considers that indirect effects of disturbance are likely to be negligible as demolition activities (likely to be most noisy) within the site is due to be conducted outside the summer roosting period. Environmental Report indicates in section 3.4 that preliminary construction works will commence in May 2023. This will comprise of pre-construction works, ground works and construction of plant equipment. This could coincide with the summer roosting period. The mitigation measures set out in section 4.4.4.3 of the report, which specifically relate to bats, suggests that the demolition of buildings and structures on site could be conducted within an 18 month period (ie by April 2024 – this suggests that the demolition of most of the structures can take place after the designated development becomes operational). Were this to be the case, there would be sufficient scope to carry out the demolition/dismantling of buildings outside the summer roosting period in order to reduce noise levels so as not to affect bat roosts. All temporary lighting will be fitted with directional cowls to prevent light spill to the surrounding area. All temporary lighting will only be directed at the works area ensuring no light overspill to suitable commuting and foraging habitat such as the River Shannon, woodland or scrub. All lighting provision will comply with best practice and guidance.

9.5.4. I note the contents of the ecologists memo stating that insufficient information is presented within the application to allow the potential for effects on bats to be understood, this concern primarily relates to lighting. The DAU submission also suggests that the most up to date lighting guidance has not been used in the assessment. Both the Ecologists memo and the DAU submission suggest that reference to more recent and relevant light guidance in any condition would remedy the inaccuracies. I recommend that this issue therefore be addressed by way of condition.

9.5.5. In relation to birds, targeted surveys for non-breeding waterbirds have been carried out within the development site in November and December 2022. None of the named Special Conservation Interest (SCI) species of SPAs were recorded roosting / feeding or foraging within the site of the Designated Development, including the construction laydown area during the surveys conducted to date. Notable birds

recorded flying over the site include two whooper swans (SCI species of Middle Shannon Callows SPA and the River Suck Callows SPA). Whooper swan and black-headed gull (both SCI species of Middle Shannon Callows SPA) were also recorded flying along the course of the River Shannon. Kestrel (included on the red-list of Birds of conservation concern) was recorded flying over and hunting above the scrub / woodland habitat along the western side of the site. Whilst breeding bird surveys have not been conducted, it is unlikely that potential nesting habitats associated with the bird of SCI will be affected by the designated development would be suitable to support nesting species other than those which are common and widespread.

- 9.5.6. While it is not ideal that breeding bird surveys have not been carried out on site, the applicant is constrained by the emergency nature of the legislation under which the application is being made. The proposal before the Board is being made on the basis to ameliorate and protect security of supply of electricity in the State because exceptional circumstances have arisen in the market for that supply and further because of the situation in Ukraine. Article 3(4) of the Regulations¹⁸ specifically notes that any environmental report shall include information “*to the extent that that information is reasonable available*”. It can therefore be argued in my view that it is not reasonable for the applicant more comprehensive surveys over a longer time period including the spring and the summertime given the time constraints involved in assessing the application before the Board.
- 9.5.7. Furthermore, the report concludes that it is likely that the nesting species that could be potentially affected by the proposal are those associated with species that are common and widespread. In addition, a suite of mitigation measures are to be employed specifically to reduce potential bird disturbance. These include noise mitigation measures in the form of acoustic barriers. Where demolition is to take place inside the bird breeding season, it is recommended that the structures or buildings are inspected in advance by a suitably qualified ecologist, and it is confirmed that there is no evidence of nesting. Information provided in the Environmental Report in respect of bats suggests that demolition of buildings could take place over an 18-month period (ie up to April 2024) on this basis there appears to be sufficient scope to carry out the demolition of buildings outside the breeding season. On foot of the site inspection undertaken of the buildings and structures

¹⁸ SI No. 719/2022

proposed to be demolished, none appear to provide more than limited potential for nesting by common species such as feral pigeon or corvid species (e.g., crows, rooks, jackdaws). There is sufficient alternative nesting habitat in the surrounding area to mitigate the loss of the structures and buildings which have low potential for nesting. In the case where vegetation clearance is required, it will, where possible be carried out outside the nesting bird (March 1st to August 31st). Having regard to the nature of the site, very little vegetation clearance will be required to facilitate the proposed development. Notwithstanding this point, the site will be checked for breeding birds by the ECoW immediately before clearance commences, any identified active nests will be left until the hatchlings have fledged. The Contractor's programme will clearly indicate any areas to be removed and their programmed schedule for removal.

9.5.8. The ecologist's memo notes that the proposed chimney stacks could pose an obstacle to birds overflying the site and that the documentation does not contain measures in relation to bird collision risk. Effects due to heat emissions from operational chimney stacks are not considered. I do not consider thermal interference with bird flight paths to be a crucial consideration as the stacks will operate so infrequently (less than 6% of the time over the 5-year operational lifetime of the development) and noise emanating from the stacks will also act as a deterrent for direct overflight bird paths. The ecologist's memo also acknowledges that site lighting will provide some illuminance of the structures which may aid visibility by night-flying birds. With regard to a direct collision risk, the stacks will operate in the immediate vicinity of the existing large buildings on site including the main power generation building, this is c60 m in height – twice the size of the proposed stacks. The existing buildings on site would therefore present an in-situ barrier and therefore the proposed stacks are unlikely to present an additional collision risk.

9.5.9. With regard to the Otter, the report notes that habitat suitable to support breeding / resting otter is not present within the site. Whilst the River Shannon and associated riparian woodland habitat located to the west of the site is suitable for use by transient and foraging otter, this habitat will not be impacted by the designated development. There are no water features within the site which are suitable for commuting otter. Furthermore, the boundary of the site is securely fenced off to prohibit the otter entering the site. Potential impacts on the otter, a qualifying interest of the adjacent SAC are dealt with in more detail in the AA section below.

Mitigation Measures

- 9.5.10. Potential indirect disturbance effects will be addressed by measures including measures to ensure that there are no adverse impacts on water quality. Furthermore, the construction works will be closely monitored and checked to ensure that no mammals which could potentially stray onto the site will become trapped on site.
- 9.5.11. No other habitats or features were identified by previous studies or the site walkover in November 2022 which are suitable to support other amphibians protected or notable species. There are no water bodies on site to support frogs or other such species. As far as possible, any works within drainage ditches or waterbodies will be carried out outside of the main amphibian breeding season (February-June). If works are required within this season, drainage ditches / waterbodies will be inspected by a suitably qualified ecologists prior to work being carried out. Should frogs or newts be found at that time they will be captured under licence from NPWS and translocated to suitable alternative habitat within the site. Captured amphibians will be relocated to areas of standing water that are not likely to quickly dry out and will not be affected by activities associated with the Designated Development.
- 9.5.12. During the operational phase, species disturbance will be minimised through minimum use of artificial lighting¹⁹, which will be appropriately cowed and directed away from habitat areas and through the rection of appropriate noise attenuation barriers.

Residual Impacts

- 9.5.13. In assessing the biodiversity issues, I note that the applicant has not been in a position to carry out extensive surveys on site particularly in respect of breeding birds and bats. However, work carried out in respect of a previous application on site APB 303108-18 has been useful in informing the base line environment. Having regard to the time constraints imposed under the current legislation and the stipulation in the Regulations regarding the extent to which information is reasonably available to the applicant in making the application, I consider the Board can reach conclusions based on the information before it. The evidence placed before the Board suggests that the buildings and structures to be demolished do not host any

¹⁹ Any artificial lighting should be lighting should be provided in accordance with the recommendation of the consultant ecologist and the DAU submission.

bats or any nesting of bird species which are of conservation importance. It would also appear that demolition works could be carried over an 18 month window and as such there is the potential to carry out the works outside the nesting/breeding season (ie spring and summer months). In the event that a pre-demolition survey is undertaken, and any bats or birds of conservation importance or any other Annex IV species for that matter are encountered, the applicant will be required to apply for a derogation licence. This in my view can be appropriately addressed by way of condition should it be necessary.

Conclusion

I have considered all of the application documentation and submissions received, and I am satisfied that impacts in relation to biodiversity and ecology generally would be satisfactorily avoided, managed and mitigated by the measures which form part of the proposed scheme and by appropriate conditions. I am satisfied that the proposed development would not have any unacceptable direct, indirect or cumulative impacts in terms of biodiversity.

9.6. Population and Human Health

- 9.6.1. The proposed development will not result in a significant alteration in the baseline environment having regard to the historical land use in which the designated development is situated. The most significant potential effects in terms of population and human health will likely arise from air quality, noise and vibration and to a lesser extent visual and traffic effects. These impacts are assessed under separate headings elsewhere in my report.

Baseline Environment

- 9.6.2. The Environmental Report identifies the target population that could be impacted upon as a result of this development as the Shannonbridge Electoral District (ED). The population of Shannonbridge ED was recorded in the last census (2022) as being 284. In terms of socio-economic profile, the local population of Shannonbridge was considered to be slightly more deprived than the state average. In terms of health, 80.5% the local population of Shannonbridge describe their health as being either 'good' or 'very good'. This is below the state average of 87%.

Main Likely Effects

- 9.6.3. In terms of predicted impacts, the report correctly identifies the demolition and construction phases as being a source of potential air pollution and noise. However, I consider that it has been demonstrated elsewhere in my report that adverse impacts on the local population through air pollution or noise propagation can be properly managed and will comply with relevant standards and guidelines. Furthermore, there will be a corresponding positive socio-economic impact in the creation of a temporary employment during the construction phase. While this will give rise to some level of increased levels of traffic, it has been demonstrated that the existing road network has ample capacity to accommodate this anticipated increase. Thus, no issues will arise in relation to traffic congestion. Noise impacts specifically attributed to traffic will likewise be negligible. Mitigation measures set out in the CEMP will ensure that impacts on the local population will not be material during the construction phase.
- 9.6.4. The operational phase will have no impacts on employment, there will be slight increase in traffic during the operational phase with the delivery of fuel and the staff commuting to and from the site for operational and maintenance purposes, these trips however will have a negligible impact on traffic volumes or the capacity of the road network to accommodate such additional traffic. A Construction Traffic Management Plan (CTMP) has been prepared (and is attached as an Appendix to the main report) and will be updated by the Contractor to mitigate any impact of construction on the surrounding road network.

Residual Impacts

- 9.6.5. With the implementation of these mitigation measures, there will be no residual effects in terms of population and human health. The conclusion set out in the Environmental Report in respect of population and health are reasonable. The main identified potential impacts primarily relate to noise and air pollution, and these are assessed under separate headings above in my report and where necessary, with the employment of appropriate mitigation, these impacts are assessed as not being material and will comply with statutory limits and guidelines. Furthermore, regard has to be had to the fact that the proposal development will be restricted to a maximum operational period of 500 hours per year ie less than 21 days or less than 6% of the time on an annual basis. The potential therefore to adversely impact on the amenity or health of the local population is greatly diminished by the operating restrictions imposed on the plant.

Conclusion

I have considered all of the application documentation and submissions received, and I am satisfied that impacts in relation to population and human health would be satisfactorily avoided, managed and mitigated by the measures which form part of the proposed scheme and by appropriate conditions. I am satisfied that the proposed development would not have any unacceptable direct, indirect or cumulative impacts in terms of population and human health.

9.7. Land Soils and Geology

Baseline Environment

- 9.7.1. Prior to the construction of a power station on the subject site in the mid 1960's, the subject lands were in agricultural use. The site now comprises of man-made ground. Subjacent subsoils beneath the site comprise of mineral alluvium and glacial till derived from the underlying fractured dark limestone (Lucan Formation). Limestone bedrock was encountered at varying depths ranging from 3.7 to 11.3m below ground level (mbgl). Groundwater was encountered in the subsoils in all but one of the boreholes drilled on site.

Main Likely Effects

- 9.7.2. In terms of predicted impacts, below ground level works will be limited on site. However, in the absence of mitigation, the following potential impacts could occur on site:
- Temporary impacts on soil structure as a result of soil excavation and compaction.
 - Construction phase activities such as earthworks, excavations, site preparation, levelling and grading operations, will result in the disturbance of soils.
 - Temporary impacts on soil chemistry as a result of spillages of oils, fuels or other construction chemicals, or through the mobilisation of existing contamination following ground disturbance.
 - Impacts on groundwater quality due to deposition or spillage of sediments, oils, fuels, or other construction chemicals / wastewater, or through uncontrolled site run-off.

- Increased risk of groundwater flooding or recharge as a result of any below-ground excavations.
- Potential increase in volume and rate of surface water runoff from new impervious areas during construction, leading to an impact on flood risk.
- Alteration in overland flow paths as a result of works associated with the designated development.
- Temporary impacts on off-site receptors through the inhalation of potentially contaminated dust and dermal contact with contaminated soil following ground disturbance.

9.7.3. Ground stability issues are scoped out of the assessment as there are no records of historic mine workings or reported karst features within the site.

9.7.4. During the operational phase, the only potential adverse impacts that could occur relates to accidental spillages, primarily from the quantities of distillate oil to be stored on site, and the possible consequential implications for groundwater contamination. The ecologist's memo, raised a number of concerns in relation to surface water drainage arrangements and these are dealt with separately under the sections of my report in relation to water and AA. Potential impacts could also arise from the decommissioning phase. These impacts are likely to be similar to those likely to occur during the construction phase.

Mitigation Measures

9.7.5. The environmental report sets out mitigation measures for the excavation and the control of water, the stock piling of materials, and refers to measures set out in the CEMP for the minimisation and control of erosion, the handling and storing of chemicals and the implementation of an Emergency Response Plan, should an accident occur. The applicant will have statutory obligations in any IED Licence issued by the EPA and separately under the COMAH legislation in relation to Storage areas for flammable / toxic / corrosive materials will be located in a separate, locked, impermeable bunded and fenced off area.

