



An
Bord
Pleanála

Inspector's Report

ABP-319566-24

Development

The proposed development will comprise of a 600MW Powerplant, 120MW Battery Energy Storage System, Above Ground Installation and associated ancillary works.

Location

Located within the townlands of Kilcolgan Lower and Ralappane between Tarbert and Ballylongford, Co. Kerry. (www.steppowerplant.com)

Planning Authority

Kerry County Council

Applicant(s)

Shannon LNG Limited

Type of Application

Permission

Third Parties

Ardfert Quarry Products
MAC Hardware & Farm Supplies -
Eoghan McEnery
Jerry O'Connell
John Fox
Michael and Deirdre Finucane
Mike Kennelly & others

O'Connor Hardware & Farm Supplies
– Larry O'Connor

Amber Service Station – Patrick
Horgan

Ballylongford Enterprise Association
Beale GAA Club

David Byrne

Eoghan O'Neill on behalf of 'The
farmers of Ballylongford, Tarbert,
Ardee and Ballybunion'

Glin GAA Club

Shannon Estuary Business Alliance
Kilnaughtin Resident's Association

Tim Kennelly

Ballybunion Community Forum – Tom
Neville

Friends of the Irish Environment

Listowel Livestock Market Limited

Noel Lynch

Fr. Philip O'Connell

Green and Gold Composting Ltd.

Centra Ballylongford UC

Futureproof Clare – Emanuela Ferrari

Future Generations Kerry – Eoghan
Harris

Cllr. Michael Foley

Friends of the Earth – Jerry MacEvilly

Gluaiseacht for Global Justice – Eoin
O Leidhin

Listowel Business and Community
Alliance - Rose Wall

Martin O'Dea

P. McNamara Contracting Limited
Melina & Christine Sharp & Michael
Eversen

National Insulation Association of
Ireland – Henry Sheahan

Niaron Ltd. – Colin Cleary

Safety Before LNG & Communities for
Environment First – John McElligott &
Eddie Mitchell

Shannon Rangers GAA Club

Tara Fitzgerald

Tarbert Development Association

Prescribed Bodies

Office of Public Works (OPW)

Transport Infrastructure Ireland (TII)

An Taisce

Development Applications Unit (DAU)
- Department of Housing, Local
Government and Heritage

Inland Fisheries Ireland (IFI)

Health and Safety Authority (HSA)

Environmental Protection Agency
(EPA)

Date of Site Inspection

12th & 13th September 2024

Inspector

Liam Bowe

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Appendix 1: AA Screening Determination

Appendix 2: Appropriate Assessment

1.0 Introduction

- 1.1. This report relates to a direct application to An Bord Pleanála by Shannon LNG for a development under section 37E of the Planning and Development Act 2000, as amended. It follows pre-application consultations between the applicant and the Board in relation to the proposed development (ABP-316518-23), and the subsequent determination by the Board that the proposed development would constitute a seventh schedule development within the scope of section 37A(2)(a), (b) and (c) of the Act and would constitute strategic infrastructure development.
- 1.2. The Application was accompanied by an EIAR and a NIS. Operation of the proposed development will be subject to an Industrial Emissions Licence from the EPA and the proposed development is also subject to the requirements of the COMAH Regulations.

2.0 Site Location and Description

- 2.1. The site comprises a stated area of 41 hectares on the southern shores of the Shannon Estuary, in the Townlands of Kilcolgan Lower and Ralappane, Ballylongford, approximately 5km west of Tarbert and 4km northeast of Ballylongford in Co. Kerry. The site is predominantly in agricultural use. Surrounding lands are generally in agricultural uses also, with an area of coniferous forestry to the east. The lands comprise part of a larger landbank in the ownership of Shannon Commercial Enterprises DAC (formerly SFADCo).
- 2.2. Access is from the L1010 local road to the south, which provides a secondary route between Tarbert and Ballylongford. From the road, ground levels fall somewhat before rising to a low intervening ridgeline, from which ground levels fall again toward the estuary. The north-eastern area of the site is more elevated and slopes relatively uniformly from approximately 35m OD to approximately 5m OD over the estuary shoreline. Maximum gradients in this part of the development site are c.1:20. To the west, the lands generally fall from southeast to northwest. There is an area of wetter and partly overgrown ground in the northwestern part of the site and there are a number of disused farm buildings at a low level in this quarter of the site. There is one residential property to the south of the site, Ralappane House, and a number of dwellings further south on the L1010. To the east of the site on Ardmore Point, are

the remains of a WWII Coastal Defence Artillery Installation, known as Fort Shannon. This comprises a number of concrete structures located close to the shoreline including one structure within the application site.

- 2.3. Within the wider area, energy infrastructure is a significant feature of the landscape. Moneypoint power station lies approximately 2.5km north of the site in Co. Clare, whilst Tarbert power station lies approximately 4km east of the site. Kilpaddoge 220 kV substation lies approximately 3km to the east of the site, to which a number of high voltage overhead lines are connected. Wind energy projects within both Co. Clare and Co. Kerry form part of the background to views in this area.
- 2.4. There are a number of designated conservation sites located in the vicinity including:
- Lower River Shannon Special Area of Conservation (Site code: 002165),
 - River Shannon and River Fergus Estuaries Special Protection Area (Site code: 004077), and
 - Ballylongford Bay proposed Natural Heritage Area (Site code: 001332).

3.0 Proposed Development

- 3.1. The proposed development primarily occupies the north-eastern portion of the overall landholding, covering an area of approximately 41 hectares, and comprises three principle elements:
1. A gas-powered power plant capable of 600MW of electricity generation,
 2. A 120MWh battery energy storage system (BESS), and
 3. An Above Ground Installation.
- 3.2. The development is described in more detail as follows:
1. The Power Plant will principally comprise 3 no. turbine halls (approx. 6,175m² each, and approx. 30.145m in height), each containing 1 no. Combined Cycle Gas Turbine (CCGT). Each turbine hall will have capacity of approximately 200MW, providing a total installed capacity of 600MW, and will include:
 - Two (2 No.) gas turbines with generators.

- Two (2 No.) heat recovery steam generators (HRSG) with exhaust stacks.
- One (1 No.) steam turbine.
- Electricity generator.
- One (1 No.) air-cooled condenser.
- Air-cooled heat exchanger.
- Generator step-up transformer (GSU).
- Natural gas fuel system.
- Turbine Hall.
- Condenser Polisher Equipment Enclosure.
- Air-cooled condenser (ACC) Air Extraction and Equipment Enclosure.
- High voltage electrical switchgear and 220 kV Substation.

The Power Plant will also include the following ancillary structures:

- Water treatment building.
 - Administration building.
 - Central control / operations building.
 - Auxiliary boiler building.
 - Workshop/ stores/ canteen building.
 - Firewater pumps enclosure.
2. A1 20MW 1-hour (MWh) Battery Energy Storage System (BESS) (approx. 5,552.7m² and 6.296m in height), comprising 27 no. lithium ion battery containers, approximately 4.5MWh each, and ancillary power conversion system (PCS) skids, as well as a step-up transformer and sound retention wall.
 3. An Above Ground Installation (AGI) which will facilitate the provision of natural gas from the national gas transmission network via a previously consented 26

km pipeline (ABP Reg. Ref. PL08.GA0003 and PL08.DA0003). The AGI will be operated by Gas Networks Ireland and will include:

- AGI Compound Fencing and Access.
- Pig-trap (Bi-directional).
- Filtration.
- Fuel gas heaters/ heat exchangers and associated fuel gas skid.
- Metering equipment located in a Metering Building.
- Gas pressure regulation system located in a Regulator Building.
- Gas chromatographs/ Chromatograph Building.
- Generator Kiosk.
- Control and Instrumentation building.

4. Ancillary structures/ works, including:

- Demolition of a small farm complex and a former dwelling, a gun emplacement structure, a well, and a field boundary wall structure, all in ruins,
- 2 no. oil/ water separators,
- 1 no. retaining wall,
- 1 no. firewater retention pond,
- Utility racks,
- utility sleepers,
- crossover platforms,
- Water supply connection,
- Pre-engineered/ package biological wastewater treatment system and surface water drainage network, which will discharge to the Shannon Estuary,
- Car parking, including mobility and EV spaces, and cycle parking,
- Access off the L1010 local road,

- 2 no. culverts; internal roadways; pre-cast concrete bridge over the Ralappane Stream,
- Temporary construction and site development works, include laydown area, earthworks to create a level platform at +18m OD for the main development footprint (excluding the proposed AGI), and landscaping,
- Security fencing and gates, including 2.9m high chain link outer site perimeter fence, a 4m high inner site security fence, internal 2.4m high palisade fencing and external 2.995m high weld mesh fencing for the AGI,
- CCTV cameras,
- Telecommunications connections, and
- All lighting.

3.3. The fuel supply to the Power Plant will be from the gas grid via the Above Ground Installation. The proposed power plant will generate electricity for its own needs and as well as for export to the national grid via a 220 kV connection, which is subject to a separate planning application (ABP-320300-24 refers).

3.4. It is indicated that the development has a flexible design that can easily transition to alternative low carbon fuels/ hydrogen, subject to future planning applications and once the technology and public policies are established.

3.5. A ten-year permission is sought in this case and the application is accompanied by an EIAR and NIS. A high-level masterplan (Campus Site Plan - Drawing No. SP160 refers) for the Shannon Technology and Energy Park (STEP) has been prepared and is submitted for information with the application. This includes a future Data Centre Campus and a future Strategic Gas Reserve Facility, which will be subject to separate planning applications, appropriate assessments and environmental impact assessments.

3.6. **Other Consent Processes**

3.6.1. The proposed development relates to an activity requiring an Industrial Emission Licence and a submission from the EPA has been received in relation to this application. A Greenhouse Gas Permit will also be required. The development would

also constitute an establishment for the purposes of the Chemicals Act (Control of Major Accident Hazards Involving Dangerous Substances) Regulations 2015 (S.I.209 of 2015). A submission from the HSA has been received in this regard.

- 3.6.2. It is indicated that the Applicant has obtained a foreshore licence for a storm water outfall pipe at the proposed location.
- 3.6.3. Authorisation is required from the Commission for the Regulation of Utilities to construct a power plant, as well as a licence to generate electricity. As part of the licence approval, a Safety Case is also to be submitted for acceptance by the CRU.

4.0 Planning History

4.1. Subject lands

Pre-Application Consultation:

- **ABP-304007-19:** Pre-application consultation request in respect of a liquefied natural gas (LNG) regasification terminal and 600MW power plant including an LNG jetty to facilitate the berthing of a Floating Storage Unit, onshore vaporisation process equipment and administrative and associated buildings, at Ballylongford, Co. Kerry. The Board determined that the proposed development would constitute Strategic Infrastructure Development.
- **ABP-316518-23:** Pre-application consultation request in respect of a 600MW power plant, 120MW Battery Energy Storage System, Above Ground Installation and associated development. The Board determined that the proposed development would constitute Strategic Infrastructure Development.
- **ABP-318119-23:** Pre-application consultation request in respect of 220kV GIS substations and underground transmission cables connecting to the existing overhead 220kV Kilpaddock circuits. The Board determined that the proposed development would constitute Strategic Infrastructure Development.
- **ABP- 319245-24:** Pre-application consultation request submitted to ABP on 8th March 2024 in respect of a proposed STEP Strategic Gas Reserve Facility that includes onshore facilities, jetty and a FSRU extending into the Shannon Estuary at the north-east corner of the site (pre-application request withdrawn 23/4/'24).

Planning Applications:

- **PL08B.PA0002:** Permission granted in 2007 for an LNG regasification terminal.
- **PL08.PM0002:** Permission granted in March 2013 for amendments to the phasing of the construction of the permitted LNG Terminal (condition no. 3) and other minor modifications. This was not considered to be material alteration.
- **PL08.PM0014:** A decision to grant permission to extend the duration of the permission for the LNG Terminal (condition no. 2) from 10 years to 15 years, was subsequently quashed by the High Court in 2020.
- **PL08.PA0028:** A 10-year permission for a combined Heat and Power (CHP) Plant was granted in 2013. This CHP plant was located at Knockinglas Point, to the west of the CCGT plant proposed in the current application.
- **PL08.GA0003:** Permission granted in 2009 under Section 182C of Planning & Development Act 2000 (as amended) for a 26km gas pipeline to connect Shannon LNG Terminal to the existing natural gas network at Leahy's, to the west of Foynes, Co. Limerick. An associated acquisition order was made for the connection of the Shannon LNG Terminal to the Bord Gáis Eireann Network at Leahy's, Foynes, County Limerick under ref. PL08. DA0003.
- **ABP-311233-21:** Permission refused for proposed Shannon Technology and Energy Park consisting of power plant, battery energy storage system, floating storage and regasification unit, jetty, onshore receiving facilities, above ground installation and all ancillary structures/works because it was not considered appropriate and contrary to current government policy to permit or proceed with the development of any Liquefied Natural Gas terminals in Ireland pending completion of the review of security of energy supply of Ireland's electricity and natural gas systems (decision is currently under judicial review).
- **ABP-320300-24:** Concurrent application to An Bord Pleanála for proposed development of a Gas Insulated Switchgear (GIS) substation compound with 5km connection to the national grid.

4.2. Other relevant cases in the wider area

- **ABP-307798-20:** Permission granted for the construction of 400kV electricity transmission cables across the estuary between Moneypoint 400kV Electrical County Clare and the existing Kilpaddoge 220/110kV Electrical Substation, Co. Kerry, including work in the foreshore, and extension to the existing Kilpaddoge Substation and associated works.
- **ABP-315838-23:** Application to the Minister from SSE Generation Ireland Ltd for the construction of temporary a 150MW emergency electricity generation plant at the existing Tarbert power plant, under the Development (Emergency Electricity Generation) Act 2022. This development was to be operational by winter 2023/2024 and would have an operational a life of 5-years. The plant would be limited to a maximum of 500 operational hours per annum.
- **ABP-318540-24:** Permission granted for a 10 year permission for the proposed Open Cycle Gas Turbine (OCGT) power plant fuelled by Hydrotreated Vegetable Oil (HVO) and associated site works at the existing Tarbert power plant, Tarbert Island, Tarbert, Co. Kerry.
- **ABP-319080-24:** Permission granted for transition and conversion of the existing 900MW electricity generating station from coal to heavy fuel oil from 31st December 2025 until 31st December 2029 at Moneypoint Generating Station, Moneypoint, Co. Clare.

4.3. Foreshore Licence/ Lease Applications relating to the development site

Reference	Decided	Decision	Description
FS006224	20.04.2010	Granted	Drainage outfall
FS006225	20.04.2010	Granted	Construction of a LNG jetty
FS006227	20.04.2010	Granted	Construction of a materials jetty
FS006228	20.04.2010	Granted	Construction of a seawater intake/ outfall

5.0 Policy and Context

5.1. Regard is had to the following national, regional and local policy documents:

National

- National Planning Framework 2018
- National Development Plan 2021-2030
- National Marine Planning Framework 2020
- Ireland's 4th National Biodiversity Action Plan 2023-2030
- The Climate Action and Low Carbon Development Act 2015 (as amended)
- Climate Action Plan 2024
- National Adaptation Framework (NAF) (January 2018)
- Sectoral Emission Ceiling Limits (Sept 2022)
- The National Energy and Plan (NECP) 2021-2030
- Policy Statement on Security of Electricity Supply (November 2021)
- National Energy Security Framework (April 2022)
- National Risk Assessment 2023 – Overview of Strategic Risks
- National Ports Policy (2013)

Other Energy Sector Reports

- All-Island Generation Capacity Statement 2022-2031
- CRU Information Paper Security of Electricity Supply – Programme of Actions
- SEAI Energy Security in Ireland (2020)
- Long Term Resilience Study 2018

Regional and Local Policy

- Regional Spatial Economic Strategy for the Southern Region
- Strategic Integrated Framework Plan for the Shannon Estuary (SIFP)
- Kerry County Development Plan 2022-2028

- Listowel Municipal District Local Area Plan 2020 – 2026

5.2. National Policy

5.2.1. National Planning Framework 2018

National Strategic Outcome (NSO) 8 refers to the Transition to a Low Carbon and Climate Resilient Society. Ireland's national energy policy is focused on three pillars:

- 1) sustainability,
- 2) security of supply and
- 3) competitiveness.

Ireland must reduce greenhouse gas emissions from the energy sector by at least 80% by 2050, compared to 1990 levels, while ensuring security of supply of competitive energy sources. The transition to a low carbon energy future requires (inter alia) a shift from predominantly fossil fuels to predominantly renewable energy.

National Policy Objective 55 promotes renewable energy use and generation.

5.2.2. National Development Plan 2021-2030

The NDP sets out investment priorities underpinning the implementation of the NPF. Chapter 13 deals with NSO 8. Strategic Investment Priorities include the delivery of c.2 GW of new conventional (mainly gas-fired) electricity generation to support a predominantly wind/ solar electricity system and provide security of supply for when variable electricity generation is not sufficient to meet demand. The CRU and EirGrid will ensure the delivery of this conventional electricity generation capacity.

Ensuring continued security of energy supply is a priority at national level and within the overarching EU policy framework. In the short-to-medium-term, conventional (mainly gas-fired) electricity generation capacity will be critical to support the operation of the electricity system and provide security of supply and will need to be delivered by mid-decade. This conventional generation will spend much of its time in reserve for when needed. Therefore, while there will be significant investment in new generation capacity, the proportion of electricity generated by natural gas is expected to decrease from circa 50% to circa 30% by 2030.