9.7.6. Water quality monitoring will be undertaken pre and during-construction, details of which will be included in the Contractor's CEMP. This will be based on a combination of visual observations, in-situ testing using handheld water quality probes, and periodic sampling for laboratory analysis. Storage of dangerous substances will not take place within 50m of a watercourse and designated storage areas will be bunded

to 110% of storage capacity to contain the effects of any spills. These areas will be cleared and re-instated following completion of the site. Should significant contamination occur as a result of construction activities, Offaly Co. Co. and the EPA will be notified, and corrective actions will be agreed. If groundwater is encountered during construction, suitable best practice de-watering methods will be used. No significant groundwater dewatering is anticipated during the course of the construction or decommissioning works. A range of other specific mitigation measures are set out in Section 4.6.4 of the Report to prevent any impacts on underlying, soils, bedrock or groundwater.

Residual Impacts

- 9.7.7. The proposed development is situated within the confines of a former power station on manmade ground. While modest excavation may be required within the confines of the site, mainly associated with the removal of existing wastewater infrastructure and underground tanks, the proposal will not involve any deep excavation of large-scale earth movements. With the implementation of the mitigation measures referred to in the environmental report and the CEMP, it is extremely unlikely that any adverse impacts will occur on lands, soils or geology or on human health of ecological receptors as a result of the designated development either during the construction, operational or decommissioning phase.

Conclusion

I have considered all of the application documentation and submissions received, and I am satisfied that impacts in relation to land, soils and geology would be satisfactorily avoided, managed and mitigated by the measures which form part of the proposed scheme and by appropriate conditions. I am satisfied that the proposed development would not have any unacceptable direct, indirect or cumulative impacts in terms of land, soils and geology.

9.8. The Water Environment

Baseline Environment

- 9.8.1. The environmental report provides details of the water quality for all surface waters and groundwaters in the vicinity of the site. The main surface water body in the vicinity is the River Shannon to the immediate west of the site. This water body has a

Q rating of 4 – (Good), 6km up-stream of the site, and a Q-rating of 3-4, (Moderate) 10km down-stream of the site.

- 9.8.2. The existing drainage network collects runoff from building roofs, hardstanding / paved areas and discharges from bunds and storage tanks. Drainage arising from hardstanding, are conveyed to the existing surface water drainage network on-site and existing settlement pond prior to discharging to the River Shannon. This drainage network incorporates hydrocarbon interceptors (2 no.), peat interceptors (6 no.) and a suspended solids settlement pond prior to discharging to the River Shannon.
- 9.8.3. The Board will note that the ecologist's memo has some concerns with regard to the accuracy and completeness of the information provided in relation to protection of water quality. Concerns are expressed particularly in relation suitability of the surface water drainage network to cater for example an accidental discharge of distillate or the need to contain fire-water. As set out in more detail in my AA section below, there will be requirements under other legislative codes to ensure that the surface water drainage network is suitable in the event of a major accident and emergency and it will also be a requirement that any IED Licence issued will require any surface water emissions will comply with statutory limits including European Communities Environmental Objectives (Surface Waters) Regulations 2009 as amended and European Communities Environmental Objectives (Groundwater) Regulations 2010 as amended.

Main Likely Effects

- 9.8.4. The potential impacts arising from the proposed development on water are set out in Table 4.37. The main potential impacts are identified as mobilisation of contaminants on site during the construction phase which could impact on groundwater and surface water quality and could also result in damage or loss of features of geomorphological interest in the vicinity. It is my considered opinion that the latter impact is not likely to be significant on the basis that any spillage/contamination emanating from the site will potentially affect water quality only. There is no evidence to suggest that features of geomorphological interest in the wider area will in anyway be affected by changes in water quality. Thus, the main impact identified relates to water pollution both during construction and to a lesser extent (subject to all mitigation measures being employed), during the operational phase.

9.8.5. Flood risk is not identified as an issue as the site is located within flood risk zone C, where the probability of flooding is less than 0.1% AEP or a probability of a 1 in 1000-year flooding event.

Mitigation Measures

9.8.6. Section 4.7.5 of the report sets out a suite of mitigation measures to curtail the possibility contaminated run-off reaching adjoining water courses. This will include compliance with best practice guidance including:

- *IFI (2016). Guidelines on Protection of Fisheries During Construction Works in and Adjacent to Waters.*
- *CIRIA C741 Environmental Good Practice on Site (3rd edition) (C692).*
- *CIRIA C532 Control of Water Pollution from Construction Sites Guidance for Consultants and Contractors.*

9.8.7. The report also sets out a range of mitigation measures for general surface water management, including monitoring and maintenance of existing surface water infrastructure, the implementation of surface water barriers, protocols and safety measures including appropriate bunding for fuel and chemical handling, restricting concrete pouring and concrete crushing to restricted and designated areas within the site and applying strict protocols to managing concrete run-off. All the mitigation measures set out in the environmental report will be the subject of strict monitoring.

9.8.8. In relation to general mitigation measures I would again refer the Board to the memorandum on file for the consultant ecologist which refers to the lack of detailed information on file in respect of surface water drainage and discharge arrangements. I would concur that there is a lack of detailed information in relation to surface water drainage in the application submitted. Again I would refer the Board to the provisions of the Act which specifically notes that any environmental report shall include information "*to the extent that that information is reasonable available*". While this information may or may have not been available at the time of submitting the report, it is my considered opinion that for the purposes of carrying out an environmental assessment under the provisions of the current Act standard, best practice in relation to water management in association with the employment of appropriate specific mitigation measures such as those set out in the Environmental Report will in my opinion ensure that sufficient pollution control measures will be implemented to ensure that no adverse impacts occur. As an additional safety measure the proposal

will be assessed in terms of compliance with other legislative codes for Licencing and prevention of major accidents and hazards it must comply with the requirements set out under these codes.

- 9.8.9. It should also be borne in mind that the 95%ile flow along this section of the River Shannon is in the region of 20 m³/s. This provides a very large assimilative capacity which will allow considerable dilution and dispersion in the unlikely event that a pollution episode occurs. Therefore, notwithstanding the lack of precise and detailed information on the file, and in particular the drawings submitted, I consider that the mitigation measures to be employed are sufficient to allay any concerns in relation to water pollution.
- 9.8.10. During the operational phase, surface water generated on impermeable surfaces will continue to be collected in a slightly modified underground pipe network. The surface water runoff will be conveyed by the existing drainage network to the settlement pond prior to discharging to the River Shannon. Surface water management, the use of impermeable surfacing, bunding and kerbing, and other preventative measures will significantly reduce the risk of any major pollution event occurring. Any catastrophic spillage of for example distillate oil, will be contained within the bunding surrounding the storage area. It is again worth reiterating that all activities including water management measures to arrest the potential for pollution of surrounding waters will be subject of limits and monitoring under any IE Licence issued by the EPA.

Residual Impacts

- 9.8.11. I am satisfied that the proposed mitigation measures will ensure that adjacent water courses, particularly the River Shannon to the west, will be protected and the proposal will not give rise to any adverse impact on the water quality of the River or any other surface water or groundwater body in the vicinity. Should the development proceed, water control and discharge measures will be the subject of strict monitoring through any licence issued by the EPA.

Conclusion

I have considered all of the application documentation and submissions received, and in particular the memo from the ecologist and the submission from the DAU and I am satisfied that impacts in relation to water quality would be satisfactorily avoided, managed and mitigated by the measures which form part of the proposed scheme

and by appropriate conditions. I am satisfied that the proposed development would not have any unacceptable direct, indirect or cumulative impacts in terms of water pollution.

9.9. Climate

- 9.9.1. The Environmental Report submitted points out that the Climate Action Plan (2023) acknowledges that Government are responsible for ensuring critical services remain operational at all times, which as a result may require fossil fuel sources to provide back-up/emergency power when there is a temporary shortfall in energy supply. This is seen as only a short-term fix and as the Irish energy grid continues to decarbonise, Ireland will still progress towards its target of net-zero emissions by no later than 2050. Similar sentiments are expressed in the in the National Energy Security Framework, published in April 2022 which, while seeking to reduce dependency on fossil fuels in the long-term, also emphasises the need to ensure continued security of supply.

Baseline Environment

In terms of greenhouse gases, the historic power station on site is no longer in operation and therefore the site can be regarded as a non-operational brownfield site.

Main Likely Effects

- 9.9.2. There is the potential for a number of greenhouse gas (GHG) emissions to be released into the atmosphere during the demolition / construction, operational and decommissioning phases of the designated development.
- 9.9.3. Some GHG's will be emitted from the machinery involved in the dismantling/demolition phase however this is not considered to be significant.
- 9.9.4. The GHG emissions for the operational phase of the Designated Development have been calculated based on the assumption that the plant will only run for a maximum of 500 hours per annum. The consumption of fuel for this period will result in emissions of 93,578 tonnes of CO₂ equivalent /year. The report also points out that there will be indirect emissions of 21,759 tonnes of CO₂ equivalent /year from the upstream fuel supply chain. Therefore, total emissions under a maximum operation/ worst-case scenario will be 115,337 tonnes of CO₂ equivalent /year. In accordance with best

practice, the contractor will seek to adopt low carbon solutions during its design and construction.

9.9.5. In terms of climate risks, the following climatic risks were identified, based on evolving climate change trends:

- Pluvial, fluvial and groundwater flooding.
- Extreme weather conditions during storms e.g., high winds.
- Increased temperatures.

Mitigation Measures

9.9.6. In terms of mitigation, the Framework CEMP will act as an overarching document that presents a number of considerations that will limit GHG emissions and ensure the designated development is in line with industry best practice standards. Where applicable carbon mitigation measures will be secured through the CEMP. In addition, the following specific mitigation measures are proposed to minimise greenhouse gas emissions:

- When sourcing materials for the designated development first choice should be given to locally sourced materials.
- Any existing materials already on the site should be considered for reuse for the Designated Development, where feasible.
- When possible, machinery, vehicles and energy should all use low and zero carbon energy e.g., electric vehicles and solar powered pitch lights.
- Workers will be informed of the ways in which they can reduce their energy use and avoid unnecessary energy consumption onsite e.g., avoid leaving equipment running when not in use and turning off lighting when not in use.
- Reduce potential emissions by minimising the waiting time for loading and unloading materials, and efficiently handling materials on site.
- Undertaking regular maintenance of plant and machinery.

Residual Impacts

9.9.7. The proposal will, if it becomes operational, contribute to greenhouse gas emissions. Based on a worst-case scenario where the power plant is operating at maximum output for 500 hours per annum, it is estimated that the power station would contribute approximately 0.18% of the total carbon emissions that were generated nationally in 2021. This contribution of CO₂ emissions will only be for a maximum period of 5 years. This is a relatively modest contribution in the context of overall emissions and represents an absolute worst-case scenario. It must also be kept in mind that the designated development was born out of an emergency on the basis of an immediate potential shortfall in electricity supply during periods of winter peak demand, should these periods coincide with low renewable and interconnector availability. Exogenic geo-political factors beyond Ireland's control necessitate the short term and expedient nature of the proposal. The designated development however will not compromise or undermine the target of achieving net-zero emissions by no later than 2050. The designated development is seen only as a short-term, stop-gap measure. The long-term goal of net zero emissions by 2050 remains and will in no way be compromised by the designated development. In my view therefore the designated development while contributing modestly to CO₂ equivalent emissions in the short term, it is nevertheless necessary to ensure the security of the State's electricity during periods of peak demand. This modest increase in GHG emissions must be viewed in the context of this necessity for security of electricity supply purposes.

Conclusion

I have considered all of the application documentation and submissions received, and I am satisfied that impacts in relation to climate would be satisfactorily avoided, managed and mitigated by the measures which form part of the proposed scheme and by appropriate conditions. I am satisfied that the proposed development would not have any unacceptable direct, indirect or cumulative impacts in terms of climate.

9.10. **Material Assets**

Baseline Environment

9.10.1. The WOP Station site comprises industrial and brownfield lands, reflecting its long-established use for power generation activity, including peat handling and management and electricity transmission infrastructure. The WOP Station site has its

main access from the R357. The WOP Station site accommodates structures and activities typical of a power station including fuel (peat and fuel oil) storage, handling areas and associated plant, the power station - including exhaust gas treatment; filter house, stack and a range of ancillary services including water treatment and management systems, offices and administration areas. The areas surrounding the site are considered a mix of agriculture and urban settlement. The existing WOP Station has a foul Water Treatment Plant (WTP) which was used in the treatment of domestic foul water discharged from the WOP Station site. This is to be decommissioned and removed as part of the proposal. The WOP Station is served by this Irish Water public watermain.

9.10.2. The WOP station is connected to the national grid via a 110 kV substation. Lower voltage supplies are available on the site from the 110kV substation supplied via step-down transformers for use during construction and operation phases. The contractor will also be responsible for providing electrical generators as required across the site during construction. There are existing telecommunication lines for telephone and fibre services at the WOP site. There are existing underground carrier ducts existing within the site.

Predicted Effects

9.10.3. In terms of predicted effects, the proposed development will re-introduce a land use which historically has already been established on site, namely the production of electricity to supply the national grid. Power and electricity supply will be required during the construction and demolition phase, but these requirements will be relatively modest. Any excavations within the vicinity of existing electrical services will be carried out in consultation with ESB Networks to ensure there is no impact on existing users. It is not anticipated that there will be any impact or disruptions to the national grid during site works.

9.10.4. As mentioned elsewhere in my assessment, pollution of surface water may occur during the construction and demolition works. However, a host of mitigation measures will be put in place to severely curtail the possibility of polluting surface water within and adjacent to the site. In respect of foul water, temporary facilities will be provided for on-site and will be periodically removed from the site by road tanker. Thus, no impacts will arise in respect of foul effluent disposal.