5.2.3. **National Marine Planning Framework 2020**

Protected Marine Sites Policy 1: Proposals must demonstrate that they can be implemented without adverse effects on the integrity of Special Areas of Conservation (SACs) or Special Protection Areas (SPAs).

Proposals must take account of the space required for coastal habitats, for ecosystem functioning and provision of ecosystem services, and demonstrate that they will, in order of preference and in accordance with legal requirements: a) avoid, b) minimise, or c) mitigate for net loss of coastal habitat.

Seascape and Landscape Policy 1: Proposals should demonstrate how significant impacts on the seascape and landscape have been considered. Proposals will only be supported if they demonstrate that they a) avoid, b) minimise, or c) mitigate significant adverse impacts, or else d) set out the reasons for proceeding.

In relation to Energy, Chapter 12 notes the objective to support the development of natural gas storage as appropriate in the context of the outcome of the review of the security of energy supply of Ireland's electricity and natural gas systems. Security of energy supply is a key energy policy objective.

Chapter 18 refers to Ports, Harbours and Shipping

5.2.4. **Ireland's 4th National Biodiversity Action Plan 2023-2030**

The Plan sets out a vision for biodiversity up to 2050 to ensure that biodiversity in Ireland is valued, conserved, restored and sustainably used, maintaining ecosystem services, sustaining a healthy planet and delivering benefits essential for all people. This is to be achieved through five objectives:

- 1) Adopt a whole-of-government, whole-of-society approach to biodiversity.
- 2) Meet urgent conservation and restoration needs.
- 3) Secure nature's contribution to people.
- 4) Enhance the evidence base for action on biodiversity.
- 5) Strengthen Ireland's contribution to international biodiversity initiatives.

5.2.5. **Climate Action and Low Carbon Development Act 2015 (As amended)**

The Act commits Ireland to the objective of becoming a carbon-neutral economy by 2050, reducing emissions by 51% by the end of the decade.

Section 4.8 of the amended act requires the Minister and the Government to have regard to matters including the risk of substantial and unreasonable carbon leakage as a consequence of measures to pursue national climate objectives. S.6(12) defines 'carbon leakage' as the transfer, due to climate policies, of production to other countries with less restrictive policies with regard to greenhouse gas emissions.

Section 17 amends the principle act such that Section 15(1) requires:

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

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

"Relevant body" means a prescribed body or a public body.

5.2.6. **Climate Action Plan 2024 (December 2023)**

The Climate Action Plan 2024 (CAP24) commits Ireland to becoming a carbon-neutral economy by no later than 2050. A key component of meeting this reduction target is the decarbonisation of electricity generation in Ireland. To drive this change, Ireland has set a target to generate 80% of grid electricity from renewable sources by 2030, largely from wind.

To allow this uptake of renewable energy to happen it is necessary to have in place back up sources of energy generation that can be efficiently dispatched when the wind is not blowing. Flexible gas-powered generation is a critical part of that strategy,

given the highly variable nature of wind energy generation. CAP24 notes that Ireland will require at least 2 GW of new flexible gas-fired generation by 2030.

Key Targets

National Target	2025	2030
Renewable Electricity Share	50%	80%
Onshore Wind	6 GW	9 GW
Solar	Up to 5 GW	8 GW
Offshore Wind - At least	-	At Least 5 GW
New Flexible Gas Plant	-	At Least 2 GW
Demand Side Flexibility	15-20%	20-30%

To reach the 2050 milestone, a series of five-year carbon budgets, setting out a carbon reduction trajectory for Ireland, are to be embedded into law. While total annual gas demand will fall under the Climate Action Plan, peak day gas demand will increase as gas will be the only backup to intermittent renewables from 2030.

The EPA projects an electricity sector emissions overshoot of approx. 5.2 MtCO₂eq in the period 2021 to 2025 and approx. 8.2 MtCO₂eq in the period 2026 to 2030. Rapid delivery of flexible gas generation is needed at scale and in a timeframe to replace emissions from coal and oil generation as soon as possible to reduce impacts on the carbon budgets. The introduction of renewable gas generation into the grid is an important factor of ensuring a security of supply for Ireland's electricity system.

5.2.7. Ireland's Long-Term Strategy on Greenhouse Gas Emissions Reductions (2024)

In the transition to a climate neutral future, the pathway to decarbonisation must be underpinned by affordability and security in how we access and use energy. The Department of Environment, Climate and Communications strategy for Ireland's energy security within 'Energy Security in Ireland to 2030' outlines our national plan to ensure energy security for this decade as we transition to a carbon-neutral energy system by 2050.

Ireland will continue its efforts to decarbonise the electricity sector by taking advantage of its significant renewable energy resources in a way that is competitive, cost-effective and ensures the security of our electricity supply. As Ireland decarbonises its energy system, demand for electricity will increase and total demand for natural gas will decrease.

Accelerating the deployment of wind and solar power is a central pillar of long-term decarbonisation of the electricity system which aligns with Ireland's EU commitments and support for the RePowerEU Plan. Deployment of renewable electricity presents challenges, as production is variable, and electricity is not easily stored as energy in a liquid or gaseous form. Therefore, Ireland will focus on a variety of actions set out in the Climate Action Plan to increase the flexibility of Ireland's electricity system.

5.2.8. Energy Security in Ireland to 2030 (November 2023)

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

The electricity system will be focused on the addition of renewable generation, demand-side flexibility, new gas-fired generation as flexible back-up, interconnection and storage.

The Energy Security Package sets out actions for the short and medium-term by prioritising:

1. Reduced and Responsive Demand.
2. Renewables-Led System.
3. More Resilient Systems.
4. Robust Risk Governance.

5.2.9. National Adaptation Framework (NAF) (2018)

In accordance with the 2015 Act, the framework specifies the strategy for adaptation measures in different sectors and areas in order to reduce vulnerability to the negative effects of climate change and to avail of any positive effects. Sectors are identified for the development of adaptation plans.

5.2.10. Electricity and Gas Networks Sector Climate Change Adaptation Plan (2019)

The Government's overarching policy objective is to ensure secure and sustainable supplies of competitively priced energy to all consumers.

It is acknowledged that a diverse range of power generation assets contribute to the energy mix, which is important in delivering energy security, reducing dependence on any one source.

It is noted in Section 2.6 that reliability of the gas network depends on electricity supply to pumps and other electrical devices. In turn, the electricity network is reliant on gas for generation when renewables are not available.

It is noted in Section 3.1 that the period to 2050 will see fundamental changes in technologies, with most existing power plants having been retired. Increased variability of wind generation will increase requirements for backup generation/storage.

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

Section 2 identifies key challenges, including maintaining security of electricity supply throughout the transition to up to 80% renewable energy by 2030.

Much of the older, higher emission conventional generation is expected to close in coming years and will need to be replaced by generation that provides the same support and backup capability but that is also flexible, supporting high levels of wind and solar generation. As more wind, solar, storage and interconnection is added to the system, conventional generation is expected to operate less. Sufficient conventional generation capacity will still be required but will spend much of its time in reserve for when needed. Natural gas will form the vast majority of this conventional generation, for which there will be a continuing need beyond 2030.

Section 3 recognises the need for significant investment in additional flexible conventional electricity generation, grid infrastructure, interconnection and storage. The Government has approved that:

- the development of new conventional generation (including gas and gasoil/distillate-fired generation) is a national priority and should be permitted and supported to ensure security of supply and support the growth of renewable electricity generation.

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

5.2.12. National Energy Security Framework (April 2022)

The Framework addresses Ireland's energy security needs in the context of the war in Ukraine. It coordinates energy security work across the electricity, gas and oil sectors and sets out a 'whole-of-Government' response. The Framework takes account of the need to decarbonise society and the economy, and of targets set out in the Climate Action Plan to reduce emissions.

5.2.13. National Energy & Climate Plan 2021-2030

The NECP was prepared in accordance with Regulation (EU) 2018/1999 on the Governance of the Energy Union and Climate Action, to incorporate all planned policies and measures identified up to the end of 2019 and which collectively deliver a 30% reduction by 2030 in non-ETS greenhouse gas emissions (from 2005 levels).

The Plan sets out the strategy in respect of five dimensions together with policies and measures to ensure that these objectives are achieved.

Section 2.3 refers to 'Dimension Energy Security' and notes that following the exit of the UK from the EU, we will no longer be physically connected to the EU Internal Energy Market. Peat and coal will no longer be part of Ireland's electricity generation mix by 2025. This will increase reliance on natural gas, reduce fuel mix diversity and impact on security of supply. A review of the security of energy supply of Ireland's

natural gas and electricity systems is being carried out in order to ensure a sustainable pathway to 2050.

Section 2.4.2 notes that the gas and electricity networks must be planned and developed to smooth the transition to a low carbon economy. The increased penetration of wind energy places an increased reliance on Ireland's gas network.

5.2.14. National Risk Assessment 2023 – Overview of Strategic Risks

This policy document highlights that there are increasing energy demands from a growing population and economy with overall demand for electricity expected to increase 37% by 2031.¹ Therefore, demand exceeding the carrying capacity of the State and our economy is a risk.

It also states that risks created by a lack of certainty regarding processes and timelines in relation to the planning and the judicial system, and the extent of legal involvement in planning processes, can lead to longer timelines for large infrastructure projects that are required to meet this demand and maintain national competitiveness.

5.2.15. Long-term Strategy on Greenhouse Gas Emissions Reduction (2024)

This policy document states that as we transition to a climate neutral future, we must ensure the pathway to decarbonisation is underpinned by security and affordability in how we access and use energy in our everyday lives. Having a reliable source of energy is vital for people to have confidence in the transition.

5.2.16. Other Energy Sector Reports

1. All-Island Generation Capacity Statement 2022-2031

Capacity statements set out expected electricity demand and the level of generation capacity required, over the next ten years. The 2022 statement predicts a challenging outlook with capacity deficits identified to 2031. In the short term, deficits will increase due to the deteriorating availability of power plants. In later years the deficits are expected to reduce as new capacity comes forward through the SEM capacity auctions. Further new electricity generation will be required to secure the transition to high levels of renewable electricity. A balanced portfolio of new capacity

¹ All-Island Generation Capacity Statement, 2022-2031, 2022, EirGrid Group

is required, including new cleaner gas fired generation plant which are renewable ready gas turbines, especially at times when the wind and solar generation is low. This is crucial to ensuring Ireland meets its carbon budgets to 2030 for the electricity sector.

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

Key elements in the programme of actions, include:

- Delivery of new, enduring, capacity, complementary to renewable electricity and central to our low carbon transition.
- The procurement of additional temporary emergency generation capacity.
- The extended availability and operation of older generation capacity otherwise expected to retire in this timeframe.

Temporary measures will be unwound on delivery of other measures. The core element is the procurement of 2GW of flexible gas-fired plant, as an enabler of the decarbonisation of the electricity system, particularly as we accelerate the decarbonisation of the natural gas network.

3. SEAI Energy Security in Ireland (2020)

Energy import dependency is described as one of the simplest and most widely used indicators of a country's energy security, with indigenous energy sources generally more secure than imported energy.

5.3. Regional and Local Policy

5.3.1. Strategic Integrated Framework Plan for the Shannon Estuary (SIFP)

The 2011 Framework Plan was commissioned by Clare, Kerry and Limerick City and County Councils, and Shannon Development and Shannon Foynes Port Company, as a marine and land use plan to facilitate and promote future marine related developments. The SIFP has been incorporated into the County Development Plan of these counties.

Nine Strategic Development Locations (SDL's) are identified (A-I), as likely to generate the greatest potential opportunities in terms of economic and social

aspirations, while safeguarding the essential integrity of the natural environment. Their identification was influenced and informed by SEA and Habitats Assessments.

Strategic Development Location H: Tarbert-Ballylongford Landbank:

This SDL is identified and prioritised for marine related industry. It offers significant potential for future development, with the (permitted) LNG acting as a catalyst for additional industrial development. With the extension of the natural gas network and existing electricity distribution infrastructure, the SDL lends itself to sustainable development as a power generation centre for the region.

Objective MRI 1.2.13 Tarbert-Ballylongford Land Bank Marine Related Industry:

To promote and facilitate the sustainable development of these lands for marine related industry, utilising the presence of deep water, existing infrastructure, natural resources, and waterside location to harness the potential of this Strategic Location. Alternative proposals for general industrial development, compatible/ complementary with marine related industry and the level of flood risk, and those creating a synergism with existing uses, and contributing to the development of a strategic energy hub at this location will also be encouraged.

Four Strategic Energy Sites are identified in section 5.6.4, including the Tarbert-Ballylongford Land Bank.

Objective ERG 1.2 Safeguarding the role & function of energy sites:

To safeguard the role and function of the strategic energy infrastructure existing within and adjacent to the Shannon Estuary, and encourage the further sustainable development of energy, enterprise and industry within these identified strategic energy locations, subject to the requirements of the Habitats & Birds Directive, Water Framework Directive, and all other relevant EU Directives.

Objective ERG 1.3 Facilitating energy development:

To facilitate the further development of energy infrastructure at identified strategic energy sites and encourage appropriate diversification projects subject to compliance with sustainable planning, and the requirements of the Habitats & Birds Directive, Water Framework and all other relevant Directives.

5.3.2. Regional Spatial Economic Strategy for the Southern Region

Section 3.8 recognises and supports the economic role and potential of settlements as economic drivers in a potential North Kerry/ West Limerick/ Clare network, connected with the Shannon Estuary and Shannon Foynes Port. Their attributes extend to include the Shannon Integrated Framework Plan (SIFP) area and strategic locations identified under the SIFP as a Shannon Estuary Coastal Network.

RPO 79 relates to the Shannon Estuary and Other Harbour Plans as follows:

- a) The RSES recognises the national and international importance of the Shannon Estuary, its potential to attract multinational development and the work undertaken to progress its promotion and development. It is an objective to support and promote the delivery of the Strategic Development Locations.
- b) To promote the SIFP initiative as a good practice model for the Southern Region.
- c) To support the promotion, marketing and seeking of financial and expertise support for the SIFP and specific projects emerging therefrom.
- d) Such initiatives shall be subject to the relevant environmental assessment requirements including SEA, EIA SFRA and AA as appropriate.

The SIFP is identified as a good practice example, identifying 1,200ha for marine related development (9 no. Strategic Development Locations) building on existing industry connectivity, synergy and existing infrastructure to create a more sustainable and attractive network for investment. Significant tracts of land have been zoned because of the preparation of the SIFP, presenting prime opportunities for employment generating development.

The “zoned lands at Tarbert/ Ballylongford in North Kerry with extant planning for strategic energy and marine related industry including the Shannon Gas LNG project are a further example of the regional and national potential of the location”.

Section 8.3 addresses the Tarbert-Ballylongford lands as an ‘Energy Hub Case Study’, anticipating that the (previously permitted) project would position the area as a major National Centre for CHP and facilities requiring access to deep water with substantial requirements for electricity and natural gas.

RPO 219 New Energy Infrastructure supports the sustainable reinforcement and provision of new energy infrastructure to ensure the energy needs of future

population and economic expansion within designated growth areas and across the Region can be delivered in a sustainable and timely manner and that capacity is available at local and regional scale to meet future needs.

RPO 225 includes the objective to strengthen the gas network sustainably to service settlements and employment areas in the Region, support progress in developing the infrastructure to enable strategic energy projects in the Region.

5.3.3. Kerry County Development Plan 2022-2028

Chapter 2.0 Climate Change & Achieving a Sustainable Future includes objective KCDP 2-2, to facilitate and support national climate change objectives contained in the Climate Action Plan 2021 and in the KCC Climate Change Adaptation Strategy 2019-2024 and successor strategies.

Chapter 9 Economic Development - Sustainable Economic Development and Climate Action.

Section 9.4.2 notes that the Council supports the economic role and potential of the established towns as economic drivers in a potential North Kerry/ West Limerick/ Clare network connected with the Shannon Estuary. This includes the Shannon Integrated Framework Plan (SIFP) area, and strategic locations identified under the SIFP as a Shannon Estuary Coastal Network, the Tarbert/Ballylongford Landbank.

Objective KCDP 9-8: Support the further development of the Kerry Hub & Knowledge Triangle and the North Kerry/ Shannon Estuary Networks and their potential to create substantial economic benefit as well as collaborations within these networks to create economic benefits.

Section 9.6.1.1 Shannon Estuary notes the strategic development locations (SDL's) identified in the SIFP. The Tarbert/ Ballylongford SDL is recognised for its potential as an Energy Hub and for industrial development at a regional and national level. There are 430.6 Hectares of zoned lands available with access to deep water.

Policy KCDP 9-23 supports and promotes the delivery of these SDL's.

Policy KCDP 9-25 promotes and facilitates the sustainable development of the Tarbert-Ballylongford landbank for industry. Proposals for marine related industry, general industrial development, and particularly those industries creating a

synergism with existing uses and contributing to the development of a strategic energy hub at this location will also be encouraged.

KCDP 9-29 states that it is an objective to protect sites of significant historical military importance along the Shannon Estuary, including the core area of Fort Shannon at Ardmore point.

Chapter 11 refers to the Environment. Policies KCDP 11-1, 11-2 and 11-3 refer to the protection, maintenance and conservation of designated nature conservation sites.

Chapter 12 Energy

KCDP 12-1 supports and facilitates the sustainable provision of a reliable energy supply, with emphasis on increasing energy supplies from renewable resources.

KCDP 12-3 facilitates the sustainable expansion of the gas network, including the facilitation of a gas importation facility in the Tarbert/Ballylongford Landbank.

KCDP 12-7 supports and facilitates the sustainable development of enhanced electricity and gas supplies, additional electricity generation capacity, and associated networks, to serve the existing and future needs of the County.