- 9.10.5. During the demolition and construction phases, public mains water supply will be provided for by the Irish Water. Water will be required for general purposes - drinking water, toilets etc. and for fire-fighting purposes. The number of construction workers required during the construction phase is expected to peak at approximately 100 persons. There is sufficient capacity in the water supply network to facilitate the demolition / construction works, therefore it is anticipated that the potential water supply impacts will be temporary and imperceptible.
- 9.10.6. The exact location of existing telecommunications services (underground / overhead) will be confirmed prior to the commencement demolition / construction works. No impacts are anticipated in terms of telecommunications.
- 9.10.7. During the operational phase, the eight gas turbine generator units will be connected to one of the two generator step-up transformers (GSUT), electricity will then be exported to the grid through the existing cable connection at the existing 110 kV substation, located within the WOP station site. No adverse impacts are anticipated, the availability of a back-up electricity supply in periods of high demand constitutes a positive impact on energy supply.

Mitigation Measures

- 9.10.8. A series of mitigation measures will be put in place during the operational phase to curtail any adverse impacts arising from spillages of fuel or other toxic or corrosive materials which will be used on site. Suitably bunded areas will be provided and where appropriate flammable / toxic / corrosive materials, will be suitably stored in safe locations which will be bunded and fenced off.
- 9.10.9. As with the construction phase, foul water from during the operational phase will be collected and periodically removed from the site by road tanker. During the operational phase, mains water will be stored in a common firewater / storage tank of approximately 1,600m³ in volume and will be used by the fire water system and for non-potable general domestic supplies. Operational phase employees will receive the appropriate training required for their role, including responding to emergency events such as fires and floods etc. These operational measures will be included in the Environment Management System (EMS) and regulated by EPA through the IE Licence. Existing telecommunications infrastructure will be used during the operational phase.

Residual Impacts

9.10.10. It is clear from the information supplied that the designated development would have a negligible impact on material assets during either the construction or operational phase. Where potential impacts could occur, mitigation measures will be put in place to address any potential adverse impacts. The proposal seeks to provide back-up emergency electricity generation, the proposal will therefore have a positive impact on electricity supply as a material asset.

Conclusion

I have considered all of the application documentation and submissions received, and I am satisfied that impacts in relation to material assets would be satisfactorily avoided, managed and mitigated by the measures which form part of the proposed scheme and by appropriate conditions. I am satisfied that the proposed development would not have any unacceptable direct, indirect or cumulative impacts in terms of material assets.

9.11. Cultural Heritage

Baseline Environment

9.11.1. No features of archaeological or architectural heritage were identified in a previous archaeological study carried out at the WOP Station site. Archaeological remains were discovered during the original development of the site in 1963. This included between 16 and 24 skeletons all aligned in the same direction. No further discoveries have been reported during the subsequent phases of work at the power station. Details of record archaeological and cultural heritage features and monuments in the wider area are set out in the report submitted.

9.11.2. Three previous archaeological investigations have taken place within the townland of Cloniffeen where the site is located. The first of these took place in May 2002 in relation to the construction of the new access road. The two remaining archaeological investigations are associated with the Bord na Móna Blackwater bog which is located to the east of Shannonbridge and includes part of the townland of Cloniffeen. The investigations were not associated with the site and took place within the commercially exploited bog.

Main Likely Effects

9.11.3. In terms of predicted impacts, there are no recorded heritage assets within the boundaries of the site. It is reasonable to conclude that significant groundworks have already taken place during the previous development phases of the site, and these would have impacted on any archaeological features that may have existed. This was confirmed during archaeological testing associated with the construction of the WOP Station in 2002 found the underlying ground conditions to comprise ground that had been badly disturbed with the underlying deposits comprising ash waste, brick and disturbed subsoil. Given these conditions, there will be no physical impact to unrecorded heritage assets during the demolition / construction phases.

Mitigation Measures

9.11.4. Should any archaeological features or material be uncovered during archaeological testing or any phase of the dismantling / demolition and construction phase, ground works will cease immediately, and the National Monuments Service (NMS) will be informed. Time must be allowed for a suitably qualified archaeologist to inspect and assess any material. If it is established that archaeologically significant material is present, the NMS may require that further archaeological mitigation be undertaken.

Residual Impacts/ Impacts on Cultural Heritage Features

9.11.5. The 30m high emissions stacks will create a visual element against the existing skyline. These could impact the settings of heritage assets especially protected structures. Protected structures in the vicinity of the site are centred in the village of Shannonbridge. There are no direct views between the majority of the Protected Structures / heritage assets within Shannonbridge and the Designated Development. The size and scale of the existing buildings within the power plant will remain the dominant features on site. Therefore, the proposal will not impact on the context or settings of any protected structures in the area. Where direct views of the site are available from the Shannonbridge over the river, or the remnants a battery fort on the west bank of the river near Lamb Island to the north of the site, the report logically concludes that The WOP Station is already a feature within the landscape and incorporates a number of structures which exceed the height of the proposed emission stacks and therefore the presence of the eight emergency generating units will not affect the ability appreciate the setting and context of the protected structures in questions. The temporary nature of the designated development will ensure that it does not become a permanent feature of the landscape.

- 9.11.6. Any potential adverse impact on the setting and context of protected structures or archaeological features in the vicinity must be balanced against the requirement for provide a back-up emergency electricity generation facility should electricity demand outstrip supply during winter months.

Conclusion

I have considered all of the application documentation and submissions received, and I am satisfied that impacts in relation to cultural heritage would be satisfactorily avoided, managed and mitigated by the measures which form part of the proposed scheme and by appropriate conditions. I am satisfied that the proposed development would not have any unacceptable direct, indirect or cumulative impacts in terms of cultural heritage.

9.12. **Landscape and Visual**

Baseline Environment

- 9.12.1. The existing WOP Station is a prominent visual feature in many existing views from the outskirts of Shannonbridge and surrounding regional and local roads as well as from the River Shannon and River Suck. The site accommodates large industrial-scale buildings and associated ancillary structures together with overhead transmission lines typical of a power station. The lands in which the designated development is located cannot be regarded as a sensitive landscape. The landscape surrounding the site is flat, with the River Shannon being a dominant feature. East and west of Shannonbridge lies extensive areas of open peatland often edged by naturalised scrub and trees. Clonmacnoise is a very significant monastic cultural and heritage site is located c7km to the north. Founded by St Ciaran in the 6th century it is one of Europe's oldest and most important early Christian communities. The existing buildings associated with the former power station is not visible from the Clonmacnoise or the area in the immediate vicinity. It stands to reason therefore that the proposed development will not be visible.
- 9.12.2. Section 4.14 of the Offaly CDP outlines the landscape character and sensitivity of the county. The River Shannon, west of the WOP and the site is classified as being of high sensitivity, while the peatlands areas east of the site are of medium sensitivity. The site itself is located in an area of low sensitivity these areas are described in the development plan as 'robust landscapes which are tolerant to

change, such as the county's main urban and farming areas, which have the ability to accommodate development'.

- 9.12.3. The adjacent administrative areas of Galway and Roscommon attribute more sensitive landscape designations. In the case of Roscommon County Council, the landscape along the River Shannon and River Suck is designated as being of 'very high value' while the landscape character type in the area to the west of the site within Co Galway is designated as 'Special'. There are no identified designated view or prospects in any of the County Development Plans referred to.

Predicted Effects

- 9.12.4. The most visually dominant component associated with the designated development are the 8 gas turbine generators and the associated 30 m high emission stacks. If the designated development did not go ahead the site would remain as a significant industrial feature within the landscape. There can be little doubt that were the development to proceed and the 8 gas turbine generators were to be constructed within the confines of the site, the character and nature of the site would not be altered to any material extent. While the proposed emission stacks are relatively high at 30m, and will be the most notable feature of the designated development, there are existing large structures on site including the existing power generating building is c60m in height and the existing chimney stack rises to c78m in height. Thus, there are structures on site at present that are considerably larger than those planned to be installed. The proposed turbines and emission stacks are of a similar massing and height to other structures at the WOP Station (see photo's attached to this report). While the designated development will on the whole, be compatible with the nature of the existing industrial scaled buildings on the site, it will intensify the industrial character of the site. The magnitude of the intensification of the industrial landscape character beyond approximately 1km will be negligible with increasing distance.
- 9.12.5. Another salient point when considering the visual impact arising from the proposed eight gas-fired turbines, is the fact that these structures are not proposed as permanent structures but will have a lifespan of only 5 years, the visual impact therefore will be temporary and relatively short-term.

9.12.6. The noise attenuation walls, between 3 and 12 m in height, proposed around the turbine generators will screen and hence lessen the industrial character of the development, however these structures will also have an inherent visual impact.

9.12.7. The magnitude of visual change over longer distance views is considered to range from low to negligible due to the effects of distance and intervening features, which can either fully or partially screen the Designated Development. The development in conjunction with the existing in-situ power station structures while recognisable, it is considered that the overall perception of the view will remain industrial in nature and character of the view will not be significantly altered.

Mitigation Measures

9.12.8. Having regard to the size and scale of the development, together with the short-term nature of the development does not lend itself to effective mitigation in the form of landscaping. The acoustic barriers will reduce to some extent the industrial character of the gas turbine generators. Artificial lighting will be cowed and directed inwards and this should reduce any adverse impacts in terms of light pollution emanating from the site.

Residual Impacts

9.12.9. Having regard to the presence of the existing structures associated with the former power station on site, the size and scale of these structures and the ability of the proposed designated development to assimilate within the overall former power station complex and the relatively short-term and temporary nature of the designated development that will operate for a maximum of 5 years, I consider the visual impact arising from the proposed development to be acceptable.

Conclusion

I have considered all of the application documentation and submissions received, and I am satisfied that impacts in relation to landscape and visual amenity would be satisfactorily avoided, managed and mitigated by the measures which form part of the proposed scheme and by appropriate conditions. I am satisfied that the proposed development would not have any unacceptable direct, indirect or cumulative impacts in terms of landscape and visual amenity.

9.13. Traffic and Transportation

Baseline Environment

9.13.1. Direct access to the site will be via existing site entrances and the existing internal roadways. It is anticipated that emergency generator plant and equipment will mainly be delivered to the site via Dublin Port, which follows the M6, R446, N62, R444 and R357 before reaching the site. Parking will be provided using existing parking facilities and open areas of the WOP Station site for construction personnel and construction vehicles. The construction compounds and laydown areas will be located entirely within the WOP station site. Figure 5 submitted with the planning application indicates the location of the parking, office and laydown areas. Levels of employment will vary throughout the construction phase with peak construction staff expected to be around 100 persons. Staff are expected to travel to the site via a combination of car sharing and private passenger vehicles. It is anticipated that a maximum of 79 vehicles will arrive during the day. Construction staff staying in local guest accommodation will arrive by minibus.

Main Likely Effects

- 9.13.2. It is not anticipated that the level of trip generation by employees will result in capacity constraints on the local road network having regard to the capacity of the existing roads, the level of baseline traffic and the relatively short-term nature of the construction phase. I am and also satisfied that there is ample supply of parking to accommodate construction workers on site.
- 9.13.3. The highest number of HGV movements will occur during the pre-construction works where an estimated 38 two-way HGV movements will take place per day. When demolition works commence it is estimated that 25 HGV trips will occur per day. When construction of the power generation station commences on site approximately 30 HGV movements will be required to deliver plant and materials to the site.
- 9.13.4. I note that the Environmental Report makes reference to existing traffic flow in the area and that AWN Consulting Limited carried out extensive traffic surveys during the week of 24th to the 30th of October 2016. It was stated in the report that due to the nature of the application it was not feasible to update the data. Details of the existing traffic flows on the existing road network are not supplied in the Report submitted. However, having inspected that the site, including the surrounding road

network on separate site visits in December 2022 and February and March 2023, I noted that the traffic volumes on the road network were very low and there were no issues with regard to capacity. Furthermore, the road network serving the former power station comprises of well-developed wide roads capable of accommodating HGV traffic. I have no doubt that the road network in question is capable of accommodating the anticipated staff and HGV movements to and from the site even under a worse case scenario where 50% of HGV movements to the site occurs during the morning peak period.

9.13.5. The likely route from Dublin Port is the M6, R446, N62, R444 and R357. Having regard to the low levels of traffic on the local roads serving the site and the general quality and width of the roads in the vicinity of the site and along the proposed haul route, I do not envisage any adverse impacts in terms of traffic impact. It should also be noted that the construction phase will only last 8 months, and the maximum movement of 38 HGV's to and from the site will only occur during the initial stage (1.5 months) of this 8 month construction period. HGV movements to and from the site will reduce after this initial phase.

9.13.6. During the operational phase, HGV movements will reduce further, with most movements associated with stored oil deliveries (oil tanker deliveries). Deliveries of diesel will be directly linked to the operational need for the emergency generation units. For example, if all eight units were required to operate four hours per day, 10 deliveries of diesel (20 HGV movements) would be required per day. The most likely scenario is that on most days of the year the emergency generation units will not be called into use. The power plant can only operate for less than 6% of the time in any given year. HGV movements associated with maintenance activities are expected to be very low and infrequent and are not expected to exceed two per day. Up to five operational staff will be on site during the daytime and up to two staff will be on-site in the evening time seven days a week, giving rise to passenger car movements up to 14 movements per day which can be considered negligible.