KCDP 12-36 facilitates the sustainable development of Battery Storage systems in appropriate locations at or adjacent to existing energy infrastructure.

The area is not subject to any landscape sensitivity designations. There are Protected Views and Prospects eastwards from the L1004 local road between Carrig Bridge and Carrig Island to the west of the application site.

5.3.4. **Listowel Municipal District Local Area Plan 2020 – 2026**

Strategic Development Objective OS-08: Support the sustainable development of the land zoned within the Tarbert/ Ballylongford area in accordance with the policies and objectives of the SIFP and County Development Plan.

The LAP notes that previously permitted developments have potential for substantial employment and to act as a catalyst for future industrial development and employment.

The LAP notes that the key objective of the SIFP is an integrated and balanced approach to facilitating economic growth in all areas of opportunity.

Kerry County Council recognises the Shannon Estuary as a major shipping artery and the potential of the Tarbert/ Ballylongford landbank to be sustainably developed for industry in compliance with the EIA and Habitats Directives.

Objective LS-T-01: Sustainably harness the economic potential from the provision of a secure natural gas energy supply to the region.

In respect of Tarbert, the plan includes the following objectives, as illustrated on the objectives map for the settlement:

TT-OS-02: Provide for the sustainable development of a (backland) public realm space with parking facilities.

TT-I-01: Facilitate the development of the Tarbert Inner Relief Road.

TT-I-02: Seek the provision and improvement of footpaths in the town as required.

TT-I-03: Facilitate the preparation of a Traffic Management Plan for Tarbert. This plan should look at both vehicular movements in the town along with improvements to pedestrian infrastructure and safety.

6.0 Planning Authority Submission

- 6.1. A submission from Kerry County Council (KCC) pursuant to s.37E(4) and (5) of the Planning and Development Act 2000, as amended, was received on 18th July 2024. The submission contains a cover letter, a planning report, copies of internal technical reports, and draft minutes of a meeting of KCC in relation to the proposed development.
- 6.2. The planning report notes that the L1010 is currently being upgraded. Section 2.3 describes Kerry/ North Kerry, as an energy hub of national importance due to the presence of conventional and renewable energy developments and transmission infrastructure. The assessment section makes the following points:

Principle of the proposed development

- The development conforms with the land use zoning requirements and development plan objectives.

Project need in the context of Electricity Generation, Gas Supply and Climate

- Transitioning to zero-carbon emissions by 2050 requires alternative sources of power generation and continued security of supply.
- Security of supply and system resilience requires conventional gas infrastructure to respond to rapid changes in demand and facilitate renewable generation.
- RPO 96 supports the development in this regard.

Electricity Generation and Energy System Resilience/ Security

- The 2030 target of 70% renewables requires a significant dispatchable generation capacity to ensure security of supply.
- The applicant's contention that the proposed CCGT would comprise a new additional gas fired conventional power plant, and that the need for same is reiterated and emphasised in EirGrid's All Ireland Generation Statement 2021-2030 appears reasonable.
- Notes that Shannon LNG Limited was awarded a capacity contract on the 28th of March 2023² from Eirgrid to deliver 400MW of electricity generation capacity at the Shannon Technology & Energy Park site by no later than 1st of October 2026.

Economic and Population

- The proposed development is of strategic economic importance to the state, region and the area.
- The proposal would help secure the nation's energy supply and generate employment.
- The proposal both by itself and through the opportunities it would create would generate employment, enabling, sustaining, and strengthening the local population and economy.

² The Board should note that the applicant states on P.6 of the Planning Report submitted with this planning application that Shannon LNG executed a Connection Agreement with EirGrid for a 600 MW Maximum Export Connection on 14th April 2023.

- It is likely that the proposed development would directly and indirectly have a positive long-term effect on population and settlement in the area.

Built Heritage

- There are no Protected Structures indicated in the Kerry CDP 2022-2028 Record of Protected Structures within the site.
- The eastern boundary proposed as part of this development will straddle a searchlight (searchlight 2), an underground bunker and a pillbox (Pillbox 5). It is considered appropriate that these elements of Fort Shannon should be safeguarded by way of appropriate boundary treatment/ setbacks. It is considered that this can be satisfactorily addressed by way of condition.
- Any security fencing should be planted with native species associated with the site and maintained to form a feature of the development.
- An analysis of the historic designed Fort Shannon military landscape should be carried out prior to commencement of development to inform mitigation in respect of undiscovered structures, tunnels, features, that may be impacted by the development.
- Mitigation proposals to minimise the impact of construction should be considered for Ralappane House and for the military complex.

Biodiversity

- The substantial number of specialist studies undertaken, and scientific data collated increases the scientific certainty of conclusions reached.
- Notes that the boundaries of the River Shannon and Fergus Estuary SPA has been extended since the earlier applications on the subject site and that this has been taken into account as part of the application.
- There are no significant populations of SCI bird species in the vicinity of the site.
- Notes that Red-throated Diver, Great Northern Diver and Sandwich Tern were recorded in the inshore waters bordering the proposed site and this was taken into account as part of the assessments.
- Habitats are of low value for foraging Hen Harrier and for breeding Curlew.

- Sedimentary cliffs along the shore are not an example of the Annex I habitat.
- Badger activity was recorded and use by otter is expected.

Water supply, surface water disposal, and wastewater treatment

- This is a matter to be clarified by Uisce Éireann.

Roads and Transport

- The capacity of the road network is adequate, particularly in light of upgrade works currently underway on the L1010.
- Recommended conditions include a special development contribution to cover the cost of upgrade works to benefit the development.
- The development would not have a significant impact on traffic safety or infrastructure in the area.

Residential Impact

- Significant residual residential amenity impacts are not likely.

Flood Risk

- The impact in terms of flood risk would be negligible.
- Culverts at watercourse crossings will require OPW Section 50 licences.

Landscape (and seascape) and visual impact assessment

- The site is not readily visible from the south or east and would only be visible from the estuary or from a distance.
- Scenic routes or views and prospects would not be significantly impacted.
- Large industrial developments are not out of character along the Estuary.
- Notwithstanding that the development platform is higher than the permitted CHP, the highest stack would be 17m lower than previously permitted.
- Notwithstanding the rural character of the site, this would not constitute an incongruous landscape feature and would conform with the zoning objective.

EIAR/ NIS Observations

General Observations:

- Emissions from natural gas-fired plant include Nitrogen Oxides and, within this context, it is noted and considered appropriate that Moanveanlagh Bog SAC and Tullagher Lough and Bog SAC have been included in the EIAR air quality assessments as sensitive receptors and that these considerations also form part of the AA Screening/ NIS submitted.
- The impact of the proposal for the cliff to be armoured with rock to prevent erosion and maintain the integrity of the foreshore should be assessed, including in relation to any deflected energy/ coastal erosion/ habitat loss.

Site selection and Consideration of Alternatives:

- The EIAR outlines that natural gas is the only realistic major energy source currently available to back-up and support the growth of renewable generation while maintaining security of supply.
- Alternatives with regard to site selection, designs and layouts are clearly set out the EIAR.
- The preference for the proposed multi-shaft combined cycle configuration over a Combined Heat and Power plant (CHP), as is currently permitted on site is outlined.

Energy and Planning Policy:

- Natural gas is identified as a lower-carbon option to provide security of supply.
- After an operational life of 25.5 years (to 2050), the development may transition to hydrogen-power subject to technology, and feasibility and consents.
- The National Energy and Climate Plan 2021-2030 recognises the key role of natural gas in the energy mix.
- 2030 renewable generation targets require that remaining demand be met predominantly from gas-powered generation.

- The development will diversify the source of supply of gas and electricity and does not in itself increase demand for energy.

Climate:

- An alternative back up to wind energy is required and the proposal would support renewable energy expansion up to 2050.
- The future use of unabated fossil gas post 2050 would not be compatible with current national targets regarding greenhouse emissions.
- Capacity to transition to hydrogen fuel is an advantage.
- Clarification of the well-to-tank emissions calculation methodology (section 15.8.1.2 of the EIAR) is required.

Land and Soils:

- Quarry material should be sourced from an authorised location.

Water:

- It is noted and accepted that the receiving waters of the estuary are naturally turbid and that sediment control measures are provided for.
- No significant decline in Otter habitat or prey availability is considered likely.
- The loss of Annex I habitats relative to the total area of the habitats in the Lower River Shannon SAC is negligible (100m²) and it seems reasonable to conclude that this will not give rise to negative impacts to the structure or functioning of the habitats.

Biodiversity:

- Noted that the boundaries of the River Shannon & River Fergus Estuaries SPA have been extended since the LNG terminal was permitted at this location and that this has been taken into account as part of the application.
- As per the 2021 application, it is noted that the majority of the site is characterised by improved agricultural grassland and to a lesser extent, a mosaic of improved agricultural grassland and wet grassland.
- Notes that Curlew were recorded in wet grassland habitats adjacent to Ralappane point to the west and outside of the Proposed Development site

and outlines that the terrestrial habitats of value for Curlew are outside the site boundary.

- Requests a review the use of sedimentary cliffs by sand martin before works commence.
- Noted and welcomed that no terrestrial land take of Natura 2000 sites would occur as a result of this proposal.
- Badger use on site was found and, given the proximity of water, a level of Otter use can also be expected, which are addressed in the reports submitted.
- Noted that a band of trees is proposed along the southern site boundary, and it is considered that this along with the protection of the Ralappane stream, adequately addresses the requirements of Section 11.2.6 of the Kerry County Development Plan 2022-2028.
- The proposed development would benefit from the creation of additional features of local biodiversity value.

Air Quality, Noise and Human Health:

- Some baseline air quality monitoring would be of benefit.
- The noise assessment should address potential low-frequency noise and impact on human beings and the wider environment.

Landscape and Visual Impact:

- Noted that the landscape assessment incorporates a seascape assessment and has also taken into account potential for impact after dark.
- Further information might be sought regarding the visual impacts of plumes.
- Landscaping and planting proposals should take account of the coastal location.

Cultural Heritage:

- In the absence of detailed information on archaeological features, it is not accepted that the site is only of local significance. Similar features at Kilpaddoge were later identified as being of regional or national significance.

- Further testing and site investigations should be undertaken in advance of any site works to properly inform any proposed mitigation/ resolution measures.
- The buffer zone surrounding the ringfort (Ke003 004) should be measured from the outermost of associated features and should comprise a planted boundary.
- A management plan for the ringfort should be put in place.
- It is considered appropriate that the character and setting of the military embankment at Fort Shannon, a protected structure, forms part of the overall planning assessment.
- The visual impact of the treatment of the eastern boundary of the proposed site, particularly in terms of character and setting of RPS-KY-0887, should respect the proximity of the protected structure.
- The issue of impact to Ralappane House (RPS KY 003-001) and the military complex arising during, and post construction, should be managed to ensure no negative impact on the fabric and setting of the structure.

Major Accidents and Disasters:

- The report of the Fire Authority should be taken into account.

Mitigation Measures

- The format provided for mitigation measures is considered to be compatible with the EU guidance document and the measures outlined do target impacts identified earlier in the appropriate assessment.

Conclusion

- Government policy recognises the need to transition to a zero-carbon economy.
- The environmental studies and assessments demonstrate that the development would not have a significant effect on the environment or on residential amenity.
- Roads, water and energy infrastructure is adequate to cater for the development.

- The development accords with National and Regional policy as set out in the NPF and the RSES, and with the objectives contained in Kerry County Development Plan and the Listowel Municipal District LAP.

Matters which An Bord Pleanála are requested to consider in making a decision on the application, include the following:

7.2 Construction Management Plan

- (i) The construction of the development shall be managed in accordance with a Construction Management Plan to be agreed in writing with the Planning Authority.

7.4 Roads and Transportation

- (i) Complete the upgrade of the L1010 before development commences.
- (ii) A detailed construction traffic management plan should be agreed.

7.5 Environmental Protection

- (iii) A Construction Environmental Management Plan (CEMP) shall be approved.
- (vi) The developer shall undertake construction noise and vibration monitoring.
- (viii) The applicant shall carry out annual noise and vibration monitoring.
- (x) During construction and development, total dust levels at the site boundaries shall not exceed 350 mg/m²/day (averaged over a 30-day period).
- (xv) The developer shall prepare and implement a site-specific water management plan, to include detailed drawings, for each phase of the project.
- (xxiv) The development shall be provided with an on-site wastewater treatment system in accordance with the EPA Code of Practice.

7.6 Biodiversity

- (i) Pre-construction sand martin and otter surveys shall be undertaken.
- (ii) An operational stage biodiversity management plan for the site shall be developed.

7.7 Conservation

- (i) An analysis of the historic designed military landscape should be carried out.

- (ii) The security fencing on the eastern side of the proposed development shall be setback from the existing structures associated with Fort Shannon.
- (iii) The vegetation surrounding pill box 6 shall be carefully removed and the pill box shall be photographed and surveyed prior to demolition.
- (iv) Mitigation proposals to minimise the impact of construction should be considered for Ralappane House and for the military complex.

7.8 Archaeology

- (i) All topsoil within untested areas should be stripped under licence and any identified archaeological features and strata mapped.
- (ii) All archaeological/ potential archaeological features should be fully excavated.
- (iii) The buffer zone (30m) around the recorded monument Ke003 004 should be securely fenced during construction.
- (iv) A management plan for the recorded monument Ke003 004 should be compiled.
- (v) A 50m buffer zone around the underwater anomaly A8 should be implemented, as proposed.

7.10 Development levies

- (ii) The developer shall pay to the planning authority a special contribution or contributions under s.48(2)(c) in respect of:
 - Upgrading and widening the L1010 required to facilitate the project.
 - Upgrading footpaths and the road surface of Bridewell Street, Tarbert and the development of an off-street car park to facilitate proposed traffic management and parking control measures.
 - Improvements at the junction of the R551 and L1010 to accommodate the projected traffic volumes travelling along the Coast Road.

7.11 Bond and allied matters

- (i) & (ii) Prior to commencement of the development, the developer shall lodge with the planning authority a cash deposit, a bond of an insurance company, to secure the reinstatement of public roads that may be damaged by the transport of materials

and/or used as haul routes for construction, and to secure the satisfactory reinstatement of the site on cessation of the project.

Copies of internal reports from the following departments accompany the report:

- Roads Transportation and Marine
- Environment
- County Archaeologist
- Environmental Assessment Unit
- Water Services
- Flood Risk Management
- Roads and Transport/ Area Engineer
- Chief Fire Officer.

6.3. Views of the Elected Members

The minutes of the meeting of Kerry County Council held on 15th July 2024 generally note the following comments:

- General support for the project which is in accordance with local and regional planning policies and objectives.
- The Tarbert/ Ballylongford landbank has been undeveloped since the state purchased the first tranche of land at this location in the 1960's and this project can deliver a future for the landbank and turn the whole area into an Energy Hub along with the proposed development at Tarbert Island delivering sustainable employment, improving the local economy and sowing the seed for continued development in the area.
- It will assist with meeting Climate Action targets which are included in the County Development Plan.
- The Council resolved to accept the report of the Chief Executive.

7.0 Prescribed Bodies

7.1. Office of Public Works (OPW)

- The OPW note that the proposed SID has the potential to impact on the natural heritage of Scattery Island, Kilrush, Co. Clare, including both breeding (nesting) birds and wintering birds.
- The OPW note that the proposed SID has the potential to impact on the cultural heritage asset of Lislaughtin Abbey and will have a significant negative visual impact on the setting of this national monument.
- The OPW outlines its support in principle for the proposed SID and acknowledges that the development is necessary to deliver on the targets in Ireland's Climate Action Plan 2024 to support renewables, enabling the decommissioning of oil and coal fired power stations.

7.2. Department of Housing, Local Government and Heritage (DAU)

Archaeology

- The Department notes that the proposed development will have a direct impact on Recorded Monument DU015-001 (Mound) and that preservation by record is proposed.³
- The Department notes that the proposed development includes a drainage outfall that extends approximately 5m beyond the lower water mark into the Shannon Estuary, which will require an open cut trench to a maximum depth of c.2.4m.
- A condition requiring the developer to engage the services of a fully qualified archaeologist to carry out a Full Archaeological Excavation of all archaeological sites and areas identified during testing that cannot be preserved in situ.

³ The Board should note that this appears to be a typographical error on the part of the OPW as DU015-001 (Mound) is a reference for a monument in Fingal County Council's administrative area. There is a ringfort (KE003-004) partially within the boundary of the Proposed Development. I address this issue in section 10 of this report below.

- In respect of underwater archaeology, the Department notes the possible presence of a potential archaeological feature that could be of prehistoric date and of regional importance.
- A condition requiring a fresh Underwater Archaeological Impact Assessment in accordance with a method statement to be agreed, is recommended.

Nature Conservation

Lower River Shannon SAC:

- There will be a direct loss of Annex I *Estuaries and Reefs* habitats.
- The areas lost are very small relative to the size of the European site.
- The construction would not allow for the target for the Qualifying Interest area of *Estuaries and Reefs* to remain “stable” subject to natural processes.

River Shannon and River Fergus Estuaries SPA:

- The Department state that it must be ensured that any liquid hydrocarbon spillages to the estuary are avoided.
- Further detail regarding the nature of the spillage containment for the tanker unloading station, the rapid mechanism to close the sluice between the pond and the stormwater outfall into the SPA in the event of a spillage, and if equipment/ materials will be available to deter birds from landing in the pond in the event of a spillage.

Protected species – Badger Setts:

- The Department notes that a subsidiary badger sett and an outlier badger sett, occupied by two separate social groups, are proposed to be destroyed as part of the development.
- A condition is recommended that specifically requires the exclusion of badger setts and that replacement artificial setts are created, prior to the destruction of the existing setts, all in accordance with best practice and in consultation with the Department.