Residual Impacts

9.13.7. The proposal therefore will have a negligible impact on the traffic environment during the 5-year operation period of the designated development. Any potential impacts in terms of traffic will be further assessed and where possible reduced with the adoption of a Construction Traffic Management Plan (CTMP). Details of the

Framework CTMP are contained in Appendix C of the Environmental Report. The adopted CTMP will provide details of vehicular and pedestrian segregation, protocols for HGV queuing on and off site should it occur, and measures for spoil removal and wheel cleaning on the road network during periods of inclement weather as well as dust suppression measures during dry weather.

On the basis of the above therefore, I am satisfied that the proposal will not give rise to any significant adverse impacts in terms traffic generation during either the construction or operational period.

Conclusion

I have considered all of the application documentation and submissions received, and I am satisfied that impacts in relation to traffic and transportation would be satisfactorily avoided, managed and mitigated by the measures which form part of the proposed scheme and by appropriate conditions. I am satisfied that the proposed development would not have any unacceptable direct, indirect or cumulative impacts in terms of traffic and transportation.

9.14. Waste Management

Baseline Environment

9.14.1. The WOP is not operational presently and therefore does not generate waste.

Main Likely Effects

9.14.2. The Environmental Report submitted notes that if the Designated Development generates more than 5% of national waste arisings or has a recovery rate for non-hazardous C&D waste less than 70% then the impacts would be considered to be significant. The report goes on to note that the quantities of waste are unlikely to be more than 5% of national waste arisings due the nature and scale of demolition and therefore not considered significant. It is assumed that this waste would have a high recovery rate and is likely be recovered rather than sent to landfill. Excavation of 9,600m³ of soil is estimated to be required which will be retained on site where possible provided that it is uncontaminated. It is not anticipated that any of the soil excavated within the site will be contaminated.

9.14.3. The report goes on to note that the precise composition and waste management route of this waste is dependent on several factors and will be further informed by

the contractor. Hazardous waste arisings are expected to comprise small quantities of oils, chemicals and similar materials typically used as part of construction activities. Procedures for the storage and management of these wastes will be further detailed in the Contractor's Resource and Waste Management Plan (RWMP).

9.14.4. Operational waste impacts from the Designated Development are expected to be negligible and will be confined to occasional disposal, maintenance and repair. Operational waste quantities will not be more than 5% of national waste arisings and therefore not considered significant.

9.14.5. Full details of waste arisings from the proposed development, have yet to be fully determined, analysed and categorised in accordance with waste management protocols. Having regard to the emergency nature of the proposed development it may not have been possible to carry out a detailed analysis of the exact nature of all the waste generated during the site preparation works and the demolition works. However, it is clear from the information provided that the levels of waste to be generated cannot be classified as being significant as it is extremely unlikely to generate more than 5% of the national waste arisings.

Mitigation Measures

9.14.6. The RWMP which is contained in Annex A of the CEMP set out the waste protocols to be employed when managing waste. It will underpin the approach to waste management by

- Defining indicative roles and responsibilities to ensure that those responsible for waste management are aware of their remit.
- Ensuring that the objectives of key waste management legislation and guidance will be met in formulating any waste management strategy will be met.
- Ensuring that all construction and demolition waste is minimised, reused and recycled to the greatest possible extent in accordance with best practice and to divert as much as possible away from landfill.
- Ensure that all waste is recorded and audited and handled in accordance with the principles of sustainable waste management and waste management hierarchy.

Residual Impacts

9.14.7. I am satisfied that a detailed waste management plan, based on the principles set out in the Framework RWMP submitted with the application, will ensure that best practice will be applied to all waste generated on site and that the adopted detailed plan will adhere to relevant waste management and legislation and guidance. The applicant have given a firm commitment to comply with the requirements of the site-specific waste management plan, and in doing so, it is reasonable to conclude that the waste management aspects of the proposed development will not have a significant impact on the environment.

Conclusion

I have considered all of the application documentation and submissions received, and I am satisfied that impacts in relation to waste management would be satisfactorily avoided, managed and mitigated by the measures which form part of the proposed scheme and by appropriate conditions. I am satisfied that the proposed development would not have any unacceptable direct, indirect or cumulative impacts in terms of waste generation and management.

9.15. **COMAH and Major Accidents**

9.15.1. The quantity of distillate oil to be stored on the site is 5,770 tonnes (three circular oil storage tanks, capacity to store approximately 1,690 tonnes and ten rectangular steel double-skin storage tanks, capacity to store approximately 70 tonnes of oil). Establishments which store more than 2,500 tonnes of distillate oil on-site fall under the remit of the COMAH Regulations and are classified as 'lower tier'²⁰.

9.15.2. A submission has been received from the Health and Safety Authority acting as the Central Competent Authority (CCA) under the Chemicals Act (Control of Major Accident Hazards Involving Dangerous Substances) Regulations 2015 (SI 209 of 2015) and provides technical advice in this regard. The Health and Safety Authority can confirm from the information received, that the development will constitute a new COMAH establishment due to the amount of distillate oil to be stored on site. Therefore, the operator of the establishment is required to prepare

²⁰ It is only where the amount stored exceeds 25,000 tonnes that establishments become 'upper tier'.

and submit to the Central Competent Authority, a Land Use Planning Risk Assessment and is also required to adhere to the legislative requirements for Lower Tier establishments, which are set out in the Chemicals Act (Control of Major Accident Hazards Involving Dangerous Substances) Regulations 2015 (S.I. 209 of 2015).

9.15.3. The Environmental Report submitted with the application has indicated that no later than three months prior to start of construction of the distillate oil storage tanks, as per Regulation 10 of the COMAH Regulations, ESB will prepare a Major Accident Prevention Policy (MAPP) document and submit it to the Health and Safety Authority (HSA) no later than one month prior to when the COMAH Regulations apply on-site. In accordance with the Regulations the MAPP shall:

- Be designed to guarantee a high level of protection of human health and the environment;
- Include ESB's overall aims and principles of action, including a commitment to ensure a high level of protection of human health and the environment;
- Include the role and responsibility of site management in ensuring its proper implementation; and
- include a commitment towards continuously improving the control of major accident hazards.

A Major Accident to the Environment (MATTE) assessment will be undertaken and provided to the HSA with the notification above. The applicant will therefore comply with the requirements HSA in respect of the European Communities, Control of Major-Accident Hazards involving Hazardous Substances (COMAH) Regulations.

9.16. Interactions

Section 4.14 of the Environmental Report submitted includes a summary of potential interactions of the environmental factors assessed above. A summary of the key potential interactions are set out below:

- Air Quality and Population & Human Health: Potential for nuisance impacts due to dust-generating activities of proposed works on human health receptors.

- Air Quality and Biodiversity: Potential for nuisance impacts due to dust-generating activities of proposed works on sensitive SAC and SPA habitats.
- Climate and Air Quality and Population & Human Health: Potential for GHG emissions to be released to atmosphere during the demolition / construction, operational and decommissioning phases of the Designated Development.
- Noise and Population & Human Health: Potential for nuisance and disturbance due to noisy plant, noisy site activities and additional traffic as a result of the Designated Development.
- Noise and Biodiversity: There is potential for impacts on sensitive SAC and SPA habitats (i.e. disturbance) due to noise and vibration during the demolition / construction, operational and decommissioning phases of the Designated Development.
- Biodiversity and Water: Potential for impacts to the surface water environment, which may in turn impact sensitive SAC and SPA habitats.
- Biodiversity and Climate: Potential for impacts to biodiversity, which may be exacerbated by climate change or the release of GHG emissions to the atmosphere as a result of the Designated Development.
- Population & Human Health and Water: Potential for impacts to the surface water environment
- Population & Human Health and Landscape & Visual: Potential for impacts on the landscape character and visual amenity during the construction and operational phase of the Designated Development.
- Population & Human Health and Traffic & Transport: Potential for nuisance and disturbance due to construction traffic noise on settlements in the vicinity of the Designated Development.
- Population & Human Health and Waste Management: Potential for impacts on human health receptors if waste is not management correctly, resulting in littering which could cause a nuisance to the public and attract vermin. In a worst case scenario hazardous waste could result in contamination of receptors.

- Water and Land, Soils & Geology: Potential for contaminated surface water run-off to potential to enter soil and groundwater.
- Land, Soils & Geology and Air Quality: Construction activities such as excavations and stockpiling of materials, etc., have the potential to results in interactions between air quality and land and soils in the form of dust emissions.

9.17. Cumulative Impacts

The final section of the environmental report assess the potential impact arising from cumulative impacts in respect of consented, planned and reasonably foreseeable projects located within the vicinity of the site that could potentially have an in-combination effect with the designated development.

Larger scale developments granted planning permission within 5km of the site were identified. A total of 4 developments were identified and are set out in the Table 12 below:

Table 12: Projects which could have potential for in-combination or Cumulative Effects

Planning Authority	Reg. Ref No.	Brief Description of development	Date & Decision	Distance form site	Potential for in-combination effects
Roscommon Co Co	22329	Permission to fill the site with inert materials including soil to return the land to productive agricultural land with all associated site development works.	Grant 27/01/23	4 km	Due to the separation distances involved and the and the nature of the inert fill, no in-combination effects are anticipated
Offaly Co Co	22223	Description The Demolition of the Existing WOP Station (As approved under Offaly County Council Ref. 01/187/ An Bord Pleanála Ref. PI 19.125575 and all subsequent permissions); and the development and operation of electricity grid services — namely a Battery Energy Storage System (BESS) and a Synchronous Condenser (Sync Con).	Grant 18/01/2023	Subject Site	This application was the subject of EIA. The PA granted PP for the development on the basis that inter alia the proposed development would not have a significant adverse impact in the environment. Thus, no in-combination effects are anticipated
Offaly Co Co	1956	For (i) provision of open area Battery Energy Storage System (BESS) compound (area of 6,200sqm) containing battery	Grant 07/05/2019	Subject site	This the development was the subject of a planning assessment and includes a suite of

		and control system enclosures in lieu of the approved single storey main building (floor area of 4,500 sqm), (ii) increase in size (630 sqm), location and internal layout of switchgear building in lieu of that approved (100 sqm) which serves the main transformer on site before electrically connecting to the existing 220kv Shannonbridge substation located on lands adjoining the site to the west, and (iii) all associated site works.		(c.350m to the SE)	mitigation measures to address potential impacts in water pollution, waste management and environmental nuisance. Thus, no in-combination effects are anticipated
Offaly Co Co	18163	Construction of a new building adjacent to existing dressing rooms containing a multi-purpose fitness centre, new public toilets, showers & equipment store. Also, provision of new floodlighting system and construction of a walking track around the perimeter of the playing field and all associated site works	Grant 05/02/23	2.6 km to the south east	Having regard to the minor nature of the development and the separation distances involved, no adverse impacts are anticipated

The Report also referred to the potential cumulative/ in-combination effects that could possibly arise from the development of the Emergency Electricity Generation Development downstream along the River Shannon at Tarbert Co Kerry. It is noted that this development is located 118 km downstream from the subject site and having regard to the separation distances involved, no in-combination effects are anticipated.

Based on the information set out above it is reasonable to conclude that there are no potential significant cumulative effects with other developments or committed schemes in the area, based on their nature, scale, location and potential interactions with the designated development.

10.0 Appropriate Assessment

10.1. Arrangements for Appropriate Assessment Under the 2022 Act

10.1.1. Section 6 (1) of the Act states that “*On receiving an application under section 4, the Minister shall arrange for an assessment of the designated development to be*

carried out by the Board in accordance with Part 5 of the Regulations of 2011, subject to any modifications as to process as may be prescribed for the purposes of this Act, and Part 5 of those Regulations shall apply in respect of the designated development subject to such modifications”.

10.1.2. Section 6 (2) states that *“the Board shall, as part of the assessments referred to in section 5(2) and subsection (1), assess the impacts (if any) of the designated development on the species listed in Annex IV of the Habitats Directive and their breeding sites and resting places and consider whether there is a need for a derogation for the purpose of Article 16 of that Directive in respect of the designated development and whether such a derogation ought to be granted, and may make a recommendation to the Minister in relation to such need and grant.”*

10.2. **Stage 1 - Appropriate Assessment Screening**

10.2.1. Having reviewed the submitted Appropriate Assessment Screening Report and supporting documentation together with the Inspector’s Stage 1 Screening Report, the Board, on the 23rd of February 2023 determined under article (42)(1) that the designated development, individually or in-combination with other plans or projects, is likely to have a significant effect on the following European Sites, in view of the sites’ conservation objectives:

- Middle Shannon Callows SPA (Site Code: 004096).
- River Suck Callows SPA (Site Code: 004097).
- River Shannon Callows SAC (Site Code 000216).

The potential for significant effects on the conservation objectives of other European sites within and outside of the zone of influence were screened out because of the separation distances and the lack of substantive ecological linkages or pathways between the proposed works and other European sites.

The Conservation Objectives for these sites are summarised below and detailed information is available at the relevant NPWS website.

10.3. **Stage 2 Appropriate Assessment**

Key Species and Key Habitats Associated with the European Sites ‘Screened In’ for Assessment

10.3.1. This section of my report focuses on the individual qualifying interests associated with the Natura 2000 sites and whether or not the proposed development has the potential to impact on the individual qualifying interests.

River Shannon Callows SAC (Site Code 00216)

10.3.2. The River Shannon Callows is a long and diverse site which consists of seasonally flooded, semi-natural, lowland wet grassland, along and beside the river between the towns of Athlone and Portumna. It is approximately 50 km long and averages about 0.75 km wide (reaching 1.5 km wide in places). Along much of its length the site is bordered by raised bogs (many, but not all, of which are subject to large-scale harvesting), esker ridges and limestone-bedrock hills.