7.3. Transport Infrastructure Ireland (TII)

- Acknowledges that access to the development is facilitated via the local road network prior to accessing the N67 and N69 national roads.
- Any proposed works to the haul route along the national road network should comply with TII guidelines.
- The remedying of any damage to national roads, in accordance with TII standards, shall be agreed with the road authority.
- Relevant permits for abnormal loads should be obtained.
- All structures along such haul routes should be checked for capacity to accommodate abnormal weights.
- No grid connection routing appears to impact on the national road network.
- Recommends consultation with Kerry County Council regarding greenway/ active travel proposals.

7.4. An Taisce

- An Taisce state that ABP is bound to objectives in the Climate Action Plan of the budgets and sectoral ceilings in its decision making.
- Contends that the applicant has failed to explain how the emissions associated with the long-term supply and usage of fossil gas for electricity generation is compatible with the State's legal obligations under the Climate Action and Low Carbon Development Act 2015 (as amended).
- States that the applicant does not appear to consider the proposals compatibility with increasingly tight carbon budgets as a result of being on a trajectory to miss the 2021-2025 carbon budget and the sectoral emissions ceiling for electricity.
- Unclear if the predicted 2030 emissions from the proposed development incorporates the projected exceedances from the first carbon budget.
- Highlights that the applicant's methodology relies on the year 2030 rather than the period 2026-2030, with no modifications for exceedances.

- Draws attention to the verbiage used about climate change in the Paris Agreement of 'well below 2°C' and 'preferably below 1.5°C', which is missing from the submitted EIAR.
- Consider the proposed 25-year operational life of the fossil gas power plant to be an unacceptable length of time in light of the climate emergency and the urgent need to reduce emissions.
- Acknowledge that a small amount of gas-fired electricity generation may be required in the short to medium term but that this must remain within carbon budget thresholds. Concerned that the current proposal locks in long-term gas use.
- Consider it a remote possibility that the proposed power plant will transition to a 50% hydrogen blend.
- Contend that the emissions from the proposed power plant would represent non-compliance with the legally binding third carbon budget (2031-2035) of the provisionally fixed 151MtCO₂eq.
- Notes the participation in the EU Emission Trading Scheme but states that the legal obligations to meet the national carbon budgets and sectoral emissions ceilings prevails.
- Mitigation measures do not address the stated *major adverse* impact on climate.
- Considers the assessment on the impact of methane emissions and its contribution to the GHG effect to be inadequate.
- Highlights that cumulative impacts from other elements of the Shannon Technology and Energy Park (STEP) i.e., the potential data centre, has not been carried out and, therefore, this is not compliant with EIA Directive and Climate Act requirements.
- Highlight the practical difficulties in transitioning the proposed power plant to a 50% hydrogen mix and submits that the potential future use of hydrogen cannot be used as a sustainability measure to justify the proposed gas plant.

- Contends that the applicant's focus on supporting the 2030 renewables target is misleading, as the key to decarbonisation is emissions reduction.
- Increasing reliance on international gas markets will introduce further supply security issues and not address decarbonisation and emission reduction targets.
- The project risks becoming a stranded asset with the transition to renewables.
- Requests that the current status of the permission issued under PL08.GA003 for a 26km gas pipeline linking the application site to the gas network be clarified, in order to determine whether revised EIA and AA assessments are required.
- Seeks the assessment of the impact of warm water discharges on QI species of the SPA and SAC.
- Seeks a sensitivity analysis for noise and disturbance to be carried out on all bird species of SCI in the vicinity of the proposed development.
- Highlights the lack of clarity on specific noise control measures and contends that mitigation measures to be agreed afterwards fall into the category of a post consent condition (per *People Over Wind v. An Bord Pleanála* (2015)).
- Concerned about the further disturbance that the proposed development will cause to the visual amenity of the area.
- Considers that the proposed development could exacerbate the extent of light pollution in the area with consequent impacts on human health, insects and other species residing in the water.
- Recommends that ABP refuse permission for the subject application.

7.5. Health and Safety Authority (HSA)

- The authority states that it currently has insufficient information to provide technical guidance under regulation 24(2) of the Chemicals Act (Control of Major Accident Hazards Involving Dangerous Substances) Regulations 2015 (SI 209 of 2015).
- Request that further information be sought in accordance with regulation 24(10) with regard to:

- A site map with the COMAH establishment clearly outlined.
- Spill management and containment arrangements at the distillate tanker unloading area, details on hydrogen storage, inputs for SAFETI calculations, modelling in relation to jet fires, details on TLUPG for new establishments, an assessment of a natural gas release scenario, determination as to whether a steam scenario and a BESS could initiate a major accident, data in Table 10, the source of data for leak detection, clarity on the wording in relation to the effects of bunding, removal of reference to Northern Ireland regulations, confirmation as to whether transformer oil is a dangerous substance, explanation of 'triple containment', and confirmation of figure for diesel storage.

7.6. Inland Fisheries Ireland (IFI)

- No objection in principle.
- IFI would like to see more attention paid to nature-based solutions to rainwater management on the site.
- IFI seeks a comprehensive post-construction monitoring programme to be agreed with KCC.
- Final design and construction methodology for any culverts and watercourse crossings should be agreed with IFI.
- Conditions recommended include the cowl of site lighting, management of surface water, the retention of riparian vegetation and the availability of mammal access through site fencing.
- IFI suggest that staff working in the vicinity of watercourses are made aware of procedures to prevent silt and other pollutants from reaching watercourses and materials that would aid staff in the event of a spillage should be readily available.
- IFI request that access along the streams and the foreshore be maintained at all times to their officers.

7.7. Environmental Protection Agency (EPA)

- Confirms that the development proposed will require an Industrial Emissions licence, and that the applicant will be required to submit the associated EIAR to the Agency as part of the licence application.
- States that should the Agency decide to grant a licence in respect of the activity, as proposed, it will incorporate conditions that will ensure that appropriate National and EU standards are applied, and that Best Available Techniques (BAT) will be used in the carrying on of the activities.

8.0 Third Party Observations

8.1. Submissions from 38 no. third parties have been received. Whilst the majority of submissions received were in favour of the proposed development, a number were opposed to it too. I have broadly summarised the matters raised in all of third party submissions received in terms either of their support for or opposition to the proposed development.

8.2. Submissions in support of the proposed development

- The proposed development will hugely benefit the North Kerry area, both socially and economically.
- Waiting many years to see a development on the 600 acre SFADCo landbank and disappointment expressed that it has taken so long for the Shannon LNG development to come to fruition.
- With the phasing out of peat and coal the electricity system is highly dependent on a combination of natural gas power stations and wind energy.
- The proposal has the potential to create employment in the area and enhance Ireland's energy security.
- Its development is strongly supported by the Kerry County Development Plan, which recognises the potential of the landbank for such development.
- The necessary support services are readily available with transmission lines on land and under the Shannon estuary and connections points at Tarbert and Moneypoint power stations.

- Ireland's Climate Action Plan calls for the urgent delivery of 2,000MW of gas fired power plants.
- The Shannon Estuary Taskforce (July 2023) strongly supports energy-based developments on the landbank.
- North Kerry and West Limerick is one of the most deprived areas in the country, mainly due to the lack of employment and job opportunities, and this proposed development will entice emigrants to return home.
- The proposal would help local sports clubs to survive into the future, with employment prospects greatly enhanced.
- The proposed development will be beneficial to the farmers and industries of North Kerry and West Limerick.
- The Board's attention is drawn to national policy on rural development, namely Rural Development Policy 2021-2025 with its vision for a thriving rural Ireland and one which is built on the interdependence of urban and rural areas.
- Economic investment in North Kerry has been well below what has been invested in the Dublin region and along the East coast, which needs to be changed with an updated Regional Spatial and Economic Strategy.

8.3. Submissions opposed to the proposed development

- Contend that the grounds of refusal from the previous application on the site remains and that the proposed development would not be consistent with Objective 1.2.13 of the Strategic Integrated Framework Plan for the Shannon Estuary.
- The absence of an assessment of alternative locations is highlighted and can find no evidence of current planning applications or consents for other aspects of the overall masterplan for these lands.
- Unclear whether gas will be transported to the site from the national gas network at Foynes or via an LNG terminal.
- Evolving law on SEAs and the shifting national policy on LNG terminals with the implications for fossil fuel lock-in must be considered.

- The Board must consider the most recent EPA report where ‘Ireland is projected to achieve a reduction of 29% in total GHG emissions by 2030 compared to a target of 51%’.
- Renewable energy sources must be prioritised over fossil fuel-based power plants to achieve our climate targets.
- No adequate and independent assessment of the strategic and cumulative environmental impacts of the development of an industrial hub also comprising of an LNG import terminal, data centres and export of gas (which could be US fracked gas) to the national transmission network via an expired permission for a 26km pipeline to Foynes.
- The proposed development is incompatible with climate obligations undertaken by the government under the Paris Agreements 2015.
- Considers that the proposed development feeds into a strategy of development based on the attraction of foreign investment in the form of data centres, which is driving demand for fossil fuels globally.
- Attention is drawn to DECC’s Energy Security Strategy to 2030 where it is stated that it would not be appropriate for the development of any LNG terminals in Ireland until the outcome of the review of the security of energy supply of Ireland’s electricity and natural gas systems.
- A standalone power station by Shannon LNG on the same site has been refused permission under ref. no.311233 on the grounds that it would not be in accordance with the proper planning and sustainable development of the area, and nothing has changed to revisit the decision.
- Highlights that the application states that it is proposed to send gas *out* to the national gas network and not to receive gas *from* the natural gas network via the consented pipeline. There has been no assessment in the current EIA of the environmental impact of the importation of fracked gas.
- Query as to whether it is normal practice by an applicant to be challenging (judicial review) a decision by An Bord Pleanála while simultaneously lodging a new application for the same project.

- Contends that planning permission for the 26km gas pipeline issued under GA0003 has expired.
- An outline of the Eirgrid auction process is provided with reference to a Section 5 request to ABP (317419 refers).
- Contends that the decision of the Board issued under 314474 consenting to the development of 6 data centres in Ennis, and now under judicial review, is relevant to this application.
- Not clear how the additional increasing emissions associated with long-term supply and usage of fossil gas for electricity generation is compatible with the state's legal commitments.
- The Board's attention is drawn to Annex 2 'Securing Ireland's Gas Supplies' of the Government's Energy Security Package Review whereby natural gas demand sees a significant reduction of between 68-78% from 2030-2040.
- The Board is called on to examine the UCC MaREI analysis on electricity and gas demand to 2050 where it is stated that the annual power generation from natural gas plants must fall by more than half by 2030.
- States that the power sector can only remain within its sectoral emissions ceiling with the rapid deployment of onshore and offshore wind and solar PV.
- Disagreement is expressed with the applicant's assertion that the effects of GHG emissions from specific cumulative projects should not be assessed as there is no basis for selecting any particular cumulative project over any other.
- Contention that the greater interdependency of the gas and electricity systems constitutes an energy security risk.
- It is highlighted that the commissioning of the power plant post-2030 will coincide with the Government's projection for fossil gas use to decrease significantly.
- The Board is requested to interrogate whether the 2009 permission (PL08.GA0003) for a 26km gas pipeline to the GNI transmission network remains in place and whether it is legally appropriate for the Board's approval

for the pipeline to remain in place because it was associated with an LNG terminal.

- Friends of the Earth remain concerned that even a state-owned LNG import facility may undermine necessary gas phase out in accordance with legally binding climate obligations.
- An outline of Action 17 of the Energy Security Review Package is included to highlight the limitations to be placed on the creation of a Strategic Gas Emergency Reserve.
- Contention that the overall project seeks to get Ireland hooked on US fracked gas and to increase our dependence on fossil fuels and that the application has more to do with bringing fracked gas into the Irish gas grid than with generating electricity.
- Contends that STEP would be using fracked gas if fully developed.
- Stated that Ireland's stock of data centres, currently at 82, is expected to grow by 65% in the coming years, with 14 data centres under construction and 40 approved, which is considered a gross mismanagement of electricity infrastructure.
- It is stated that the proposed development would be contrary to the principles of the methane pledge to develop STEP, which would increase methane emissions of both the US and Ireland.
- Concern expressed and outlined about the conservation status of protected species and habitats.
- Transforms the Estuary into a sacrifice zone for unsustainable development in Ireland.
- Concern expressed about the possible cumulative impact on public health from Moneypoint and Tarbert power plants, Aughinish Alumina, the Irish Cement waste incinerator, and the approved gas plant and data centre at Ennis, Co. Clare.
- Reference is made to the AA Screening report associated with the Moneypoint 'Security of Supply' project from 2025-2029.

- A query is raised as to the ownership of the lands that are the subject of this application.
- Contention that the Kerry County Development Plan cannot and should not be relied upon in this planning application.
- Disagreement with the Applicant's claim that 'gas will be the only backup to intermittent renewables from 2030' and cites storage options as an alternative to gas generation.
- The Board is requested to examine the compatibility of a natural gas facility with hydrogen.
- State that the operational stage of the power plant would generate a mere 34 no. jobs and recommend that the strategic land reserve should be used to support the resourcing and development of renewable energy systems/ hub of research.

9.0 First Party Response to Submissions Received

- 9.1. Following the direction of the Board with regard to the holding of an oral hearing, the applicants were requested to respond to submissions received from third parties and certain prescribed bodies in relation to this application. The applicant responded on 25th September 2024
- 9.2. In their response to the submissions by prescribed bodies, the applicant makes the following points:
- Provides a comprehensive response to the issues raised by the HSA including a COMAH facility map, a spill management plan, and further technical details in relation to hydrogen, risk contours, natural gas release, steam, the BESS facility, scenario conditions, leak detection, bunding, transformer oil, triple containment, and diesel storage.
 - Includes updated Quantitative Risk Assessment and MATTE (Major Accidents to the Environment) study for the power plant within Appendices 1 and 2 attached to the response to the submissions.

- Confirms their view that the loss of Annex I habitats 1130 Estuaries and 1170 Reefs due to the installation of the drainage outflow pipe is negligible, relative to the total area of the habitats in the SAC and will not give rise to negative impacts to the structure or functioning of the habitats.
- Clarifies oil spillage containment methods, automatic shut valve feature at the outlet of the firewater retention pond, and the use of standard bird dispersal techniques at the firewater retention pond.
- Confirms that the total weight of the steam turbines including the weight of the modular six axle and three axle trailers in combination pulled by tow bar on a standard four axle lorry will be 190 tonnes and, therefore, that this would fall under definition of an abnormal load as defined by TII.
- Notes the NMS submission, welcomes all potential conditions proposed by the Board, and will ensure all conditions relating to marine and terrestrial archaeology are met.
- Confirms that Shannon LNG have initiated the EPA license application process to expedite this requirement, should planning permission be granted.

9.3. In their response to the submissions by third parties, the applicant makes the following points:

- States that with the closure of coal and peat power plants under the CAP24, natural gas electricity remains as the only significant source of electricity when wind and solar power cannot meet demand.
- Contends that the Proposed Development is a highly efficient low carbon combined cycle power plant, where the carbon impact is much lower than the proposed emergency generation units at Tarbert and Shannonbridge.
- Reiterates the statement in CAP24 that: *“Rapid delivery of flexible gas generation is needed at scale and in a timeframe to replace emissions from coal and oil generation as soon as possible to reduce impacts on the carbon budgets...”* and contends that the Proposed Development is compliant with carbon budgets and emission reduction obligations.

- Contends that renewable energy will remain intermittent beyond 2050 and, consequently, seeks an operational life of 25 years for the Proposed Development.
- In relation to the issue of 'lock-in' of fossil fuels raised by An Taisce and others, the applicant states that when the power plant is no longer needed it will be decommissioned.
- States that although emissions from the Proposed Development represents a major adverse impact, dispatchable energy from gas fired power stations will support the wider decarbonisation of the economy and the achievement of an overall reduction in emissions.
- Confirms that fugitive emissions were included in the assessment (Table 15-19 in the EIAR refers) and that and these emissions from the Proposed Development are predicted to be de minimis.
- States that an EIAR either has been or will be prepared to cover every element of the overall STEP project, and it was therefore deemed not necessary nor appropriate to consider cumulative impacts from developments being brought forward under separate planning applications.
- States that the plant could burn between 15-20% hydrogen initially, with the capability to transition to 100% hydrogen over time, with relevant consents and when the required policies and supply chains for hydrogen are implemented.
- States that the Proposed Development will have significantly lower emissions than other power plants due to its CCGT efficiency and low carbon natural gas fuel and that by displacing higher carbon power plants the Proposed Development will be a significant emissions reducing project.
- Confirms that the Proposed Development will only be operated by the grid operator to support wind generation and that it will never compete with wind generation.
- States that the planning approval (Ref. No. PL08.GA0003) for a 26km gas pipeline under section 182D of the Planning and Development Act, 2000 (as amended) is for an indefinite duration.

- Counters the claim that the impact of the warm water discharged to the Shannon Estuary was not assessed and highlights section 3.7, Appendix 3 - Hydrodynamic and Dispersion Modelling of the NIS in this regard.
- Reaffirms that no signs of breeding Cormorant were recorded at the Proposed Development site and no trees suitable for use as Cormorant roosts or nesting sites were recorded within the Proposed Development site boundary.
- States that given the small numbers of birds using the shoreline adjoining the Proposed Development site and the temporary nature of blasting works there is no potential for significant disturbance effects to any SCI species within the River Shannon and River Fergus Estuaries SPA.
- Acknowledges that lighting could potentially impact on nocturnal fauna such as otter, bats, night foraging/ roosting birds, but confirms that mitigation measures have been specified during construction and operation to minimise the impacts on lighting.
- Confirms that a pre-application consultation request was made to the Board a proposed STEP Strategic Gas Reserve Facility (APB-319245-24), which will include onshore facilities, jetty and FSRU and that this will extend into the Shannon Estuary at the north-east corner of the site.
- Acknowledges that the applicant is obliged to only consider reasonable alternatives, but that this excludes unreasonable alternatives i.e., technically or economically unfeasible alternatives and, for this reason, states that the Tarbert/ Ballylongford landbank was the only suitable location to accommodate the Proposed Development.
- States that Sections 2.3 and 2.9.2 of the EIAR clearly clarifies that the fuel supply to the Proposed Development will be from the gas grid through the AGI connection.

10.0 **Assessment**

I have examined the application details and all other documentation on file, including the submissions from Kerry County Council and the prescribed bodies, all other submissions received in relation to the application, and the applicant's response to these submissions. I have inspected the site and, having regard to relevant local, regional and national policies and guidance, I consider the critical issues in determining the current application before the Board can be considered under the following broad headings:

- Land Use and Principle of Development
- Energy and Climate Policy Context
- Scope of the project being assessed
- Greenhouse Gas Emissions
- Water
- Biodiversity/ Ecological Impacts
- Air Quality
- Landscape and Visual Impacts
- Roads and Traffic
- Archaeology and Cultural Heritage
- Major Accidents and Disasters
- Other Matter Arising

Environmental Impact Assessment and Appropriate Assessment are considered under separate headings in this report below.

10.1. **Land Use and Principle of Development**

10.1.1. The development comprises a number of elements, described in detail in section 3.0 above, but generally comprising a 600MW power generation plant, a 120MW BESS, an AGI and associated development. The physical characteristics of the site make it an appropriate location for such development on the basis of the availability of

connections to gas and electricity transmission networks. It is understood that these, and other, characteristics informed its identification as a strategic development location in the Shannon Integrated Framework Plan and their zoning for industrial use in the County Development Plan.

- 10.1.2. I note the concern raised in third party submissions that the proposed development is inconsistent with Objective MRI 1.2.13 in the Shannon Integrated Framework Plan for the Shannon Estuary. It is clear that this Plan seeks to promote and facilitate the sustainable development of these lands (Tarbert-Ballylongford Land Bank) for marine related industry. However, it is also stated in the objective that alternative proposals for general industrial development that contribute to the development of a strategic energy hub at this location will also be encouraged. Therefore, I am satisfied that the proposed development is in accordance with this policy.
- 10.1.3. In this regard, I also note the minutes of the meeting of Kerry County Council held on 15th July 2024 that show general support for the project which is considered to be in accordance with local and regional planning policies and objectives. I further note the significant number of submissions from local people, organisations and businesses that outline their support for the planning application and the development of the strategic landbank at this location. It is highlighted in a number of these submissions that the lands that are the subject of this application are zoned for industrial use in the current Kerry County Development Plan (KCDP), and in previous iterations of the KCDP.
- 10.1.4. Most importantly, the site comprises part of the Tarbert/ Ballylongford landbank identified for industrial use in the current KCDP. Objectives KCDP 9-23 and 9-25 of the KCDP support the development of the lands for these purposes. In addition, the Listowel LAP supports the development of the lands in this fashion. The provisions of the Regional Spatial and Economic Strategy also support the development of these lands for energy and marine related activities, following on from the provisions of the Shannon Integrated Framework Plan. The proposed development therefore accords with and is supported by local and regional land use planning policies.

10.2. Energy and Climate Policy Context

General Policy Context

10.2.1. Policy in relation to energy security and supply, and climate change is a complex and evolving area, subject to environmental, economic and geopolitical influences. It is not the role of the Board to set policy and, in this regard, I note that under s.143(1) of the 2000 Act, as amended, the Board is required to have regard to:

- (a) the policies and objectives of the Government, State authority, Minister, planning authorities and any other body which is a public authority whose functions have, or may have, a bearing on the proper planning and sustainable development of cities, towns or other areas, whether urban or rural,
- (b) the national interest and any effect the performance of the Board's functions may have on issues of strategic economic or social importance to the State, and
- (c) the National Planning Framework and any regional spatial and economic strategy for the time being in force.

10.2.2. Furthermore, the Climate Action and Low Carbon Development 2015 (as amended) requires that public bodies perform their functions in a manner consistent with, inter alia, the most recent approved climate action plan, national long term climate action strategy and the furtherance of the national climate objective. These matters are considered in further detail below. It is therefore useful to identify some of the current policy provisions most relevant to this case:

- The National Planning Framework promotes renewable energy use and generation and identifies the single point of connection to the UK gas network in Scotland and our limited gas storage capacity, as a risk to security of supply.
- The National Development Plan identifies the delivery of c.2GW of new conventional generation capacity to support a predominantly wind/ solar electricity system, as a strategic investment priority. The review of the security of energy supply of electricity and natural gas systems will inform Government policy in relation to security of supply and the need for further investment.

- Targets and actions set out in the Climate Action Plan 2024 includes the delivery of at least 2GW of new flexible gas-fired power plants by 2030.
- The National Energy & Climate Action Plan 2021-2030 notes that increased penetration of wind energy will increase reliance on the gas network.
- The Policy Statement on Security of Electricity Supply (November 2021) identifies the development of new conventional generation (including gas-fired) as a national priority and should be permitted and supported to ensure security of supply and support the growth of renewable electricity generation.
- The Review of the Security of Energy Supply of Ireland's Electricity and Natural Gas Systems identifies a number of electricity supply risks due to the expected increases in electricity demand and the need to decommission some existing conventional power plants.
- The National Risk Assessment 2023 highlights that there are increasing energy demands from a growing population and that demand exceeding the carrying capacity of the State and our economy is a risk.

10.2.3. In considering the proposed development, it is useful to note the distinction between security of gas supplies and security of electricity supply/ generation. While there are dependencies between these areas, recent concerns in relation to the capacity of the national grid to meet demand for electricity relate primarily to electricity generation capacity rather than supply of fuel.

10.2.4. There is clear national policy support for the development of efficient, flexible conventional/ gas-fired electricity generation capacity, as part of the package of measures aimed at reducing emissions in line with the Climate Action and Low Carbon Act 2015 (as amended), and as set out in the Climate Action Plan 2024. The proposed development provides such a flexible, high efficiency power generation plant and associated battery storage facility, capable of quickly responding to reduced/ fluctuating renewable electricity generation. These conventional plants are required to enable the transition to renewables and the closure of older, less efficient and more polluting generation plants. The requirement for such development has been recently highlighted in the All-Island Generation Capacity Statement 2022.

- 10.2.5. The Climate Action Plan 2024 notes that Ireland will require at least 2GW of new flexible gas-fired generation by 2030. Shannon LNG Ltd. were awarded a generation contract on 28th March 2023 to deliver 353MW of electricity generation capacity by no later than 1st October 2026, or any subsequent date approved by the regulator. The Climate Action Plan 2024 also commits Ireland to becoming a carbon-neutral economy by no later than 2050. To reach the 2050 milestone, a series of five-year carbon budgets, setting out a carbon reduction trajectory for Ireland, are to be embedded into law.
- 10.2.6. The Climate Action Plan 2024 acknowledges the need for efficient, conventional generation capacity to act as support or back-up to a renewables-based system. The extent of emissions from such plant will be dependent upon the frequency or degree to which it is dispatched by the TSO, where priority is given to renewable generators. I, therefore, consider that the proposed power generation development would be consistent with the provisions of the Climate Action Plan and the sectoral ceiling limits.
- 10.2.7. Third parties refer to the carbon budgets and sectoral emissions ceilings which have been set for the overall sector. Policy provision for the development of additional conventional generation capacity does not contradict the overall objective to reduce emissions as such capacity provision is aimed at providing increased power security and will not necessarily lead to increased demand/ usage. In this regard, I note that the operation of the energy market is based on the use of capacity payments to maintain available generation capacity in these conventional power plants and separates such payments out from actual energy supply/ generation payments. This falls within the remit of the CRU.
- 10.2.8. The TSO/ Eirgrid will be responsible for the dispatch of power plants where required, prioritising the use of renewable generation and more efficient conventional generation. In this context, notwithstanding a requirement for increased investment in generation infrastructure, overall emissions from power generation are still projected to fall. I conclude therefore that development of the proposed CCGT power plant is aligned and consistent with national energy and climate policy, as described in section 5.0 above.

- 10.2.9. I acknowledge the concerns outlined in a number of the submissions regarding the source of fuel for the proposed electricity generating turbines. In this regard, I note that sections 2.3 and 2.9.2 of the EIAR state that the fuel supply to the Proposed Development will be from the gas grid through the AGI connection and I draw the Board's attention to the fact that the applicant has confirmed this to be the case in their response to the submissions.
- 10.2.10. There appears to be an insatiable human demand for energy from the land and natural resources. This energy generally takes the form of food and electricity. At present in Ireland, it appears that the country as a whole is behind the growth in demand for the supply of energy from electricity. The evidence for this is clear with the review of security of electricity supply being presently undertaken by DECC. The conundrum in all of this is how security of electricity supply can be achieved to meet imminent capacity shortfall issues and, simultaneously, achieve net-zero carbon emissions by 2050.
- 10.2.11. I am cognisant of the fact that only 353MW of the total output of 600MW from the proposed power plant will be initially available to the national grid. It is clear from the information presented by the applicant that the balance of 247MW is presently intended to be directed to another user i.e., a possible data centre. There are no proposals for a data centre before the Board at this point in time. I consider that any proposal(s) for a data centre should be assessed on its own merits in the context of GHG emissions and sectoral ceilings when such an application/ appeal comes before the planning authority or the Board at that time.
- 10.2.12. I consider and recommend to the Board, if the Board is minded to grant permission for the Proposed Development, that an appropriately worded condition should be attached to such a grant of permission to enable the facilitation of the entire generating capacity of 600MW to be exported to the national grid, if the applicant was in a position to do so. As well as this, and in order to meet the legally binding emissions limits and carbon neutral target by 2050, I recommend to the Board that such a condition should also be time limited, for example allowing up to 600MW to be exported to the national grid for back-up use only until 31st December 2050. This would not preclude the applicant from acquiring other relevant planning and regulatory consents to use a portion of the overall electricity generated by the power plant for other purposes during that period. Similarly, it would not preclude

the applicant from obtaining further consents to extend the life of the power plant for the production of carbon neutral electricity post-2050.

10.3. Scope of the project being assessed

10.3.1. A number of third parties argue that the assessment of the impacts of the project should consider the source of LNG fuel to the facility as well as upstream and downstream emissions associated with the extraction, production, transport and end use/ combustion of the fuel. They also draw attention to DECC's Energy Security Strategy to 2030 where it is stated that it would not be appropriate for the development of any LNG terminals in Ireland until the outcome of the review of the security of energy supply of Ireland's electricity and natural gas systems. Further to this, concerns are raised that there is no adequate and independent assessment of the strategic and cumulative environmental impacts of the development of an industrial hub also comprising of an LNG import terminal, data centres and export of gas (which could be US fracked gas) to the national transmission network.

10.3.2. In this regard, I note that the EIA Directive requires that EIA should be carried out in respect of the project for which planning permission is sought, which is defined by reference to the development which is the subject matter of the application for planning permission. The term "project" is itself defined by Article 1(2)(a) as:

- the execution of construction works or of other installations or schemes,
- other interventions in the natural surroundings and landscape, including those involving the extraction of mineral resources.

10.3.3. The Directive acknowledges the implications of climate change and notes that it is appropriate to assess the impact of projects on climate (for example greenhouse gas emissions) and their vulnerability to climate change. Article 5(1) requires the developer to provide the information specified in Annex IV. Paragraph 1(d) thereof provides that this must include an estimate of the level of emissions which will be produced during the construction and operational phases. Under Paragraph 5(f) the description of the likely significant effects of the project on the environment should include "the impact on climate (for example, the nature and magnitude of

greenhouse gas emissions)”. The description should cover, inter alia, the direct and indirect effects of the project.

- 10.3.4. In this regard, it is considered that the indirect significant effects to be assessed are those which are intrinsic to the construction and operation of the project and the scope of the Directive should not be further extended to consider broader policy or legislative matters. The wider indirect environmental consequences of gas-fired power generation must be considered at a national programme level. In this regard, I note the provisions of s.5 of the Climate Action and Low Carbon Development Act 2015 (as amended), and the Climate Action Plan 2024 provides for the introduction of additional gas-fired generation capacity as part of the overall reduction in emissions and transition to zero carbon economy. Furthermore, sectoral emission limits have been agreed, including limits for the energy sector. If permitted, the CCGT will also be required to operate in line with BAT and under the conditions of the sites IE and ETS Licences.
- 10.3.5. Observers also submit that a data centre and an LNG terminal which are to be the subject of future planning applications on adjoining lands should be assessed as part of this application. Such development does not comprise part of the current application and any future applications will be subject to its own EIA process and planning assessment.
- 10.3.6. Similarly, a number of third parties contend that planning permission for the 26km gas pipeline issued under GA0003 has expired. I note that the applicant, in their response to the submission, states that the planning approval for the 26km gas pipeline under section 182D of the Planning and Development Act, 2000 (as amended) is for an indefinite duration. Again, this does not fall within the scope of this project.

10.4. Greenhouse Gas Emissions

- 10.4.1. National policy provides for the type of development proposed within existing emissions targets and the National Development Plan notes that the delivery of circa 2GW of additional conventional generation capacity will provide security of supply for when variable generation (wind/ solar) is not sufficient to meet demand. While there will be significant investment in new generation capacity, the proportion of electricity

generated by natural gas is expected to decrease from circa 50% to circa 30% by 2030.

- 10.4.2. The Climate Action Plan 2024 and other policy statements also provide for the development of conventional (gas-fired) power generation capacity to facilitate the transition, and act as back-up to, a renewable based system. Current shortfalls in generation capacity are resulting in the life of older, less efficient fossil fuel plants being extended, along with the short-term deployment of emergency fossil-fuel based generation capacity, pending the commissioning of modern, efficient plant of the nature proposed in this case. The proposed development would facilitate the closure of such older and less efficient plant and overall improvements in emissions and plant availability.
- 10.4.3. The EIAR considers operational greenhouse gas emissions from the power generation plant, based on the plant operating 24/7, which is regarded as a conservative approach given its likely role and deployment in the energy system. The EIAR also considers upstream emissions associated with the extraction, refining and transportation of the natural gas to the point of use. The assessment of emissions also includes downstream residual emissions from carbon displacement and offsets, and from land use change (Table 15-2 of the EIAR refers). The applicant has also confirmed in their response to the submissions, and I accept, that fugitive emissions were included in the assessment (Table 15-19 in the EIAR refers) and that these emissions from the Proposed Development are predicted to be de minimis. No other downstream emissions are expected.
- 10.4.4. The plant is not expected to operate on a continuous basis and the generation/dispatch of power from the facility will be the responsibility of the TSO/ Eirgrid. The efficient and flexible nature and design of the plant and its ability to be rapidly deployed, facilitating increased renewable generation capacity, is the primary inherent mitigation to the identified potential “major adverse” effects of emissions from the plant. I note also that the development will be subject to an IE licence from the EPA and the emissions limits to be imposed on the sector.
- 10.4.5. Concern is also raised in the third party submissions that the most recent EPA report notes that ‘Ireland is projected to achieve a reduction of 29% in total GHG emissions by 2030 compared to a target of 51%’. In response to this, the applicant states that

although emissions from the Proposed Development represents a major adverse impact, dispatchable energy from gas fired power stations will support the wider decarbonisation of the economy and the achievement of an overall reduction in emissions i.e., without a supply of gas-powered electricity generation, Ireland would not meet its 80% by 2030 renewable energy electricity target.

- 10.4.6. In their submission, An Taisce contend that the emissions from the proposed power plant would represent non-compliance with the legally binding third carbon budget (2031-2035) of the provisionally fixed 151MtCO₂eq. Targets and actions set out in the Climate Action Plan include the delivery of c.2 GW of new flexible gas-fired power stations by 2030 in order to act as back-up to achieving 80% of electricity demand from renewable sources. I am satisfied that, if these renewable targets are met, emissions from the electricity sector will be 4MtCO₂e in 2030 and this will assist in achieving the overall target of 151MtCO₂eq.
- 10.4.7. A number of third parties also emphasise that renewable energy sources must be prioritised over fossil fuel-based power plants to achieve our climate targets. Reducing overall gas demand is a matter for government policy instruments and measures under the Climate Action Plan. The Climate Action Plan 2024 sets out GHG emissions targets to 2030. To meet the required level of emissions reduction by 2030, Ireland will need to reduce annual CO₂e emissions from the electricity generation sector by 50% from 8 Mt CO₂e in the first carbon budget period (2021 – 2025) to 4 Mt CO₂e in the second carbon budget period (2026 – 2030). The Climate Action Plan 2024 also seeks to achieve net-zero emissions by 2050, and the Climate Action and Low Carbon Development Act 2015 (as amended) commits Ireland to move to a climate resilient and climate neutral economy by 2050.
- 10.4.8. The recently updated National Energy and Climate Plan (July 2024) states that it is expected that peat and coal will no longer be part of Ireland's electricity generation mix post-2025. This generation will be replaced by a combination of renewable energy, interconnection imports and in the short to medium term by generation from natural gas. In this regard, I am of the view that the proposed power plant should be considered in the context of national climate policy and its role in replacing existing conventional generation capacity and supporting a renewable based energy system.