10.3.3. The River Shannon Callows is mainly composed of lowland wet grassland. Different plant communities occur, depending on elevation, and therefore flooding patterns. Two habitats listed on Annex I of the E.U. Habitats Directive are well-represented within the site – Molinia meadows and lowland hay meadows. The former is characterised by the presence of the Meadow Thistle (*Cirsium dissectum*) and Purple Moor-grass (*Molinia caerulea*), while typical species in the latter include Meadow Fescue (*Festuca pratensis*), Rough Meadow-grass (*Poa trivialis*), Downy Oat-grass (*Avenula pubescens*), Common Knapweed (*Centaurea nigra*), Ribwort Plantain (*Plantago lanceolata*) and Common Sorrel (*Rumex acetosa*). In places these two habitats grade into one another.

10.3.4. A further two Annex I habitats, both listed with priority status, have a minor though important presence within the site. Alluvial forest occurs on a series of alluvial islands just below the ESB weir near Meelick²¹. Several of the islands are dominated by well-grown woodland consisting mainly of Ash (*Fraxinus excelsior*) and Willows (*Salix spp.*). The islands are prone to regular flooding from the river. At Clorhane, an area of limestone pavement represents the only known example in Co. Offaly. It is predominantly colonised by mature Hazel (*Corylus avellana*) woodland, with areas of open limestone and calcareous grassland interspersed. The open limestone pavement comprises bare or moss-covered rock, or rock with a very thin calcareous soil cover supporting a short grassy turf. Other habitats of smaller area but also of importance within the site are lowland dry grassland, drainage ditches, freshwater marshes and reedbeds.

²¹ Circa 20 km downstream of Shannonbridge Power Station.

10.3.5. This site holds a population of Otter, a species listed on Annex II of the E.U. Habitats Directive, while the Irish Hare, which is listed in the Irish Red Data Book, is a common sight on the callows.

10.3.6. The Shannon Callows has by far the largest area of lowland semi-natural grassland and associated aquatic habitats in Ireland, and one in which there is least disturbance of natural wetland processes. Botanically, it is extremely diverse with two legally protected species of plants and many scarce species. Excellent examples of two habitats listed on Annex I of the E.U. Habitats Directive occur within the site – Molinia meadows and lowland hay meadows with good examples of a further three Annex habitats (two with priority status). In winter the site is internationally important for numbers and species of waterfowl. In spring it feeds large numbers of birds on migration, and in summer it holds very large numbers of breeding waders, rare breeding birds and the endangered Corncrake, as well as a very wide variety of more common grassland and wetland birds. The presence of Otter, an Annex II species, adds further importance to the site.

Table 12 – Screening In/Out Impacts on Qualifying Interests on the River Shannon Callows SAC

River Shannon Callows SAC (Site Code 00216)		
Qualifying Interest	Occurrence within the ZOI of the site	Potential of adverse effects on the qualifying interest (QI) Yes/No
Molina meadows on Calcareous, peaty or clayey-silt-laden soils [6410]	This habitat is located throughout the SAC and it is present downstream along the river Shannon. It is, at its closest point c.2.4km downstream of the subject site	This habitat is within the zone of influence on the basis that any potential water pollution episode could have the potential to impact on this QI. Yes
Lowland hay meadows [6510]	This habitat is located throughout the SAC it is present downstream along the River Shannon. It is, at its closest point c.2.4km downstream of the subject site	This habitat is within the zone of influence on the basis that any potential water pollution episode could have the potential to impact on this QI. Yes
Alkaline fens [7230]	The NPWS Conservation Objectives Map indicates that the nearest location of this habitat is c24km south of the subject site	Due to the separation distances involved and the dilution and dispersion capacity of the River Shannon, it is not considered that this habitat is within the zone of influence of the subject site and

		therefore there is no potential to impact on this habitat No
Limestone Pavements [8240]	The nearest limestone pavement to the subject site is c3km up stream of the proposal	Due to the nature of the QI, the separation distance and its location upstream of the subject site, it is concluded that the proposal is not located within the zone of influence of the designated development. No
Alluvial Forests with <i>Alus glutinosa</i> and <i>Fraxinus excelsior</i> [91E0]	This habitat is located c.9km south of the proposed development (c.15km hydrological route).	The NIS submitted on a precautionary principle screens this habitat to be within the zone of influence, however having regard to the separation distances, and the dilution and dispersion capacity of the River Shannon it is not considered that the proposed development could impact on this habitat. No
Otter [1355]	The otter is the only species associated with this habitat. No couching sites or holts were identified within the study area. However, the otter is a highly mobile species and has been identified on the banks of the river Shannon in the vicinity of the WOP Station. Historic records have also placed the otter within 2km of the site.	The foraging and commuting habitat of the otter is within the ZOI of the site and therefore should be screened in for further assessment. Yes

Middle Shannon Callows SPA (Site Code 004096)

Like the Middle Shannon Callows SAC, the Middle Shannon Callows SPA is a long and diverse site which extends for approximately 50 km from the town of Athlone to the town of Portumna; it lies within Counties Galway, Roscommon, Westmeath, Offaly and Tipperary. The site averages about 0.75 km in width though in places is up to 1.5 km wide. The site has extensive areas of callow, or seasonally flooded, semi-natural, lowland wet grassland, along both sides of the river.

10.3.7. The Middle Shannon Callows qualifies as a site of international importance as it regularly supports in excess of 20,000 wintering waterbirds (23,656 – four year mean

peak for four of the winters between 1995/96 and 1999/2000). The site also supports internationally important populations of Whooper Swan (305 – five year mean peak for the period 1995/96 to 1999/2000) and Black-tailed Godwit (485 – four year mean peak for four of the winters between 1995/96 and 1999/2000). Four further species of wintering waterbird occur in numbers of national importance, i.e. Wigeon (3,059), Golden Plover (4,133), Lapwing (13,240) and Black-headed Gull (1,209) – all figures are four year mean peaks for four of the winters between 1995/96 and 1999/2000. A wide range of other species occurs within the site, including Mute Swan (407), Teal (88), Tufted Duck (41), Dunlin (335), Curlew (162) and Redshank (39). Small numbers of Greenland White-fronted Goose use the Shannon Callows (peak 55 in 1998/99) and these are generally associated with larger flocks which occur on the adjacent Little Brosna Callows and River Suck Callows. The callow grasslands provide optimum feeding grounds for these various species of waterfowl, while many of the birds also roost or rest within the site. The Shannon Callows is also an important site for breeding waders with the total population on the Shannon and Little Brosna Callows being one of three major concentrations in Ireland and Britain in 1987.

Table 13 – Screening In/Out Impacts on Qualifying Interests on the River Shannon Callows SPA

Middle Shannon Callows SPA Site Code 004096		
Qualifying Interest	Occurrence within the zone of Influence (ZOI) of the Site	Potential of adverse effects on the qualifying interest (QI) Yes/No
Whooper Swan [A038]	Historically this species has not been identified as being present within 2km of the site. However, in surveys undertaken by APEM Ltd. In December 2021, one swan was observed flying high over the site in a SW direction	The designated development is located within the core feeding range of the QI species which is identified as up to 5km and is therefore within the ZOI. Yes
Wigeon [A050]	The proposed development is within the core feeding range of the QI species of 5km.	As the species has been recorded within 2 km of the subject site it is considered to be within the ZOI Yes
Corncrake [A122]	This species has been extinct in the Shannon Callows since the early 2000's.	As this species is now confined to the NW of the county. This species is considered to be outside the zone of influence of the subject site. No

Golden Plover [A140]	There is no core feeding range for this species and the species has not been identified as being present within a 2 km radius of the site.	Out of an abundance of caution, the NIS has screened in this species on the basis that there is suitable habitat within the surrounding landscape. Based on the same precautionary principle, on foot of potential noise disturbance it is appropriate to screen this species in. Yes
Lapwing [A142]	There is no core feeding range for this species and the species has not been identified as being present within a 2 km radius of the site.	Out of an abundance of caution, the NIS has screened in this species on the basis that there is suitable habitat within the surrounding landscape. Based on the same precautionary principle, on foot of potential noise disturbance it is appropriate to screen this species in. Yes
Black-tailed Godwit [A156]	There is no core feeding range for this species and the species has not been identified as being present within a 2 km radius of the site.	Out of an abundance of caution, the NIS has screened in this species on the basis that there is suitable habitat within the surrounding landscape. Based on the same precautionary principle, on foot of potential noise disturbance it is appropriate to screen this species in. Yes
Black-headed Gull [A179]	There is no core feeding range for this species and the species has not been identified as being present within a 2 km radius of the site.	Out of an abundance of caution, the NIS has screened in this species on the basis that there is suitable habitat within the surrounding landscape. Based on the same precautionary principle, on foot of potential noise disturbance it is appropriate to screen this species in. Yes
Wetland and water birds [A999]	This area of designated habitat is located throughout the SPA.	While these species were not present during the habitat survey carried out in December 2021 and January 2022, these species are nevertheless considered to be within the zone of influence due to the ubiquitous nature of these species throughout the site. Yes

River Suck Callows SPA (Site Code 004097)

10.3.8. The River Suck Callows SPA is a linear, sinuous site comprising a section of the River Suck from Castlecoote, Co. Roscommon to its confluence with the River Shannon close to Shannonbridge, a distance of approximately 70 km along the course of the river. The site includes the River Suck itself and the adjacent areas of seasonally-flooded semi-natural lowland wet callow grassland. The site is a Special Protection Area (SPA) under the E.U. Birds Directive, of special conservation interest for the following species: Whooper Swan, Greenland Whitefronted Goose, Wigeon, Golden Plover and Lapwing. The E.U. Birds Directive pays particular attention to wetlands and, as these form part of this SPA, the site and its associated waterbirds are of special conservation interest for Wetland & Waterbirds. The River Suck Callows SPA is an important site for wintering waterfowl. Of particular note is the nationally important Greenland White-fronted Goose flock (293 – five year mean peak for the period 1994/95 to 1998/99) which congregates mainly in the middle reaches of the river. Four other species occur in populations of national importance, i.e. Whooper Swan (164), Wigeon (3,232), Golden Plover (2,241) and Lapwing (3,906) – all figures are five year mean peaks from aerial surveys between 2001/02 and 2005/06. Other species present include Mute Swan (122), Teal (402), Mallard (70), Black-tailed Godwit (24), Curlew (22) and Black-headed Gull (86). The River Suck Callows SPA is of considerable ornithological importance, in particular for the presence of nationally important populations of five species. Of note is that three of the species that occur regularly, i.e. Whooper Swan, Greenland White-fronted Goose and Golden Plover, are listed on Annex I of the E.U. Birds Directive.

Table 14 – Screening In/Out Impacts on Qualifying Interests on the River Suck Callows SPA

River Suck Callows SPA Site Code 004097		
Qualifying Interest	Occurrence within the zone of Influence (ZOI) of the Site	Potential of adverse effects on the qualifying interest (QI) Yes/No
Whooper Swan [A038]	Historically this species has not been identified as being present within 2km of the site. However, surveys undertaken by APEM Ltd. In December 2021 one swan was observed flying high over the site in a SW direction	The designated development is located within the core feeding range of the QI species which is identified as up to 5km and is therefore within the ZOI. Yes
Wigeon [A050]	The proposed development is within the core feeding range of the QI species of 5km.	As the species has been recorded within 2 km of the subject site it and if it is assumed that there is a

		certain interaction between the Suck Callows SPA and the Middle Shannon Callows SPA, it is considered to be within the ZOI. Yes
Golden Plover [A140]	There is no core feeding range for this species and the species has not been identified as being present within a 2 km radius of the site.	Out of an abundance of caution, the NIS has screened in this species on the basis that there is suitable habitat within the surrounding landscape. Based on the same precautionary principle, on foot of potential noise disturbance it is appropriate to screen this species in. Yes
Lapwing [A142]	There is no core feeding range for this species and the species has not been identified as being present within a 2 km radius of the site.	Out of an abundance of caution, the NIS has screened in this species on the basis that there is suitable habitat within the surrounding landscape. Based on the same precautionary principle, on foot of potential noise disturbance it is appropriate to screen this species in. Yes
Greenland Fronted Goose [A395]	There is no core feeding range for this species. It has not been identified as being present within a 2 km radius of the subject site. There are no suitable feeding/roosting habitats within the site.	There is however suitable habitat within the surrounding landscape there this QI is within the ZOI in terms of potential impacts. For this reason, primarily through noise disturbance it is screening in.
Wetland and Waterbirds [A999]	The SPA is upstream of the proposed development as such this QI is outside the ZOI of potential impact.	Out of an abundance of caution it is assumed that the Wetland and Waterbirds would interact with waterbirds in the area and for this reason it is screened in.

The potential effects from the identified impacts include:

- Displacement of QI species due to physical changes to the environment and increased human presence and activities.
- Displacement of QI species due to increased noise levels primarily due to the operation of electricity generating plant on site.
- Emissions to water could result in displacement of QI species through loss of habitat or feeding grounds for species; mortality of species through

contamination / water pollution; significant pollution / contamination could also damage or destroy sensitive habitats.

- The duration of the project could give rise to seasonal displacement of species.

The potential impact of the proposal on each of the Qualifying Interests within the zone of influence of the development are assessed in each of the Natura 2000 Sites below:

River Shannon Callows SAC

Molina Meadows on calcareous peaty or Clayey-silt-laden soils.

- 10.3.9. The conservation objective is to restore the favourable conservation condition of this habitat. There is very little potential of adverse impacts on this habitat. At its closest point it is 2.4km downstream from the site. The terrestrial nature of the habitats within the SAC (minimum 50m between the bank of the river and the habitat boundary), the emissions to water would need to coincide with an extreme flood event to reach/ impact the habitat downstream of the site. Even in the event of an extreme flood event the water mitigation measures to be put in place on site will ensure that any water discharged from the site will not be heavily polluted or contaminated to the extent that it could damage this habitat.

Lowland hay meadows

- 10.3.10. The conservation objective is to restore the favourable conservation condition of this habitat. There is potential to impact on this habitat which is located c750m downstream through a degradation of water quality and habitat heterogeneity in the absence of mitigation. An array of water quality mitigation measures are to be put in place including detailed monitoring of the water drainage network, measures to avoid sediment-laden runoff from excavated material to surface waters, wheel wash facilities, concrete management protocols, refuelling / hydrocarbon management protocols, spill control emergency plans, contaminated material management and the incorporation of silt fences where appropriate. Full details of the water mitigation measures are set out in S.5.5.2 and Table 7 of the NIS.

Otter

- 10.3.11. The conservation objective is to maintain the favourable conservation condition of this species with no significant decline in the target population. Otter

signs (e.g., spraint) were recorded west <2km of the proposed development on the River Suck, and otter signs have previously been recorded along the western boundary of the WOP Station on the bank of the River Shannon during surveys undertaken by Apem Ltd in December 2021. While no couching site or holts were identified within the study area, the proposed development in the absence of mitigation, could potentially impact on otters in the wider area, including within the confines of the SAC through noise disturbance, potential lighting pollution and a degradation of water quality which in turn could impact on fish populations resulting in a decline in fish biomass.

10.3.12. The Ecologists Memorandum recommends that a condition that a pre-construction otter survey be carried out on site. I note that no such condition was recommended in the DAU submission. CIEEM Guidelines²² recommend that where 18 months have elapsed between the time that the survey was undertaken, and the development commences, new surveys should be undertaken. I note in this instance that only 14 months have elapsed and because of the imminent commencement of works on site, the surveys undertaken in my opinion are still valid. However, should the Board decide otherwise, it is of course open to it to recommend to the Minister that additional pre-construction surveys be undertaken.

10.3.13. In terms of disturbance, the intensity duration and frequency of repetition of disturbance are important parameters in terms of assessing and defining impacts. The fact that any potential disturbance with limited in the extent of its duration, operating for a maximum period of 500hrs per year (less than 6% of the year) and the fact that the life of the project is limited to 5 years; this will significantly curtail the potential impact and is very unlikely to contribute to the long-term decline of the population of the species, by reason of reducing the natural range of the habitat or impacting the population dynamics of the species within the habitat. The infrequent nature of the activity during the operational phase will not result in significant disturbance.

10.3.14. A series of noise mitigation measures are proposed, this includes a site representative responsible for all matters relating to noise. Specific noise measures include the provision of acoustic screens between 3 and 12 m in height to attenuate noise propagation beyond the site. All construction works on-site will be carried out

²² Advice Note on the Lifespan of Ecological Reports & Surveys (April 2019)

in accordance with the guidance set out in BS 5228:2009+A1:2014 and contractors will be required to comply with the requirements of the Directive 2000/14/EC of the European Parliament and of the Council that relates to the noise emission in the environment by equipment for use outdoors. Construction activities during the night-time shift will be restricted to low noise construction activities. Other more general noise mitigation measures include:

- Avoid unnecessary revving of engines and switch off equipment when not required.
- A speed restriction of 20 km/hr will be applied on-site.
- Training of site staff in the proper use and maintenance of tools and equipment.
- Machines that could be in intermittent use will be shut down between work periods or will be throttled down to a minimum.
- Plant known to emit noise strongly in one direction will, when possible, be orientated so that the noise is directed away from noise-sensitive locations.
- Keep internal haul routes well maintained and avoid steep gradients.
- All lighting systems will be designed and cowled to minimise light spillage into surrounding areas.

10.3.15. I am satisfied that once these measures are strictly adhered to and based on the noise assessment undertaken and presented in Section 4.3 of the accompanying Environmental Report, these measures will ensure that the predicted noise levels from the proposed development will be reduced significantly, to below the predicted disturbance threshold for birds of 55-57 dB, before reaching the Natura 2000 sites in question including the River Shannon Callows SAC.

10.3.16. Lighting is another important consideration in terms of disturbance for both otters and bats. This issue was highlighted in both the ecologist's memorandum and the submission on behalf of the DAU. Neither had a fundamental concern regarding lighting as a issue, both however did recommend that the applicant design lighting arrangements in accordance with more recently adopted guidance including '*Guidance Note 08/18 Bats and Artificial Lighting in the UK - Bats and the Built Environment Series (Bat Conservation Trust/Institute of Lighting Professionals*

(2018)'. Issues in relation to lighting disturbance can therefore be adequately addressed by way of condition.

- 10.3.17. An array of water quality mitigation measures are to be put in place including detailed monitoring of the water drainage network, measures to avoid sediment-laden runoff from excavated material to surface waters, wheel wash facilities, concrete management protocols, refuelling / hydrocarbon management protocols, spill control emergency plans, contaminated material management and the incorporation of silt fences where appropriate. These measures will ensure that suspended solids or other pollutants will not be discharged to surface waters during construction and operation and that there will be no effect on the water quality downstream of the Site. full details of both the noise and water mitigation measures are set out in S5.5.2 and Table 7 of the NIS.
- 10.3.18. The ecologist's memo has concluded that there is a significant absence of information in respect of the surface water arrangements on site and where information has been provided, there appears to be some ambiguity in relation to the nature of the surface water arrangements to be implemented as part of the proposal. The Board will note that from an Appropriate Assessment perspective any potential deterioration of the water quality in the River Shannon as a result of the activities on site is extremely unlikely to result in any adverse impacts on the habitats downstream which are qualifying interests associated with the SAC. Thus, the lack of information with regard to surface water drainage in the plans and particulars submitted would not necessarily pose a problem in reaching a reasonable conclusion in respect of the absence of adverse significant effects on the habitats (my emphasis) which are qualifying interest of the Middle Shannon Callows SAC.
- 10.3.19. Perhaps a more salient issue arises from the point of view of the impact of the proposal on the only species associated with the SAC ie the otter. The lack of information regarding surface water drainage could be regarded somewhat problematic for the Board, having particular regard to its obligations that any appropriate assessment to be carried out should contain complete, precise and definitive findings and conclusions capable of removing all reasonable scientific doubt as to the impact of the proposal on the Natura 2000 site in question. European Case Law has determined that it is at the time of adoption of the decision authorising implementation of the project that there must be no reasonable scientific doubt

remaining as to the absence of adverse effects on the integrity of the site in question²³. It is my considered opinion that the employment of standard mitigation measures will address most the concerns raised in the ecologist's memo. One issue raised might require more detailed consideration in order to reach a definitive conclusion that the mitigation measures to be implemented will fully address the potential of a proposed spillage or surface water discharge from a fire, or a massive distillate oil spill which could adversely impact on one of the qualifying interests associated with the Middle Shannon Callows SAC.

As already mentioned, I am satisfied that sufficient protocols and mitigation measures can be put in place to address relatively straight forward potential pollution episodes such as:

- Discharge of vehicle wash-down water.
- Uncontained spillage of wastewater effluent
- Small-scale refuelling spillages
- Uncontrolled sediment erosion and contaminated silty runoff etc.

The existing surface water management system such as drains, settlement ponds interceptors/separators can ensure that receiving water in the River Shannon will remain uncontaminated should such minor pollution events occur. In this regard I would refer the Board to the EPA document *IPC Guidance Note on Storage and Transfer of Materials for Scheduled Activities* (2013). It provides detailed guidance on the design, construction, operation, maintenance and monitoring of tanks (including drums and containers), bunds and pipelines which store or transmit potentially polluting substances including fuels. Such guidance would provide a suitable design standard to provide the necessary confidence with regard to effectiveness of these measures.

10.3.20. As the Ecologists memo implies, larger one-off catastrophic events which, albeit unlikely, could potentially occur on site, such as a large-scale fire would give rise to more serious environmental and health and safety problems. While less likely an occurrence, I cannot disagree with the conclusion of the ecologist that there is a dearth of information as to how the surface water drainage arrangements would work were such a serious event to occur on site. The documentation submitted refers in

²³ Commission V Portugal C-239/04 (2006)

S2.3.7 A fire water storage tank of approximately 1,600m³ will be installed on-site. It is not clear where this tank is to be located. More importantly for the purposes of carrying out an appropriate assessment, it is possible that wash down waters from the fire water storage facility in the event of a fire on site could result in a significant overwhelming of the existing surface water drainage infrastructure including the sedimentation pond and could result in large volumes of untreated wash down contaminated water bypassing the network and discharging directly into the River Shannon. While the River Shannon at this location has a very significant assimilative capacity, (in the order of 20m³/s). Nevertheless, contaminated washdown waters of this nature could potentially, under a worst-case scenario, result in fish kills thereby affecting fish biomass availability in the River Shannon for the otter.

10.3.21. Thus, the absence of information on file as to how specific mitigation measures are to be put in place to deal with such a scenario, the Board may not be able to conclude, beyond all reasonable scientific doubt, that adverse impacts on the habitat of the otter would occur. However, it should be borne in mind, in respect of applying mitigation, that firewater storage issues do not represent a unique risk and arises in respect of also all such IED licenced facilities and is well understood.

I note the DAU submission on file which specifically states the following in relation to distillate oil storage:

“The development includes three distillate oil circular steel storage tanks, each with capacity of 1,690 tonnes and ten distillate oil storage tanks, each with capacity of 70 tonnes. This equates to a storage capacity of 2,845,237 litres of distillate oil (diesel). Given the location of the designated development adjacent to surface and groundwater dependant Natura 2000 sites and the volume of distillate oil which could be stored on site, all mitigation measures to avoid hydrocarbon spillage must be strictly adhered to. The hydrocarbon spillage collection tanks must be sufficiently sized. Clean surface water must be directed away from the fuel oil unloading modules and any other areas where hydrocarbon spillage may occur”.

10.3.22. The DAU are a very competent authority in advising the Board on issues in respect of Appropriate Assessment. It is telling that the DAU did not raise any concerns in respect of the lack of detail regarding specific mitigation measures in respect of oil storage and firewater retention facilities on site. It merely stipulates that *“all mitigation measures to avoid hydrocarbon spillage must be strictly adhered to”*.

This would appear to imply that the DAU are satisfied that standard mitigation measures applied across the industry in accordance with tried and tested guidance and protocols would be sufficient to address any concerns in this regard.

10.3.23. There are however in my view potential mitigation measures inherent in the licencing of the facility by the EPA and the applicant's requirements in the COMAH Regulations which requires the applicant put in place specific and detailed accident prevention and emergency response as part of the overall development consent process.

10.3.24. The EPA has prepared and adopted detailed Guidance on Retention Requirements for Firewater Run-off²⁴. The document is primarily written for sites licenced by the EPA regulated under the Environmental Protection Agency Act, 1992 (as amended), and the Waste Management Act 1996 (as amended). It sets out clear guidance on the requirements in relation to risk assessments, retention capacity calculations and the design of firewater retention facilities which includes detailed requirements in relation to the design of firewater retention ponds, tanks, bunding and drainage systems etc. I reiterate that the EPA have additional guidance and protocols with regard to the design and construction of storage of hazardous materials on site including the aforementioned EPA document *IPC Guidance Note on Storage and Transfer of Materials for Scheduled Activities (2013)*, which addresses design, construction, operation, maintenance and monitoring of tanks (including drums and containers), bunds and pipelines which store or transmit potentially polluting substances including fuels.

10.3.25. The Environmental Protection Agency (Industrial Emissions) (Licensing) Regulations 2013 (S.I. No. 137 of 2013), and the European Union (Industrial Emissions) Regulations 2013 (S.I. No. 138 of 2013) also lay down rules on integrated prevention and control of pollution arising from licenced industrial activities. All IED licences must comply with Best Available Techniques (BAT). The EPA is prohibited from granting a licence unless it is satisfied that emissions will not cause significant environmental pollution and that necessary measures will be taken to prevent, limit, and remediate the consequences of incidents and accidents.

²⁴ EPA Guidance on Retention Requirements for Firewater Run-off.

10.3.26. I note that the existing licence for the Shannonbridge facility (Licence No. P0611-02), includes a specific condition (condition no. 9) which requires the operator of the facility to ensure inter alia that:

- *A documented Accident Prevention Procedure is in place that addresses the hazards on-site, particularly in relation to the prevention of accidents with a possible impact on the environment.*
- *The licensee shall ensure that a documented Emergency Response Procedure is in place, that addresses any emergency situation which may originate on-site.*
- *This procedure shall include provision for minimising the effects of any emergency on the environment. This procedure shall be reviewed annually and updated as necessary.*

10.3.27. Furthermore, and in addition to the EPA Licence requirements, the Board may conclude that the designated development, and any fire associated with the operation of the plant will be the subject of a separate emergency response plan as part Major Accident Prevention Policy (MAPP) document envisaged under the COMAH Regulations. Should the Board deem it appropriate to advise the Minister in relation to conditions, it could include a condition requiring the applicant to adhere to the legislative requirements for Lower Tier establishments, which are set out in the Chemicals Act (Control of Major Accident Hazards Involving Dangerous Substances) Regulations 2015. Compliance with these additional legislative requirements would undoubtedly ensure that appropriate mitigation measures and procedures will be put in place to limit and address any adverse impacts arising from a major incident such as a fire or major oil spill at the plant during the operational phase.

10.3.28. The AA assessment undertaken by An Bord Pleanála has identified an impact which could materially affect the habitat of the otter, a qualifying interest associated with the Shannon Callows SAC that was not identified in the NIS. With regard to mitigation measures, the guidance of the Commission (2018) very clear that mitigation measures '*must be directly linked to the likely impacts that have been identified (my emphasis) in the appropriate assessment and can only be defined once these impacts have been fully assessed and described in the appropriate assessment*'.