10.4.9. Following on from this, the issue of ‘lock-in’ of fossil fuels is raised by An Taisce and others. I note, and generally agree with, the tenet contained in a number of the third party submissions opposing the proposed development because of the consequences of locking in the use of gas/ fossil fuels in the generation of electricity post-2050. In this context, there are significant government level decisions to be made regarding how the country uses the energy that is produced in order to meet GHG and sectoral emissions targets. I consider that the unencumbered use of the proposed facility rather than its use just as a backup for the variable nature of renewable wind energy may impact Ireland achieving its legally binding GHG and sectoral emissions targets in the lead up to and post-2050. I do note that the applicant states that the proposed development will only be operated by the grid operator to support wind generation and that it will never compete with wind generation and that when the power plant is no longer needed it will be decommissioned. I also consider that the 120MW stored in the BESS should be deployed in the same manner in order to meet intermittent demand shortfall and achieve climate targets.

10.4.10. In their response to the submission, the applicant also states that the plant could burn between 15-20% hydrogen initially, with the capability to transition to 100% hydrogen over time, with relevant consents and when the required policies and supply chains for hydrogen are implemented. At present, I consider the nature of this statement to be aspirational rather than a definite commitment as I do not consider it something that could be enforced by the imposition of a specific planning condition attached to a grant of permission.

10.4.11. I draw the Board’s attention to GNI’s Vision 2050 document and how it envisages the Irish gas network evolving to become net-zero carbon by 2050. This ambition is set to be achieved by:

- 1) The injection of 50% zero and net-zero carbon gas (such as biomethane and green hydrogen) into the network to displace half the natural gas required to meet customer demand.
- 2) The use of carbon capture and storage technology to abate the remaining emissions from the consumption of gas in the power generation sector and by large industry.

- 10.4.12. The applicant contends that renewable energy will remain intermittent beyond 2050 and, consequently, seeks an operational life of 25 years for the Proposed Development. It is also clear from this policy that GNI envisage the use of natural gas in the network to and beyond 2050 with the use of carbon capture and storage technology to achieve net-zero carbon emissions.
- 10.4.13. I note that the applicant stated in their application that “once the technology and public policies are established” that a transition to hydrogen would occur. In this context, I am not satisfied that the proposed development as presented and being assessed herein can operate at net-zero carbon levels post-2050. However, I do recognise the acknowledgement and requirement for security of energy supply outlined in the Policy Statement on Security of Electricity Supply (November 2021) whereby Security of electricity supply must also be maintained throughout the transition to up to 80% of electricity consumption coming from renewable sources by 2030 on a pathway to net zero emissions.
- 10.4.14. I acknowledge that the energy output from proposed development would also form part of the replacement energy for the national grid that will be required in lieu of the greater polluting coal and oil generating power stations that are due for decommissioning, for example the 900MW coal burning power plant at Moneypoint. In this regard, I am satisfied that there would be a net reduction in the sectors and Ireland’s GHG emissions as a result of the proposed development to 2050. However, I recommend including a time limiting condition on a grant permission requiring the generation of net-zero carbon electricity post-2050, if the Board are minded to grant permission.
- 10.4.15. I am satisfied that if a proposal for a data centre at this location was deemed unacceptable that the applicant could then readily renegotiate with Eirgrid to make the entire 600MW available as backup to the production of electricity from renewable wind and solar energy. This 600MW would form a significant contribution to the 2,000MW minimum requirement for backup energy outlined in the Climate Action Plan 2024. Furthermore, the nature of the proposed development i.e., 3 x 200MW turbines, would lend itself towards this type of segmented and/ or back up use, and would be consistent with the Climate Action Plan 2024. In their response to the submissions, the applicant confirms that the Proposed Development will only be operated by the grid operator to support wind generation and that it will never

compete with wind generation. Therefore, I also recommend including a condition as part of a grant permission stipulating this, if the Board are minded to grant permission.

10.5. Water

- 10.5.1. The dominant water feature in this area is the Shannon Estuary to which all other water features drain. There are some minor field drains across the site, however, the primary freshwater feature is Ralappane Stream on the western side of the site, which flows northwest to the estuary. The proposed development access road traverses this stream at the southern end of the site.
- 10.5.2. The estuary is identified by the EPA as a Transitional body, with unpolluted water quality, of good WFD status. Ralappane Stream is assigned a River Waterbody WFD Status (2016-2021) of Moderate. The site overlies a locally important aquifer, moderately productive in local zones, of high or extreme vulnerability and of good status. A flood risk assessment undertaken by the applicant indicates that apart from where the access road crosses Ralappane Stream, the lands are not at risk of flooding. The crossing of the Ralappane Stream is designed to address such flood risk.
- 10.5.3. The extensive works proposed on the site have the potential to give rise to impacts on the surface and groundwater environment, including waters in the estuary. These primarily comprise emissions of sediment or other contaminants to waterbodies and the potential impact of spillages or discharges during construction activities and are considered in the EIAR and NIS.
- 10.5.4. Subject to the identified construction and surface water management and mitigation measures and proposed design of the crossing of the Ralappane Stream, it is not considered that the development would negatively impact on the quality or status of waterbodies. Identified mitigation includes adherence to published guidance, including CIRIA guidelines and IFI guidelines of protection of fisheries. I note the submissions from prescribed bodies in this regard.
- 10.5.5. At operational stage, potential impacts from process effluent and surface water will be controlled, prior to discharge to the estuary via a new outfall and discharge will be

subject to continuous monitoring. A separate stormwater drainage network will incorporate hydrocarbon interceptors and all drainage discharge will be subject to the terms of the IE licence for the facility. Identified process effluent streams will be collected and removed off-site for treatment. Wastewater will be subject to on-site treatment prior to discharge to the sump. I note that predicted current directions on the ebb tide indicate little or no interaction of the outfall from the site with intertidal or subtidal habitats or species in the estuary, including the SCA, SPA, pNHA and the oyster production sites in inner Ballylongford Bay.

- 10.5.6. I have assessed the proposed development and when considering the objectives as set out in Article 4 of the Water Framework Directive to protect and, where necessary, restore surface & ground waterbodies in order to reach good status (meaning both good chemical and good ecological), and to prevent deterioration. In having considered the nature, scale and location of the project, I am satisfied that it can be eliminated from further assessment because there is no conceivable risk to any surface and/or ground waterbodies.
- 10.5.7. The reason for this conclusion is based on the nature of works/ development. I conclude that on the basis of objective information, that the proposed development will not result in a risk of deterioration on any waterbody (rivers, lakes, groundwaters, transitional and coastal) either on a temporary or permanent basis and consequently can be excluded from further assessment.
- 10.5.8. The information provided in the EIAR in terms of the management and treatment of waters discharging to the estuary does not suggest that significant impacts on water quality are likely. In this regard, I note the proposed drainage design and the significant levels of assimilative capacity in the receiving waters. I note the procedures for the management of spillages to the estuary set out in the application. Subject to the implementation of such mitigation, a significant risk of impacts on water quality is not considered to arise. Operational emissions will be subject to the requirements an IE licence from the EPA.

10.6. Biodiversity/ Ecological Impacts

Marine Ecology

10.6.1. The site directly adjoins and overlaps with the Lower River Shannon Estuary, which comprises part of the Lower River Shannon SAC and River Shannon and River Fergus SPA. There are direct impacts from the development on the estuary and pathways for the discharge of waters from the development site to the estuary. Ballylongford Bay pNHA is hydrologically connected to the site, while Tarbert Bay pNHA lies further to the east. Both sites are important for the numbers of waterfowl which they host. The application identifies a number of potential impact mechanisms as follows:

1. Release of pollutants during construction.
2. Underwater noise during construction and operations.
3. Seabed habitat loss during construction.
4. Discharge of wastewater and Power Plant Process Heated Water Effluent during operations.

10.6.2. These mechanisms are considered to adequately reflect the potential for effects on marine habitats and ecology. The primary impacts of concern during construction activity include noise and disturbance to marine mammals and aquatic species due to on-shore blasting, potential sediment discharge to waters and direct habitat loss within the estuary and SAC. I refer also to the detailed assessment of impacts on the designated sites under the Appropriate Assessment heading of this report.

10.6.3. In respect of noise and disturbance effects on marine mammals and aquatic species, I refer to the detailed discussion under section 12.0 Appropriate Assessment. This concludes that having regard to the nature and duration of activities, and subject to the identified mitigation measures adverse effects on marine mammals and otter or on diving birds are not likely.

10.6.4. I consider that the mitigation measures identified for the control and management of surface waters during construction, which are generally standard in nature, are satisfactory to ensure that no significant impacts on the quality of waters in the estuary would arise. Sediment release is not likely to significantly alter the already

turbid nature of waters in the estuary so as to impact on fish or marine mammals, or prey availability.

- 10.6.5. The extension of development into the estuary, through the construction of an outfall, will result in the direct loss of habitats identified as qualifying interest of the Lower River Shannon SAC. The application Planning Report, refers to the provisions of Article 6 of the 'Habitats' Directive 92/43/EC (2000), which defines 'integrity' as the 'coherence of the site's ecological structure and function, across its whole area, or the habitats, complex of habitats and/ or population of species for which the site is or will be classified', and concludes that the construction and operation of the proposed project will have no adverse effect on the SPA or SAC.
- 10.6.6. I note the submission of the DAU which states that the construction of the outfall pipe would not allow for the target for the Qualifying Interest area of *Estuaries and Reefs* to remain "stable" subject to natural processes. I refer to section 12.0 below Appropriate Assessment, wherein it is concluded that the proposed development will not have an adverse effect on the integrity of the Lower River Shannon SAC as the loss of this very small amount of benthic habitat from the Estuary would not adversely impact on the ecological structure or function of the site or of the habitats and community complexes therein, and that the minor loss of habitat will not affect the overall site integrity of the River Shannon and River Fergus Estuaries SPA due to the very small area affected and the low-quality habitat for SPA birds at this location, which is reflected in the low numbers of birds recorded utilising this area of the estuary.
- 10.6.7. I refer also to the discussion under the Appropriate Assessment heading below in respect of impacts on the qualifying interests of the River Shannon and River Fergus Estuaries SPA and Lower Shannon Estuary SAC. The conclusions of the Appropriate Assessment are relevant to other marine species and habitats, not identified as qualifying interests of European Sites. Modelling indicates that construction and operational discharge to the estuary will be subject to rapid dispersion, with no significant effects on water quality. The impacts of the development are otherwise considered to be localised and no significant impacts on marine ecology are considered to arise. I also note the requirement for operations to adhere to the requirements of the IE licence.

Habitats

- 10.6.8. The proposed development will result in the change of these currently agricultural lands to industrial/ utility uses, with the loss of existing habitats. The main development area comprises agricultural lands, primarily under grazing with mature field boundaries. Surveys have identified no rare plant species within the site and habitats are described in the EIAR as being generally of local importance only. There will be direct impact on a section of sedimentary sea cliffs along shoreline, however, this habitat is not identified as a qualifying habitat of the SAC. The extent of this habitat within the site is relatively low and largely unvegetated and is not identified as being of high ecological value.
- 10.6.9. The removal/ modification of existing terrestrial habitats will have a minor negative impact at a local level; however, these are not regarded as habitats of particular ecological or conservation interest and I note the long-term zoning of these lands for industrial purposes.

Mammals

- 10.6.10. Surveys carried out in 2022, 2023 and 2024 within and around the development site recorded badger, otter, mink, fox, Irish hare, hedgehog, red squirrel, fallow deer, sika deer and bat species (common pipistrelle, soprano pipistrelle and Leisler's). These findings are supported by previous surveys of the site undertaken in 2006/ 2007, 2011/ 2012, and 2019/ 2020/ 2021.
- 10.6.11. Two main badger setts were recorded, one (Sett 3) on the southwestern part of the site and one (Sett 4) outside of the eastern site boundary. Two other Setts are described as outlier setts, associated with main setts. Sett 2 is associated with Sett 3. The main setts will not be impacted by the proposed development, however, the exclusion of badgers from the outlier setts will be required to facilitate the development. Detailed mitigation measures and methodologies, in line with NRA guidance are identified, including compliance with any licence requirement. I note that the submission of the DAU raised no objection to the development in this regard. Subject to such mitigation measures I do not consider that the development will have unacceptable impacts on badger populations.
- 10.6.12. The development will also result in a reduction in foraging habitat for badger groups within the area, with potential impacts on group size. Having regard to the

extent of remaining lands available in the surrounding area, however, such impact is not regarded as unacceptable.

- 10.6.13. Bat foraging/ commuting activity was recorded across the site, however, surveys did not identify any bat roost sites in trees or hedgerow. No mature trees or buildings, with the potential to be used as significant bat roosting sites, were recorded within the Proposed Development site boundary. A pillbox close to the coast lacks suitable crevices for bats and the disused farmhouse within the redline boundary was considered of low potential for bats as it is now in an advanced state of disrepair. Other structures/ buildings are described as being of low roost potential. Bat (common pipistrelle) emerging and feeding activity was recorded in the farm complex located to the southwest, and outside of, the proposed development site.
- 10.6.14. Internal hedgerows and scrub are described as being moderately suitable for commuting and foraging bats under the guidelines, and the development will result in some loss of foraging habitat. Overall, the site is described as being of low to moderate value for foraging bats. Pre-construction surveys of all structures and trees to be removed should be undertaken in line with best practise, while the removal of any identified roost site would be subject to a derogation license from the Department. It is indicated that the development will adhere to NRA 'Guidelines for the Treatment of Bats during the Construction of National Road Schemes' NRA (2005c) and 'Bat Mitigation Guidelines for Ireland: Irish Wildlife Manuals (NPWS). Detailed method statements are to be agreed with NPWS prior to commencement of works. Lighting design will follow Bat Conservation Ireland Guidelines (2010).
- 10.6.15. Otter activity has been recorded along the Ralappane Stream and the shoreline in the vicinity of the site but not within the site and no signs of Otter or no Otter holts were recorded during site surveys between 2019 and 2024. No holts were recorded within 150m of the Proposed Development site. No signs of Otter were recorded in the eastern section of the site where shoreline works are proposed. There will be some loss of potential foraging habitat for otter, primarily along the watercourse and the shoreline although the works area is circa 1km from areas of recorded otter activity. Pre-construction surveys for otter holts within 150m of the development site will be undertaken no more than 10-12 months prior to commencement of construction works and, where exclusion from resting or breeding sites is required, a derogation licence will be obtained. Otters are largely nocturnal

and have the ability to habituate to disturbance and operational lighting. Short-term displacement during construction is unlikely to significantly impact on otter due to their ability to move away from or adapt to short-term disturbance. Any impacts during the construction phase are expected to be localised, slight and short-term.

- 10.6.16. The site includes aquatic habitats in the form of drainage ditches and the Ralappane Stream. Pre-construction surveys (visual search) will be undertaken for frogs on wet grassland and drainage ditches to be removed. Small numbers of fish use the stream, and no Annex II species were recorded. Having regard to the range of this species, the impacts of the development are regarded as acceptable. The EIAR notes that small numbers of fish use the stream. European eel, which is critically endangered, was recorded within the stream in 2011 and 2021. The stream is considered of Local importance (Higher value) for fish species and of Local importance (Lower value) for invertebrate species. Construction activity has the potential to result in the release of pollutants/ sediment to waterbodies. Subject to the identified construction and surface water management measures and the proposed design of the crossing of the Ralappane Stream, however, significant impacts in this regard are not anticipated. Identified mitigation includes adherence to published guidance, including CIRIA guidelines and IFI guidelines for the protection of fisheries and Bat Conservation Ireland guidance on lighting. I note also the submission of Inland Fisheries Ireland in this regard.

Birds

- 10.6.17. The site and adjoining land and shore have been the subject of bird surveys over a number of years including breeding and wintering bird surveys. Breeding bird surveys in 2023 recorded one Annex I species, Little Egret, within the salt marsh habitat located outside and to the west of the site boundary. A number of red-listed species (Meadow Pipit, Curlew, Barn Owl, Kestrel and Snipe) were recorded within the site. Eleven Amber List species were recorded, and the site is described as being of Local Importance (Higher value) for birds of conservation concern and for other breeding birds. A number of Birds of Conservation Concern in Ireland (BOCCI) species are likely to breed within the site i.e. Meadow Pipit, Skylark, Snipe, Linnet, Willow Warbler, and other species, such as Kestrel and Mallard could breed in nearby habitats. Curlew and Snipe have been recorded on lands to the west and terrestrial habitats of interest for these species are stated to be outside the site

boundary. Some small numbers of curlew were recorded along the northern shoreline of the site.

10.6.18. The site has been classified as being of Local importance (Lower value) for White-tailed Sea Eagle given the foraging range of this species. During the February 2023 winter bird surveys, a single bird was observed overflying the estuary from a vantage point at Knockfinglas Point. Terrestrial habitats are described as not suitable foraging or breeding for White-tailed Sea Eagle.

10.6.19. Potential impacts on estuarine birds and on the River Shannon and River Fergus Estuaries SPA, and SCI birds using waters in the vicinity of the site, are considered in more detail in section 12.0 below, Appropriate Assessment. It is noted, however, that the detailed surveys undertaken did not record nationally or internationally important numbers of birds in this area. The site and adjoining shoreline provide limited intertidal foraging habitat of value and subsequently very low numbers of birds were recorded. Overall, the site is described as being of county importance for Annex I species, Local importance (Higher value) for SCI species and Local importance (Higher value) for non-SCI wintering/ estuarine birds. The applicant's conclusions with regard to the relatively low number of birds occurring on the site or within the adjacent estuary are supported by the findings of the detailed MKO surveys, which were conducted over a calendar year across the entire estuary.