10.3.29. Therefore, while potential adverse impacts identified in the Ecologists memo, which are not specifically addressed in the NIS submitted, (namely measures dealing with firewater run-off), this potential adverse impact will be required to be addressed in the legal requirement to prevent and minimise impacts from major accidents under other legislative codes. As such there are inherent or 'built-in' mechanisms to employ mitigation measures through the legal requirement of (a) obtaining an IED Licence from the EPA and/or (b) the requirement of producing and agreeing a Major Accident Prevention Policy Document, with the HSA.

10.3.30. The Board has in my considered view, identified all the likely impacts on the SAC that could arise in relation to surface water drainage in respect of the designated development. Should it decide to reach a conclusion and recommend that the Minister approve the proposed development, there are in my view, sufficient safeguards through the requirement of the applicant obtain a EPA licence and to adhere to the legislative requirements for Lower Tier establishments, which are set out in the Chemicals Act (Control of Major Accident Hazards Involving Dangerous Substances) Regulations 2015 to ensure that no significant impacts occur on the SAC in question. Therefore, notwithstanding the absence of specific design details in the mitigation section of the NIS, subject to the application of such standards, any residual risk would not be significant and I consider that the Board may reach a conclusion that the development will not give rise to adverse effects on the integrity of the European Sites.

10.3.31. However, should the Board reach a different conclusion, namely that there is insufficient information in respect of mitigation measures concerning firewater storage facilities or surface water drainage arrangements more generally, rather than refuse planning permission, it could request that the Minister seek further information in respect of the following:

(a) surface water drainage arrangements and layouts to be incorporated on the site and

(b) request the applicant to furnish the Board with sufficient details as to what detailed mitigation measures will be employed at the site to ensure that where the fire water storage facility on site is utilised in the event of an emergency, that any contaminated run-off water from the storage facility is suitable captured / attenuated

to ensure that it poses no threat to the water quality of the receiving waters of the River Shannon and therefore no threat to the habitat of the otter.

Middle Shannon Callows SPA

Whooper Swan, Wigeon, Golden Plover, Lapwing, Black-tailed Godwit, Black-headed Gull.

10.3.32. The potential impact arising from the proposed development for the above species of bird is likely to be very similar, for this reason the potential impacts for all of the species can be assessed together. There is a generic conservation objective in respect of each of the species to maintain or restore the favorable conservation condition of the bird species. As noted previously in my assessment, the subject site is not suitable for foraging breeding or roosting features for the species concerned due to the absence of suitable habitats, namely wetlands and lakes. Although the site due to its proximity to the SPA, is within the core foraging range of the bird species only the whooper swan has been observed flying over the site; and this observation occurred only on one occasion. The wigeon has been historically recorded within 2 km of the site. As in the case of the otter, it is possible that lands in the immediate vicinity of the subject site could host species of the above birds, primarily for foraging. As such, noise levels during the construction and operation of the proposed development could result in the disturbance and displacement of these species in the absence of mitigation. Furthermore, as in the case of other species in the event of a water pollution/contamination episode, this could result in the degradation of water quality which in turn could indirectly impact on wetland habitat used for foraging and feeding. I have argued above that there are inherent and built-in mechanisms and mitigation measures in other legislation which the applicant must comply with, to ensure that no catastrophic water pollution occurs which could impact on the River Shannon.

10.3.33. With regard to the potential of the 8 proposed 30m high emission stacks to present a barrier to flight paths of these species, the Board will note that there are existing structures, some of which are very large (i.e. the in situ power generation building and chimney c.60m and 80m in height respectively). The fact that the proposed gas fired turbines and associated stacks are located adjacent to these existing structures will ensure that any obstruction or barrier to flight paths which can be specifically attributed to the structures proposed would be negligible and therefore

would not have a significant impact on the on the flight paths of these species of conservation interest associated with the SPA. I do not consider thermal interference with bird flight paths to be a crucial consideration as the stacks will operate so infrequently (less than 6% of the time over the 5-year operational lifetime of the development) and noise emanating from the stacks, will also act as a deterrent for direct overflight bird paths. The thermal plume will dissipate quickly on existing the stacks and therefore should not pose a problem to overhead birds.

10.3.34. A series of noise and water quality mitigation measures are proposed, and these are outlined in the previous section of my report (para. 10.3.13 to 10.3.15 above).

Wetland and Waterbirds

10.3.35. Again, wetland and waterbird species, while recorded throughout the SPA, were not recorded within or immediately adjacent to the site during the habitat survey carried out during the winter of 2021/2022. Notwithstanding this point and out of an abundance of caution, it is possible that these species of interest could frequent areas surrounding the site and as such, could be displaced or disturbed through noise generation associated with the construction and /or operation of the proposed development. Furthermore, as in the case of other species, in the event of a water pollution/contamination episode, this could result in the degradation of water quality which in turn could indirectly impact on wetland habitat used for foraging and feeding downstream of the subject site. The size and scale of the structures proposed could potentially pose a barrier to the flight path of the birds in question, although no species of this bird was recorded in flight or otherwise during the surveys undertaken. As in the case of the other species of birds associated with this SPA, with the employment of appropriate mitigation measures in respect of noise and the protection of water quality which are outlined above in my report, no adverse impacts arising from the designated development are anticipated on the wetland and waterbird species associated with the Middle Shannon Callows SPA.

10.3.36. Even if it were the case that wetland and waterbirds species foraged or frequented the banks of the River Shannon to the west of the site, the noise and water attenuation and mitigation measures proposed would ensure that the habitat would not be unduly disturbed and that the measures to be employed to protect water quality discharge off site would not result in the degradation of water

downstream. In terms of a barrier to flight paths, the proximity of the proposed turbine generators to in-situ larger structures on site will ensure that the generators themselves will not pose a risk to flight-paths.

River Suck Callows SPA

Whooper Swan, Wigeon, Golden Plover, Lapwing, Greenland White Fronted Goose

10.3.37. As in the case of the Middle Callows SPA, the potential impacts arising from the proposed development for the above species of bird is likely to be very similar in the case of all the species of conservation interest. For this reason, the potential impacts for all the species can be assessed together. There is a generic conservation objective in respect of each of the species to maintain or restore the favorable conservation condition of the bird species. Although the site is within the core foraging range of the birds, as already mentioned, only the Whooper swan has been observed passing the site and the Wigeon was historically recorded within 2km of the site boundary. The site does not support foraging, loafing or roosting features of significance for these species due to the absence of suitable habitats (e.g., wetlands, lakes). Due to the overlap in species of conservation interest the SPA is designated for, using the precautionary principal, any identified impacts to the species of conservation interest of the Middle Shannon Callows SPA (refer above) could also impact the species of conservation interest species of the River Suck Callows SPA in the absence of mitigation.

10.3.38. The only realistic impacts that could arise relates to noise disturbance as the River Suck Callows SPA is located up stream of the and thus any contaminated discharge which could potentially result in a degradation of water quality, will not affect the water quality, habitats or feeding grounds of the River Suck Callows SPA. Even if it were the case that species of conservation interest associated with the River Suck Callows SPA frequented the banks of the River Shannon to the west of the site, noise attenuation and water quality mitigation measures outlined above in the report will ensure that the proposal will not result in any meaningful disturbance which would result in the displacement of habitat associated with the species of conservation interest concerned.

10.4. In Combination Effects

- 10.4.1. The NIS submitted provides details of all developments which have taken place over the previous 5 year period within a 15 km radius of the site. It lists over 500 applications, the vast majority of which are of a very minor nature. The applications listed would have been the subject of AA screening or in a few cases a stage 2 appropriate assessment. Where it was concluded that the proposed development would have an adverse impact on Natura 2000 sites the competent authority would have been precluded from granting planning permission for the developments in question. I have concluded from my own independent assessment above, which was based on an abundance of caution, particularly in terms of screening in potential impacts on QI's, that the proposed development will not have any adverse impact on qualifying interests or species of conservation interests associated with the three Natura 2000 sites which were screened in for a stage 2 assessment. On this basis of the above therefore, I consider that the Board can reasonably conclude that no in-combination or cumulative effects arising from the designated development in combination with other plans or projects will occur.
- 10.4.2. The submission from the DAU suggested that construction works in relation to other developments in the vicinity of the site should be staggered in order to avoid any cumulative impacts during construction activities. This may not be practical in the case construction activities outside ESB controlled lands. Furthermore, construction activities will be short-term and temporary in nature and are unlikely to give rise to in-combination effects.

10.5. Appropriate Assessment Conclusion

- 10.5.1. Having regard to the works proposed to be undertaken within an existing brownfield site and subject to the implementation of best practice construction methodologies and the proposed mitigation measures particularly in relation to water quality and noise, I consider that it is reasonable to conclude on the basis of the information on the file, which I consider adequate in order to carry out a Stage 2 Appropriate Assessment, that the proposed development, individually or in combination with other plans and projects would not adversely affect the integrity of the Middle Shannon Callows SPA (Site Code: 004096), River Suck Callows SPA (Site Code:

004097), or the River Shannon Callows SAC (Site Code 000216) or any other European site, in view of the site’s Conservation Objectives.

10.6. Requirements for A Derogation Under Article 16 of the Habitats Directive

10.6.1. The Habitats Directive is transposed into Irish law by the European Communities (Birds and Natural Habitats) Regulations, 2011-2021. Requirements in relation to Strict Protection are set out in:

- Regulation 51 – Annex IV animals
- Regulation 52 – Annex IV plants, and
- Regulation 54 – derogation licences including Regulation 54 A when the Minister is applying for a derogation.

In considering the requirements of s.6(2) of the Act of 2022, I have had regard to the *Guidance on the Strict Protection of Certain Animal and Plant Species under the Habitats Directive in Ireland*, National Parks and Wildlife Service Guidance Series, published by the Department of Housing, Local Government and Heritage (2021).

The guidance notes that the following Annex IV species occur in Ireland:

Animals	Plants
All bat species	Slender Naiad
Otter	Killarney Fern
Natterjack Toad	Marsh Saxifrage
Kerry Slug	
Dolphins, Whales and Porpoises	
Marine Turtle	

10.6.2. The need for a derogation licence with regard to animals, arises in respect of the carrying out of any work which has the potential to capture or kill any specimen of a strictly protected species, or to disturb these species, or to take or destroy eggs of such a species, or any action resulting in damage to, or destruction of, a breeding or resting place of an animal.

10.6.3. In respect of plants, the need arises in relation to the deliberate picking, collection, cutting, uprooting or destruction of any specimen of these species in the wild, or the

keeping, transport, sale, exchange, offer for sale or offer for exchange any specimen of these species taken in the wild.

Stage 1: *Annex IV Plant and Animal Species present on the site or within the zone of influence of the development.*

10.6.4. Surveys of the site did not identify any Annex IV plant species within or adjoining the site, or within the zone of influence of the designated development. I have reviewed the survey data accompanying the application and the records of the National Biodiversity Data Centre. The following Annex IV animal species are noted to occur on or within the zone of influence of the designated development:

- Bat species
- Otter

Stage 2: *Surveys indicate that the following are present:*

10.6.5. The otter is a qualifying interest of the Middle Shannon Callows SAC. Surveys of the site and immediate surrounding area did not record any signs of otter, or any resting sites used by the otter. It is known that the riparian woodland habitat along the banks of the River Shannon is suitable for use by transient and foraging otter. While this habitat will not be directly impacted upon by the designated development, potential indirect impacts could occur through disturbance during the construction and operational phase. Mitigation measures are being put in place to address any potential impacts in terms of disturbance of the otter.

10.6.6. The site comprises part of an existing industrial complex. Some structures on site will require dismantling and demolition. The site was the subject to a bat roost assessment survey in the winter of 2020/21 and again in November/December 2022. The assessment was carried out in accordance with Bat Conservation Trust Survey Guidelines. None of the buildings or trees on site were assessed as having anything other than a negligible potential to support bat roosts. It is acknowledged in the survey that there are a number of buildings within the overall complex (ie outside the site) that either have the potential to support bat roosts or accommodate a small night roost used by low numbers of bats, namely the Dalton Building and the Pump House Building adjacent to the River Shannon. These buildings are not to be demolished as part of the proposal. I conclude that the designated development will not impact on any breeding site or resting place for bats.

Stage 3: Examination of Impacts and Satisfactory Alternatives

10.6.7. As mentioned above the otter is a qualifying interest of the Middle Shannon Callows SAC. The proposed development will not result in direct impacts on otter, will not result in damage to, or destruction of, a breeding or resting place of otters.

10.6.8. In relation to bats, I conclude on the basis of the information provided, that the buildings to be dismantled on site are not suitable for bat roosts. The proposed development will not result in direct impacts on any bat species using the site and will not result in the loss or removal of any breeding site or resting place for bats.

Conclusion

10.6.9. I would therefore conclude there is no basis to consider that a need for a derogation licence in respect of as referenced under s.6(2) of the Act of 2022, arises in respect of the designated development as such there is no requirement to consider alternatives. The need for a derogation licence in respect of these species, as referenced under s.6(2) of the Act of 2022, does not arise in this case.

I note, however, that this conclusion does not obviate the requirement on the developer to adhere to the requirements of the of Articles 51 and 52 of the European Communities (Birds and Natural Habitats) Regulations, 2011-2021.

11.0 Recommendation

APPLICATION by ESB Ireland Limited submitted to An Bord Pleanála on the 17th February 2023 by the Minister for the Environment, Climate and Communication for the purposes of carrying out an environmental assessment and appropriate assessment by the Board of the designated development as provided for in accordance with section 5(2) and section 6(1) of the Development (Emergency Electricity Generation) Act 2022 in respect of development comprising the installation and operation of temporary emergency electricity generating plant, to a limit of 500 hours per annum, for a maximum period of 5 years at the former West of Offaly Power Station, in the townland of Clonliffeen, Shannonbridge Co. Offaly.

11.1. Decision:

The Board recommends that the conditions as set out below be taken into account in any approval of the designated development by the Minister.

11.2. Environmental Assessment

The Board carried out an environmental assessment of the designated development in accordance with section 5(2) of the Act.

The Board considered that the Environmental Report, supported by the documentation submitted by the applicant, was prepared by competent experts and describes the likely main effects of the designated development on the environment. The Board agreed with the examination set out in the inspector's report of the information contained in the Environmental Report and associated documentation submitted by the applicant, and submissions made in the course of the application for approval.

In coming to its conclusions, the Board had regard to

- a) European, national, regional and local planning, energy, climate and other policy of relevance, including in particular the following:

European Policy

- Directive 2014/52/EU amending Directive 2011/92/EU (EIA Directive)
- Directive 92/43/EEC (Habitats Directive, and Directive 79/409/EEC as amended by 2009/147/EC (Birds Directive).
- Directive 2000/60/EC (Water Framework Directive)

National Policy

- National Development Plan (2021-2030) (NDP);
- Development (Emergency Electricity Generation) Act 2022;
- Climate Action and Low Carbon Development Amendment Act 2021, amending the Climate Action and Low Carbon Development Act 2015;
- Climate Action Plan 2023;
- Policy Statement on Security of Electricity Supply (November 2021);
- National Energy Security Framework (April 2022);

Regional and Local Policy

- Regional Spatial and Economic Strategy (RSES) for the Eastern and Midlands Region (2019-2031);
- The Offaly Co Council Development Plan 2021-2027

- b) The brownfield nature of the site and planning history relating thereto.
- c) The nature and scale, and infrequent operation of the development limited to a maximum operation of 500 hours per year and the temporary period of operation limited to a maximum of 5 years, of the designated development.
- d) The range of mitigation measures set out in the Environmental Report and the Natura Impact Statement accompanying the application and recommended hereunder.
- e) The submissions received in relation to the application by all parties.
- f) The report of the planning inspector.
- g) The Memorandum of the Ecologist appointed by the by the Board to assist in the Natura Impact Statement and general ecological matters.

The Board has concluded that the main likely effects of the designated development on the environment are as follows:

- The development would give rise to a slight increase in airborne emissions with resulting air quality limited impacts during the operational phase. Modelling indicates that the impact on human and ecological receptors in the receiving environment would not be significant. Having regard to the scale and limited deployment of the plant and the modelling undertaken which demonstrates the designated development's ability to adhere to the air pollution limits set out in the Air Quality Standard Regulations (SI 180 of 2011), it is not considered that any airborne emissions would be significant.
- Noise emissions during construction activity have the potential to give rise to adverse effects on adjoining sensitive residential and ecological receptors, in particular wintering birds. Having regard to the temporary duration of such activity and the identified mitigation measures, including in particular the proposed acoustic barriers around within the site and surrounding the gas turbines and the limited timing and duration of certain activities, significant adverse effects are not considered likely. Such acoustic screening would also address potential disturbance effects on species of conservation interest.

- Peak construction traffic movements have the potential to impact on adjoining residential amenity during night-time hours. Having regard to the limited duration of such activity and subject to the routing of HGV traffic and restrictions on the volume of HGV movements during such periods, significant adverse impacts are not considered likely.
- The designated development would give rise to an increase in operational greenhouse gas emissions with resulting impacts on and on the achievement of EU and National climate change and carbon emission reduction targets, however the impact on the environment would not be significant in the long-term having regard to the scale and the temporary and emergency nature of the facility which would only operate intermittently, as and when needed, and for no more than 500 hours per year.
- The project could give rise to minor impacts on hydrology as a result of run-off of sediments, accidental spillages of chemicals, hydrocarbons or other contaminants entering waterbodies during construction and operational phases. These impacts will be adequately mitigated by the implementation of standard construction management measures, including measures for the control of polluting materials and the management of surface waters and adherence to IE licence requirements.

In conclusion, having regard to the identified likely main effects, the Board are satisfied that the designated development would not have any unacceptable direct or indirect impacts on the environment, subject to implementation of the identified mitigation measures.

Having regard to the above conclusions, the Board recommends that the conditions as set out below be taken into account in any decision by the Minister to approve of the designated development.

Appropriate Assessment

AA Stage 1

The Board noted that the designated development is not directly connected with the or necessary for the management of any European Site.

The Board completed an Appropriate Assessment Screening exercise in relation to potential effects on designated European Sites, taking into account the Screening

Report submitted with the application, the report and screening assessment completed by the Board's Inspector which concluded that the following sites are the European Sites in respect of which there is a likelihood of significant effects:

- Middle Shannon Callows SPA (Site Code: 004096).
- River Suck Callows SPA (Site Code: 004097).
- River Shannon Callows SAC (Site Code 000216).

The Board concluded that Appropriate Assessment was required in respect of these European Sites.

AA Stage 2:

The Board considered that the Natura Impact Statement and associated documentation submitted with the application, the mitigation measures contained therein, the submissions and observations on file and the report of the planning inspector and the memorandum of the ecologist, and carried out an Appropriate Assessment of the implications of the designated development on European Sites in view of the sites' conservation objectives. The Board considered that the information before it was adequate to allow the carrying out of an Appropriate Assessment and to allow it to reach complete, precise and definitive conclusions for Appropriate Assessment.

In completing the assessment, the Board considered in particular the likely direct and indirect impacts arising from the designated development both individually and in combination with other plans and projects, the mitigation measures which are included as part of the current proposal and additional mitigation measures recommended by the inspector in view of the sites' conservation objectives. In completing the Appropriate Assessment, the Board accepted and adopted the Appropriate Assessment carried out by the Board's Inspector of the potential effects of the development on the aforementioned European Sites, having regard to the sites' conservation objectives. In overall conclusion, the Board was satisfied that the proposed development would not adversely affect the integrity of the European Sites,

- Middle Shannon Callows SPA (Site Code: 004096)
- River Suck Callows SPA (Site Code: 004097)
- River Shannon Callows SAC (Site Code 000216),

in view of the conservation objectives of those sites and there is no reasonable scientific doubt as to the absence of such effects.

12.0 Recommended Conditions:

1)	<p>The designated development shall be carried out and completed in accordance with the plans and particulars, including the mitigation measures specified in the Environmental Report, Framework Construction Environmental Management Plan and the Natura Impact Statement lodged with the application to the Minister on the 17th February 2023, except as may otherwise be required in order to comply with the following conditions.</p> <p>Reason: In the interest of clarity and environmental protection</p>
2)	<p>The construction of the development shall be managed in accordance with a finalised Construction Management Plan, which shall be made available for inspection to the Minister prior to the commencement of development. This plan shall provide details of intended construction practice for the development, including, inter alia:</p> <ul style="list-style-type: none">a) Location of the site and materials compounds including areas identified for the storage of construction refuse;b) Location of areas for construction site offices and staff facilities;

	<p>c) Final alignment of acoustic barriers and site security fencing and hoardings; Acoustic barriers shall be erected prior to any demolition and dismantling activity on site.</p> <p>d) Details of the timing and routing of construction traffic to and from the construction site and associated directional signage, to include proposals to facilitate the delivery of abnormal loads to the site;</p> <p>e) Measures to prevent the spillage or deposit of clay, rubble or other debris on the public road network;</p> <p>f) Details of appropriate mitigation measures for noise, dust and vibration, and monitoring of such levels;</p> <p>g) Containment of all construction-related fuel and oil within specially constructed bunds to ensure that fuel spillages are fully contained. Such bunds shall comply with the EPA's - IPC Guidance Note on Storage and Transfer of Materials for Scheduled Activities</p> <p>h) Off-site disposal of construction/demolition waste and details of how it is proposed to manage excavated soil;</p> <p>i) A site-specific water management plan, to include detailed drawings of adequate scale, for each development phase of the project identifying measures to ensure that surface water run-off is controlled such that no silt or other pollutants enters local surface waters or drains. The existing surface water management system, such as drains settlement ponds, outfalls and interceptors / separators must be inspected and confirmed to be in suitable working order prior to any designated development works commencing on site. The self-contained wheel wash shall be the subject of regular inspection and maintenance.</p> <p>A record of daily checks that the works are being undertaken in accordance with the Construction Management Plan shall be kept for inspection by the planning authority.</p> <p>Reason: In the interest of amenities, public health and safety.</p>
3)	<p>During the operational phase of the development, the noise level arising from the development, shall not exceed:-</p>

	<p>a) An Leq,1h value of 55 dB(A) during the period 0800 to 2200 hours from Monday to Saturday inclusive at any point along the boundary of the site.</p> <p>b) An Leq,15 min value of 45 dB(A) at any other time at the nearest dwelling at any other time.</p> <p>The noise at such time shall not contain a tonal component. All sound measurement shall be carried out in accordance with ISO Recommendation 1996:2007: Acoustics - Description and Measurement of Environmental Noise.</p> <p>Reason: To protect the residential amenities of property and avoid adverse effects on species of conservation interest in the vicinity of the site.</p>
4)	<p>Water supply arrangements shall comply with the requirements of Irish Water for such works and services.</p> <p>Reason: In the interest of public health.</p>
5)	<p>During the construction phase, the developer shall adhere to the measures set out in “Guidelines for the Treatment of Otters Prior to the Construction of National Road Schemes”, published by the National Roads Authority in 2008.</p> <p>Reason: In the interest of wildlife protection.</p>
6)	<p>a) All discharges shall be through the stormwater drainage outfall shall pass through a silt trap and Class 1 Hydrocarbon Interceptor. Any bunded areas within the site will have valve-controlled discharge points as part of their connection to the outfall drainage network. Drainage runoff from these areas will be tested for contamination prior to release to the outfall drainage network.</p> <p>b) All material storage and containment at the Designated Development site, to include all tanks (including drums and containers), bunds and pipelines and transformers which store or transmit potentially polluting substances shall be designed and installed in accordance with the EPA Guidance Note ‘<i>Storage and Transfer of Materials for Scheduled Activities</i>’ (EPA 2013) and transformers.</p> <p>Reason: In the interests of environmental protection.</p>
7)	<p>The development shall provide firewater retention which shall be designed and sized in accordance with the provisions of the Environmental Protection Agency</p>

	<p><i>Guidance on Retention Requirements for Firewater Run-off</i> (EPA 2019). In the event of a fire or a spillage to storm water, the system shall provide for the automatic diversion of storm water for collection.</p> <p>Reason: In the interests of environmental protection.</p>
8)	<p>During the site clearance, preparation and construction phase of the development, dust levels shall not exceed 350 milligrams per square metre (TA LUFT Air Quality Standard) per day averaged over 30 days, when measured at the site boundary.</p> <p>Reason: In the interest of public health and residential amenity.</p>
9)	<p>A finalised Construction Traffic Management Plan shall be submitted and agreed in writing with the relevant Roads Authorities prior to the commencement of development.</p> <p>a) All national road structures on the proposed haul route, should be checked to confirm their capacity to accommodate any abnormal load proposed.</p> <p>b) Pre and post-construction phase surveys of structures on the public road network to be used as haul routes, shall be carried out by the applicant to confirm their capacity to accommodate any proposed abnormal weight loads.</p> <p>c) The applicant/developer should consult with all relevant parties involved in the management of the local and national road network traversed by the haul route to ascertain any operational requirements such as delivery timetabling, etc.</p> <p>d) Any damage to the local and national road network arising from the transportation of components, units and/or materials to the site shall be rectified in accordance with the requirements of the Road Authority, at the developer's expense. Details in this regard shall be agreed with the Road Authority prior to the commencement of any development on site.</p> <p>Reason: In the interest of road safety, orderly development and the proper planning and sustainable development of the area.</p>

10)	<p>Construction and demolition waste shall be managed in accordance with a construction waste and demolition management plan, which shall be submitted to, and agreed in writing with, the planning authority prior to commencement of development. This plan shall be prepared in accordance with the “Best Practice Guidelines on the Preparation of Waste Management Plans for Construction and Demolition Projects”, published by the Department of the Environment, Heritage and Local Government in July 2006. [The plan shall include details of waste to be generated during site clearance and construction phases, and details of the methods and locations to be employed for the prevention, minimisation, recovery and disposal of this material in accordance with the provision of the Waste Management Plan for the Region in which the site is situated.</p> <p>Reason: In the interest of sustainable waste management.</p>
11)	<p>During both the construction and operational phases all artificial lighting to be provided on site shall conform with the Bat Conservation Trust/Institute of Lighting Professionals guidance entitled ‘Bats and Artificial Lighting in the UK – Bats and the Built Environment Series’ (2018). A suitably qualified Environmental Manager shall be appointed and be responsible for monitoring compliance with lighting mitigation and shall require the contractor(s) to take corrective action if the light spill is illuminating habitats adjoining the site.</p> <p>Reason: To minimise disturbance on bats and otters in the vicinity of the site boundary.</p>

Section 6(2) - Strict Protection of Certain Animal and Plant Species under the Habitats Directive

12.1.1. Having regard to the available information, including the results of surveys undertaken in respect of the designated development and the results of surveys previously undertaken in the area, it is concluded that there is no basis to consider that a requirement for a derogation for the purposes of Article 16 arises. Accordingly, no recommendation as to the granting of such a derogation under article 6(2) of the regulations of 2022 is made.

Statement

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.

Paul Caprani
Senior Planning Inspector
March 26th 2023