10.6.20. The most significant effects on breeding birds will arise from habitat loss, fragmentation, and modification. Construction works are likely to overlap with two breeding bird seasons. Disturbance impacts are described as negative, slight and short-term at a local level, given the availability of alternative habitats, the mobile nature of the species and fall-off in noise levels with distance. The loss of nesting and foraging habitat of red listed bird species will have negative, moderate and long-term impacts at a local level in the absence of mitigation. There will be some short-term construction disturbance of birds of conservation interest that forage within but breed outside the site, however, the numbers of such birds are not significant and impacts at the population level are not anticipated.

10.6.21. Potential impacts on estuarine birds during construction include habitat loss, noise and visual disturbance (including lighting), underwater noise and changes in prey availability and water quality. The adjacent intertidal area is of low value for

waterbirds. It is indicated that given the low numbers of birds using site, the availability of alternative foraging habitat in the immediate vicinity and the foraging range of diving birds within the estuary, significant impacts are not likely. The development will not result in the loss of critical foraging habitat, and I conclude that significant impacts on the overall numbers of birds within the estuary are not likely.

10.6.22. Given the temporary duration of works and rapid dispersion of sediment or other pollutants within the dynamic estuarine waters, impacts on foraging activity and prey availability are unlikely. I refer to the discussion of disturbance effects set out in section 12.0 of this report, Appropriate Assessment. Noise disturbance will be limited to a relatively small area and given the small numbers of birds recorded around the site and their mobile nature, significant disturbance impacts are not anticipated. Blasting activity on land will be limited in duration and extent and subject to daily limits, such that impacts will be confined to a small area of subtidal waters and shoreline. Similarly, the extent of visual disturbance is not expected to have significant effects. Overall slight negative construction impacts are predicted.

10.6.23. Operational impacts in terms of noise and visual disturbance are not considered likely to be significant, due largely to the nature of emissions and the relatively small numbers of estuarine birds frequenting this location. Mitigation measures include pre-development surveys of buildings for nesting birds and the timing of vegetation clearance, and erection of nesting boxes. Landscaping plans include the provision of native woodland, scrub and grassland.

10.6.24. The applicant includes nighttime photomontages⁴ with the application and confirms that, subject to the identified mitigation measures, no significant impacts are likely. Night-time photomontages show that the light levels from the proposed development will be low. It is noted in the NIS that the level of the proposed lighting is significantly less intrusive than for other developments in the vicinity and there is minimal upward light spillage. A number of mitigation measures are proposed in section 3.6.3 of the NIS, and I consider that such mitigation and design measures would satisfactorily address any potential impacts in this regard.

⁴ View 8: Proposed with the lights on, Appendix A10.1: Booklet of Photomontages, Screening Statement for Appropriate Assessment and Natura Impact Statement (AQUAFAC International Services Limited, April 2024).

10.7. Air Quality

- 10.7.1. Impacts on air quality during construction are likely to be short-term in nature and will be subject to identified mitigation measures, and on-going monitoring as proposed. Residential receptors in this case are located at a remove from the main works area and the immediately adjacent habitats are not sensitive to the effects of dust deposition i.e., there are no single high sensitivity amenity and human health receptors within 250m of the construction site boundary. Significant environmental impacts are not expected in this regard.
- 10.7.2. Operations at the site will potentially give rise to impacts on air quality due to the burning of fossil fuels and release of emissions, including NO_x emissions. The combustion of gas for energy generation is acknowledged in national policy as a necessary component of the fuel mix in order to support increased renewable penetration. The intent is that while sufficient conventional generation capacity will be required, it will operate less, spending much of its time in reserve for when needed, during times of high demand and/ or low wind/ solar generation. The proposed power plant will therefore not operate on a constant basis.
- 10.7.3. Table 8-1 of the EIAR identifies the relevant national and EU air quality standards, and relevant Environmental Assessment Levels and averaging periods for other pollutants as referred to within EPA guidance (2020). The proposed CCGT Power Plant will fall within the remit of the Industrial Emissions Directive (2010/75/EU) and will be required to obtain an IE licence from the EPA.
- 10.7.4. The emissions characteristics of the proposed development are set out Table 8.4 of the EIAR, along with any assumptions made. Air dispersion modelling was undertaken in respect of the proposed development, which predicts the contribution of pollutants at selected human and ecological receptors. This contribution is added to the background (or ambient) pollutant concentrations (Table 8.8 of the EIAR refers) representative of those locations to report total pollutant concentrations that can be compared to the relevant Air Quality Standards and Environmental Assessment. The assessment of cumulative emissions includes emission sources at Moneypoint and Tarbert power stations (Table 8.5 of the EIAR refers).
- 10.7.5. The EIAR assessment of operational emissions from the CCGT power plant considers two scenarios, including the envisaged normal operational scenario which

conservatively provides for continuous operation of the Power Plant (CCGT) throughout the year (24/ 7/ 365 or 8,760 hours of operation per year). Emissions are modelled for identified human health and nature conservation receptors.

- 10.7.6. The assessment concludes that for the two assessed scenarios, the majority of pollutants and averaging periods at human health and nature conservation receptors reported in the normal operating scenario can be considered insignificant. There will be no exceedances of Air Quality Standards, and no significant effects are likely. For a limited number of receptors, where 'Imperceptible' to 'Slight' effects and 'Moderate' effects are predicted, further analysis of the Process Contribution and Predicted Environmental Concentrations has been undertaken for those pollutants and averaging periods.
- 10.7.7. While hourly mean NO₂ PC and PEC at the worst affected human health sensitive receptor (R19) could not be screened as insignificant, the Proposed Development does not give rise to any risk of exceedance of the hourly mean NO₂ Air Quality Standard in the Normal Operational Scenario, nor is it likely to constrain any future development of the area.
- 10.7.8. In considering acid deposition, the EIAR notes that there is some uncertainty in the existing rate of acid deposition, due to an absence of site or even regional-specific baseline data. The annual average acid deposition rate impact (PC) and total deposition rate (PEC) at the worst affected ecological receptor site (receptor E12 - perennial vegetation on stony banks habitat) could not be screened as insignificant, however, the impact (PC) accounts for only circa 1% of the Air Quality Standard, and the elevated total deposition rate (PEC) is primarily due to the assumed ambient background levels. The EIAR also notes that background acid deposition rates in the study area are likely to fall in the near future with the cessation of the burning of coal and Heavy Fuel Oil at Moneypoint and Tarbert Power Stations, respectively.
- 10.7.9. In light of the above, it is determined that the operation of the Proposed Development will not give rise to an exceedance of the Air Quality Standards for annual mean acid deposition rates and that the impact will not cause a significant effect. Similarly, the alternative scenario assessed did not give rise to any significant additional effects and pollutant concentrations remain well below the relevant AQS and EAL.

- 10.7.10. Details of the potential effect of nitrogen deposition on European sites was included in the EIAR. The analysis provided indicated that the main constraint on Moanveanlagh Bog SAC and Tullagher Lough and Bog SAC arises from the existing background concentrations which exceed the conservation objective target values and that the contribution of the proposed development to such levels, either on its own or in combination with other sources in the area is not significant. The potential effect of nitrogen deposition on European sites in the wider area is considered further in section 12.0 Appropriate Assessment, below.
- 10.7.11. The assessment of cumulative effects notes the contribution of nearby sources including Moneypoint and Tarbert Power Stations, which are to cease burning coal and oil by 2025, respectively. The proposed power generation plant will create additional capacity in the system to facilitate the closure of such older plant. With the cumulative operation contribution to total pollutant concentrations the proposed development does not give rise to any exceedance of Air Quality Standard in the Normal Operational Scenario, nor is it noted as likely to constrain any future development of the area.
- 10.7.12. In addition, it is noted that approvals were recently granted for a temporary (5-year) 150MW emergency electricity generation development at Tarbert Power Station, which will be fuelled by distillate fuel oil, and for the transition and conversion of the existing 900MW electricity generating station from coal to heavy fuel oil at Moneypoint Power Station from 31st December 2025 until 31st December 2029. The Tarbert application undertook an assessment of cumulative air quality impacts, including the operation of the proposed Shannon LNG Plant. In respect of key ecological receptors, the conclusion in that case was that the baseline concentration of pollutants was already well in excess of the relevant EALs and that the cumulative contribution to these baseline concentrations was not significant... The continuation of electricity generation at Moneypoint by use of HFO in lieu of coal will result in a reduction in GHG emissions by 12% in comparison and further as an agreed generator of last-resort contract with the TSO.
- 10.7.13. I note the requirements in respect of EPA licencing and that there is no evidence that the proposed development cannot be operated appropriately in accordance with such licence or would otherwise be unacceptable in terms of air quality.

- 10.7.14. In terms of cumulative construction impacts, works for the upgrading of the L1010 local road from Tarbert may overlap with the site development works. The main development site is located approximately 750m from the L1010, such that significant cumulative dust impacts impacting on the same receptor are unlikely. Potential for track-out of mud from vehicles leaving site can be adequately managed. Development traffic on the public road at this phase will be subject to a construction traffic management plan which will be co-ordinated with the road upgrade works. Cumulative construction dust emissions are not considered likely to have a significant effect and I note the proposals for dust monitoring set out in the EIAR.
- 10.7.15. Cumulative construction impacts are also possible where development coincides with the construction of the 220 kV connection, medium voltage (10/ 20 kV) connection, Shannon Pipeline or potential data centre projects. Due to the distance to the limited number of potential receptors, and identified mitigation measures, the potential effect of construction activity on dust and air quality is not considered to be significant.

10.8. Landscape and Visual Impacts

- 10.8.1. I note the land use zoning objectives and the landscape designations for these lands in the Kerry County Development Plan. I note also that the northern shores of the estuary in County Clare, including the area opposite the subject site, are identified as a working landscape and the extent of scenic routes/ protected views in this area under the Clare County Development Plan is limited.
- 10.8.2. The EIAR is accompanied by a series of visual images/ photomontages describing views to the constructed development from 15 no. viewpoints on both sides of the estuary and from the Killimer – Tarbert ferry crossing. The photomontages also attempt to describe the night-time/ lighting effects of the development from two of these viewpoints along or across the estuary. I consider that the selected viewpoints are representative of views from the surrounding area and provide a reasonable basis for assessing the impacts of the development.
- 10.8.3. The proposed development would comprise a significant intervention in the landscape. The landscape of this area is already characterised by significant and dominating pieces of energy infrastructure, including in particular Moneypoint and

Tarbert Power Stations, high voltage power lines, as well as more recent renewable, wind energy developments within Counties Clare and Kerry.

- 10.8.4. The proposed power generation plant is the most significant element of the development. The sloping topography of the site will be modified to provide a level platform for the main infrastructure elements at 18mOD. The proposed turbine halls rise to 30.145m with an associated stack height of 35m over platform level. Air cooled condensers to the north of the turbine halls comprise prominent features at 32.605m. Separate fuel oil and water storage tanks to the east of the turbine halls rise to a maximum of 24m over ground level. Further to this, there will be a cumulative impact from the two no. substations proposed (ABP-320300-24 refers) immediately to the west of the BESS. Both buildings are proposed at 17m in height with profiled metal cladding finishes on all elevations.
- 10.8.5. The proposed power generation plant will be visible from the local road network and residential properties to the south of the site, somewhat mitigated by the low ridge to the south of the main development area. I note the existing industrial/ energy context in this part of the estuary and the zoning of these lands in the Kerry County Development Plan for industrial development for a considerable period. There is also a history of previously permitted, although not constructed, energy infrastructure development on these lands. In this regard, while I acknowledge that the development will have impacts on local visual amenities, I do not consider that such impacts would be unacceptable.
- 10.8.6. I note that this has not been raised as a concern in third party submissions on this case. However, the OPW have raised a concern over the potential of the Proposed Development to impact on the cultural heritage asset of Lislaughtin Abbey and contend that it will have a significant negative visual impact on the setting of this national monument. In this regard I draw the Board's attention to View 7, Appendix A10.1 Booklet of Photomontages, Volume 4 of the EIAR. I have reviewed this documentation and observed the viewpoint immediately to the west of Ballylongford village on the day of my site inspection. I can confirm that the view presented as existing and proposed in the applicant's photograph and photomontage is representative of the 'on the ground' views of Lislaughtin Abbey from this entry point to Ballylongford village. I acknowledge the concern raised by the OPW in their submission and the fact that the proposed buildings will form part of the backdrop to

the monument when viewed from this location. However, I am satisfied that the impact is mitigated by both proposed planting⁵ along the southwestern site boundary and the distance from the site. Consequently, I do not consider that unacceptable impacts on the character or setting of this monument will arise.

10.8.7. There are also Protected Views and Prospects in the direction of the site from Carrig Bridge to Carraig Island along the L1004 local road to the west of the application site. Having regard to the separation distance, the scope and the limited level of intrusion into such views, I do not regard such impacts as significant or unacceptable. The development will be visible from the northern shore of the estuary in Co. Clare; however, I note that such views are most readily available in the vicinity of the existing Moneypoint power station, and that the impact is mitigated by the distance from the site.

10.8.8. Ralappane House is identified as a protected structure in the Kerry County Development Plan (RPS-KY-0888). This is an 18th century two-storey farmhouse, which sits on the low ridge between the main development area and the L1010. The property is bounded by agricultural structures/ barns of varying condition and a stand of mature trees to the west. The proposed power station will extend above the ridge into views to the house from the L1010, however, having regard to the existing adjoining farm structures, the zoning of the lands and the limited degree of intrusion, I do not consider that unacceptable impacts on the character or setting of this structure will arise.

10.9. Roads and Traffic

10.9.1. The site is served by the L1010, a rural road, which primarily serves local residential and farm properties and provides a secondary route between Ballylongford and Tarbert. Sections of this road are currently subject to constraints in terms of width and alignment, between the site and Tarbert/ R551 (approx. 4.5km).

10.9.2. The most significant transport impact from the proposed development will arise during the construction phase, which is described as comprising a 32 month construction period with a 1 month peak period. Construction traffic will be directed

⁵ Darwing No. SP130, Landscape Plan, Sheehan Nagle Hartray Architects.

along the L1010 from the N67/ N69 via Tarbert to the east. Predicted AM peak hour traffic is 314 no. staff vehicles between 6.30am – 07.30am. Predicted PM peak hour traffic is 312 no. staff vehicles between 16.45 – 17.30. Construction deliveries are predicted to peak in September 2027 and comprise of 80 no. LGV's and 40 no. HGV's per day at a uniform rate between 07:00 hrs and 17:00 hrs (no deliveries between 08:30 hrs and 09:15 hrs). In the context of existing traffic on the local road network, this would represent a significant increase in traffic volumes during construction. Operational traffic volumes are not predicted to be significant, having regard to the projected employment numbers on the site.

- 10.9.3. With regard to construction traffic impacts on Tarbert to the east, regard is had to the large secondary school on the western approach to the town. Mitigation measures include the scheduling of construction traffic to avoid school drop-off/ collection times, while traffic movements are otherwise spread over the day i.e., the majority of non-essential time-based construction deliveries will not take place during the morning and evening peak traffic periods from 08:30 hrs to 09:30 hrs and after 15:30 hrs.
- 10.9.4. The national road network is generally of a good standard and adequate to accommodate the movements predicted, although Tarbert Main Street would constitute a constraint on HGV traffic. A traffic management plan will be implemented to mitigate the short-term construction impacts of the development, which should be agreed with KCC. I note also the comments and requirements of TII in respect of abnormal loads, and their request for a condition to be included in any grant of permission.
- 10.9.5. The Construction Traffic Management Plan (Appendix A11.1, Volume 4 of the EIAR) states that, prior to the construction phase, a section of the L1010 road is to be upgraded by KCC with the site to be accessed by way of a new vehicular priority junction off the L1010. Further to this, upgrade works to the L1010 would consist of removing/ straightening out two existing bends and widening the whole road between the site entrance and Tarbert Comprehensive School to a width of 8m, with two 3.5m lanes and a 0.5m hard shoulder either side. To date approximately 0.89km of the upgrade works have been undertaken by KCC.

10.9.6. Kerry County Council's Development Contribution Scheme 2017 is the relevant scheme for the county. As well as a standard condition requiring a financial contribution for public infrastructure and facilities benefiting development in the area, the planning authority have recommended that a condition under S.48(2)(c) be attached to any decision to grant permission, in respect of the following:

- (a) Upgrading and widening of the L1010 required to facilitate the project, taking account of works completed to date on the L1010 to facilitate undergrounding of Electrical Services and connection to the substation.
- (b) Upgrading footpaths and the road surface of Bridewell Street, Tarbert and the development of an off-street car park to facilitate proposed traffic management and parking control measures.
- (c) Improvements at the junction of the R551 and L1010 to accommodate the projected traffic volumes travelling along the L1010 Coast Road.

10.9.7. The identified works are not costed by the planning authority; however, the recommendation reflects condition no. 36 of PA08B.PA0002, granted permission in 2007. I note that the first party have not appealed or otherwise raised a question in relation to this condition.

10.9.8. S.48(12)(a) requires that where payment of a special development contribution is required in accordance with subsection (2) (c), the condition shall specify the particular works to which the contribution relates. In this regard, I consider that:

- (a) The upgrading and widening of the L1010 required to facilitate the project can be understood to reflect the works identified in the CTMP (Figure 2.3), accompanying the application.

I note that some of these works undertaken to date on the L1010. With regard to the remainder of outstanding works along the L1010, and having regard to the scale of the proposed development and the planning history relating to the lands, it is accepted that the works will facilitate the development of these lands and may therefore be considered under s.48(2)(c).

- (b) Improvements at the junction of the R551 and L1010 to accommodate the projected traffic volumes travelling along the L1010 can be regarded as

sufficiently specific in terms of location and function, in facilitating this development.

- (c) In respect of the upgrading of footpaths and the road surface of Bridewell Street, and development of an off-street car park to facilitate traffic management and parking control measures, I note that in 2008 condition no. 27 of PA0028 provided for a special development contribution in respect of parking restrictions along Bridewell Street in the vicinity of the junction with the N67 (Ferry Port Road) and N69 (Listowel to Tarbert Road).

The location of proposed off-street car parking and the size and extent of same is not identified in planning authority documentation, nor do the planning authority describe the parking and traffic management works. The provision of such a car park appears to reflect a specific objective of the Listowel Municipal District LAP for Tarbert, wherein a town centre car park on a backland site south of the junction with the N67 is identified, off a proposed new Inner Relief Road/ Town Centre Street (TT-OS-02), which is zoned N1.6 "Indicative Car Park". Objective TT-OS-02 seeks to provide for the sustainable development of a public realm space with parking facilities.

The LAP notes that Tarbert's location on the national road network and the presence of the ferry service results in high levels of through traffic, a significant proportion of which consists of commercial vehicles. It is not clear that the requirement for this off-street car park and footpath facilities are required for, or and are properly attributable to the proposed development. It would appear that the costs of same, identified as specific objectives of the Local Area Plan, would be appropriate for apportionment under a development contribution scheme. In this regard it is not clear to me that this is a specific exceptional cost appropriate for apportionment under s.48(2)(c).

10.9.9. Having regard to the foregoing, I recommend that in the event of a decision to grant permission, a condition under s.48(2)(c) be attached in respect of the following works:

- Upgrading and widening of the L1010 required to facilitate the project, and
- Improvements at the junction of the R551 and L1010 to accommodate the projected traffic volumes travelling along the L1010 Coast Road.

10.10. Archaeology and Cultural Heritage

- 10.10.1. The site has been subject to extensive archaeological investigations during the course of this and previous applications. While there is one recorded monument (rath) within/ adjoining the application site, investigations have revealed a relatively significant level of human activity on these lands. I note the contribution that the investigation of this site could make to understanding the wider archaeological landscape in the Shannon estuary area and the submission of the DAU in this regard, including the recommended conditions.
- 10.10.2. I note in particular the recommendation to undertake a further underwater archaeological impact assessment. I consider that this assessment can be confined to the underwater area around where the outfall is proposed as the main concern expressed by the DAU is in relation to an anomaly ('a 15m-long feature') found during a geophysical survey, which is located 300m to the north-east of the stormwater outfall pipe and, consequently, will not be impacted by the development proposed under this application. Subject to the identified conditions and the mitigation measures set out in the EIAR, I do not consider that significant or unacceptable impacts on the archaeological heritage of the area are likely.
- 10.10.3. Ralappane House is located on a local ridgeline to the south of the main development area, is a protected structure, although it is not listed in the NIAH. I have already commented above on the potential impacts on the character and setting of this property and do not regard such as unacceptable.
- 10.10.4. The site includes part of the site of Fort Shannon, a WWII defence installation constructed in 1941/42 and abandoned in 1946. This is not a fort in the traditional meaning of the term but rather comprises a number of separate structures within an undefined site on the southern slopes of the estuary. There is a Lookout Post (RPS-KY-0877) associated with the Fort Shannon Coast Defence Artillery installation located adjacent to the north-east boundary of the Proposed Development and 20m to the south of the foreshore. This flat roofed concrete structure was identified as a searchlight chamber with the remains of its searchlight still within the structure. Fort Shannon contained two searchlight positions, which were positioned in such a way as to be able to illuminate any ship sailing up the Shannon estuary and allowing the fort's two-gun emplacements to target the vessel, if necessary. These structures are

not generally accessible to the public and the disparate and overgrown nature of the site has reduced its coherence. Development Plan objective KCDP 9-29 seeks to protect the core area of Fort Shannon at Ardmore point.

- 10.10.5. The pillbox/ emplacement located within a field boundary in the northeastern part of the site will be removed to facilitate the proposed development. This is described in the EIAR as CHS7:

A detached single bay, single-storey hexagonal pillbox, built c.1942, now derelict. Flat concrete roof. Concrete walls with rubble limestone camouflage covering. Square-headed chamfered openings. Square-headed door opening. Built within a field boundary. A typical WWII era pillbox, of functional design. It remains in good condition due to its simple design.

- 10.10.6. This pillbox structure is described as being of local interest and low importance and the impact of the development is identified as significant, negative and permanent. The EIAR notes that a lookout post/ searchlight emplacement (RPS-KY-087) located immediately adjacent to the north-east of the site will not be impacted by the development. I am satisfied that the presence of the Proposed Development will not impact the ability to understand or appreciate the purpose of the Lookout Post/ Searchlight Emplacement or its relationship with the other structures in Fort Shannon.

- 10.10.7. The proposed development occurs on zoned lands and while it will result in the removal of one pillbox structure, the core of the site, including the gun emplacements and magazine, will not be directly impacted by the proposed development. While the fort is of some historical interest, I do not consider that the development would materially contravene KCDP 9-29 of the KCDP in this regard, or that the impacts on the character of the complex would themselves warrant a refusal of permission in this instance.

10.11. Major Accidents and Disasters

- 10.11.1. The proposed development would comprise an establishment for the purposes of the Chemicals Act (Control of Major Accident Hazards Involving Dangerous Substances) Regulations 2015 (S.I.209 of 2015) in respect of which the

HSA is the competent authority. The HSA have advised that it has insufficient information to provide technical advice in relation to this application and set out a further information request in their submission.

10.11.2. In their response to the HSA submission, the applicant has provided updated QRA, updated MATTE and the following information:

- A map of the COMAH boundary.
- Details of a spill management plan.
- Confirmation that hydrogen will not be used for generator cooling.
- More details on how SAFETI contours were generated.
- Modelling for both horizontal and vertical releases.
- Confirmation that the site complies with criteria in the TLUPG.
- Modelling for a natural gas release scenario in the turbine enclosure.
- Removal of steam from assessment of dangerous substances.
- Confirmation that fire will be contained within the BESS building, and the probability of it escalating into a major accident affecting areas outside the site is discounted.
- Correction to Table 10.
- Removal of leak detection and isolation as this has no impact in land use planning assessment.
- Revisions to Section 7.4 clarifying that the primary and second bunds are considered to contain all leaks.
- Removal of reference to Northern Ireland regulations.
- Confirmation that the type of transformer oil to be used is not finalised and has therefore, conservatively, been evaluated in the MATTE as a dangerous substance.
- Removal of reference to 'triple containment'.

- Confirmation that normally only 11,500m³ of distillate will be stored on the site but, for conservative purposes in the QRA, a total inventory of 16,000m³ of distillate is assumed as a worst-case scenario.

10.11.3. The development will be subject to detailed assessment by the competent authority under the 2015 regulations, and the operators will be required to carry out various tasks in compliance with the Regulations, including a Notification to the HSA, the development of a Major Accident Prevention Policy (MAPP) and Safety Management System (SMS) for operating the site, a Safety Report and the development of an Internal Emergency Plan for the site.

10.11.4. The Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment (August 2018), notes that:

“The EIA must include the expected effects arising from the vulnerability of the project to risks of major accidents and/or disasters that are relevant to the project. Where appropriate, the description of expected significant effects should include details of the preparedness for and proposed response to such emergencies.

There are two key considerations, namely:

- *The potential of the project to cause accidents and/or disasters, including implications for human health, cultural heritage, and the environment;*
- *The vulnerability of the project to potential disasters/accidents, including the risk to the project of both natural disasters (e.g. flooding) and man-made disasters (e.g. technological disasters).*

These considerations are separate to any assessment of the project required under the Seveso III Directive, which is likely to include a detailed risk assessment.”

10.11.5. Chapter 14 of the EIAR considers the risk of Major Accidents and Disasters and notes that it is a preliminary review of the current engineering design, drawings and documentation. It is indicated that further detailed hazard and risk analysis will be undertaken throughout the project lifecycle. The application was also accompanied by the following supporting documents:

- A Quantitative Risk Assessment.
- A Preliminary MATTE Assessment.
- An Oil and Hazardous and Noxious Substances Spill Plan.

10.11.6. The EIAR identifies flash fires and jet fires as credible scenarios for accidental releases of natural gas, while risks of explosive overpressures are described as negligible given the open nature of the site. Diesel oil leakage creates a risk of a pool fire. Accidental damage or malfunction of the batteries can create potential for the battery to ignite, and result in a fire and or explosion. There is a risk to the environment from leakage of pollutants or firewater from the site. Table 14-1 of the EIAR sets out the screening for dangerous substances and major accident hazard scenarios. Tables 14-2 and 14-3 identify potential major accidents and hazards/ mitigation measures in respect of each potential major accident hazard (MAH)/ major accident to the environment (MATTE) scenario and natural disaster scenarios.

10.11.7. Section 14.9 summarises the key preventative and mitigating measures to prevent major accidents and disasters as follows:

- The CEMP will be updated by the Contractor in accordance with any conditions of planning.
- The design, construction, and operation of the Proposed Development will be in accordance with international, national and established industry codes, standards and practice.
- A detailed chemical inventory and risk assessments for all materials handled on-site will be produced.
- All fuels and chemicals stored on-site will be subject to the Safety, Health and Welfare at Work (Chemical Agents) Regulations.
- The Proposed Development will comply with the requirements of all relevant health, safety and environmental legislation including COMAH.
- Regular maintenance and inspection of all facilities will be carried out.
- A firewater retention pond is proposed and sized according to the EPA Guidance.
- Secondary fuel (distillate oil) will be stored with tertiary containment.

- An Environment Management System (EMS) will set out the requirements and procedures required to ensure that the Proposed Development is operating to appropriate standards.
- Hazardous and polluting liquids such as transformer oils will be stored in tanks located in bunds.
- Distillate Oil unloading bays will be designed to contain spillages.
- Storage tank level indicators and oil detection sensors in bunds will be provided with alarms.
- Class 1 hydrocarbon interceptors will be provided in the surface water drainage system.
- Measures to isolate the surface water drainage system will be provided to prevent discharge of contaminated water.

10.11.8. The EIAR acknowledges the potential for residual effects following implementation of identified mitigation measures, however, hazardous events are described as extremely unlikely will be subject to the final QRA study report. The Quantitative Risk Assessment (QRA) accompanying the application concludes, having regard to 2010 HSA Land-use Planning guidance, that:

- There are no incompatible land uses in any of the three LUP zones.
- The individual risk at the nearest residential property is negligible.
- The Expectation Value for members of the public is 0, as no lethality is expected in the populated areas near to the site.

On the basis of this conclusion, the findings of the QRA appear to be reasonable.

10.11.9. The Major Accidents to the Environment (MATTE) assessment provides a qualitative assessment of possible scenarios for accidental releases, and indicates that large quantities of the following materials have the potential to cause a MATTE:

- Diesel.
- Transformer Oil.
- Firefighting water.

There is no MATTE associated with the natural gas used on the facility as it does not have any liquid constituents. All of the identified MATTE events are described as low/ very low risk, as measures for prevention of discharge to the estuary are present within the plant design and operating philosophy.

10.11.10. The EIAR notes that facilities will be designed to incorporate separation distances to prevent major accidents such as fires and explosions originating in one area from spreading to another area or escalating via domino effects, based on established engineering guidance for industrial site layout. The Tarbert and Moneypoint facilities are located at a distance which, should a major accident such as a fire or explosion occur, would not have an effect on the Proposed Development.

10.11.11. There is the potential for a major accident scenario associated with significant damage to the BESS, which involves the application of firewater and subsequent release to the environment. I note that the BESS does not fall under the COMAH regulations and will be subject to separate fire safety regulatory controls.

10.11.12. The EIAR notes that if a release of natural gas does not ignite immediately it may form a cloud, which could enter an area of confinement and contact an active source of ignition, causing a Vapour Cloud Explosion (VCE), which could generate potentially harmful overpressures. However, an impact to the pipeline would likely create an opening to the surface for natural gas to escape and as the area is well ventilated it is unlikely for such a vapour cloud to form.

Vulnerability

10.11.13. In terms of the vulnerability of the project to potential disasters/ accidents, including both natural and man-made disasters I note that the application is accompanied by a flood risk assessment, which concludes that with the exception of crossings of Ralappane Stream by the access road, there is no development proposed within either Flood Zones A or B. The proposed watercourse crossings have been sized to have a minimal impact on the hydraulic regime in the area and provide an adequate freeboard for a 1% AEP fluvial event. The site is also remote from other major accident sites and would not be at risk from events at such sites.

Conclusion

10.11.14. The EIAR and supporting documentation identify and assess the potential for major accidents and hazards and the likely significant effects arising these. Based on the information contained in the documentation and the revisions submitted in response to the submission by the HSA, the conclusions appear to be reasonable. While the report of the HSA identified a number of areas of clarification, I am satisfied that the applicant has addressed these issues in their response to the submission. I consider that any other matters arising in this area would be most properly resolved as part of the HSA role as the competent authority under the 2015 regulations. Therefore, I consider that the requirements under the EIA Directive have been met in the submitted documentation.

10.12. Other Matter Arising

Legal/ Ownership

10.12.1. One of the third parties contends that the applicant does not have legal interest in the land that is the subject of this application, however no clear information contradicting them is presented. On the basis of the information available, I am satisfied that there is no clear information presented to conclude that the applicant does not have sufficient legal interest in the application site, and I am satisfied that the applicant has provided sufficient evidence of their legal interest for the purposes of the planning application and decision. In any case, this is a matter to be resolved between the relevant parties, having regard to the provisions of S.37H(6) of the Planning and Development Act, 2000 (as amended).

11.0 Environmental Impact Assessment (EIA)

11.1. Statutory Provisions

- 11.1.1. This application was submitted to the Board after the commencement of the European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018 which transpose the requirements of Directive 2014/52/EU into Irish law. The application was accompanied by an Environmental Impact Assessment Report (EIAR), which is mandatory for the development in accordance with s.37E(1) of the Planning and Development Act, as amended, and Schedule 5, Part 1, 2(a) of the 2001 regulations, as amended.
- 11.1.2. The EIAR accompanying the application contains four volumes. Volume 1 comprises a Non-Technical Summary, Volume 2 is the Main Text, Volume 3 contains Figures and Volume 4 contains Appendices.
- 11.1.3. Chapters 1 & 2 of Volume II set out an introduction to the EIAR including the methodology used, and a description of the proposed development and works. Chapter 3 considers the need for the project, site selection and consideration of alternatives. Chapter 4 describes relevant Energy and Planning Policy.
- 11.1.4. The likely significant direct and indirect effects of the proposed development are considered in the remaining chapters of Volume II, which address the following headings, in accordance with Article 3 of the EIA Directive 2014/52/EU:
- Chapter 5 Land, Soils and Geology
- Chapter 6 Water Chapter
- 7A Marine Ecology Chapter
- 7B Terrestrial Ecology
- Chapter 8 Air Quality
- Chapter 9 Airborne Noise and Groundborne Vibration
- Chapter 10 Landscape and Visual
- Chapter 11 Traffic and Transport
- Chapter 12 Cultural Heritage
- Chapter 13 Population and Human Health

Chapter 14 Major Accidents and Disasters

Chapter 15 Climate

Chapter 16 Waste Management

Chapter 17 Material Assets

Chapter 18 Interactions

Chapter 19 Schedule of Environmental Commitments

- 11.1.5. In terms of cumulative impacts, the EIAR states that the new substations, 220kv electricity transmission connection, and the medium voltage (10/ 20kv) electricity connection have been considered as part of the cumulative impact assessment within each chapter. The Board should note that a possible future Strategic Gas Reserve Facility and data centres will be subject to future consents on the lands reserved in the wider area. In addition, I note that various chapters consider potential cumulative effects with other projects in the area including the Cross Shannon 400kV cable project and various energy infrastructure projects in the area.
- 11.1.6. Chapter 14 considers the risk of major accidents and disasters, while the application is also accompanied by a Quantitative Risk Assessment, a MATTE Assessment, and a Spill Plan. Section 10.11 of this report considers the issue of major accidents and disasters in detail.
- 11.1.7. Chapter 6 of the EIAR, Water, considers the risk of flooding and a detailed flood risk assessment is contained in Appendix 6.3.
- 11.1.8. Chapter 1 identifies the EIAR contributors and sets out their relevant qualifications and experience. This is supplemented by additional information under the relevant chapter headings. I am satisfied that the EIAR has been prepared by competent experts to ensure its completeness and quality, and that the information contained in the EIAR and supplementary information provided by the developer, adequately identifies and describes the direct, indirect and cumulative effects of the proposed development on the environment, and complies with article 94 of the Planning and Development Regulations 2000, as amended.
- 11.1.9. In carrying out this EIA, I have examined the information presented by the applicant, including the EIAR, and the submissions made by the planning authority, prescribed bodies and observers during the course of the application. I have also had regard to

relevant legislation and guidance including, Guidelines on the information to be contained in Environmental Impact Assessment Reports (EPA 2022).

11.2. Alternatives

11.2.1. Article 5(1)(d) of the 2014 EIA Directive identifies the requirement to describe the reasonable alternatives studied by the developer, which are relevant to the development and its specific characteristics, and an indication of the main reasons for selecting the chosen option, taking into account the effects of the development on the environment.

11.2.2. Chapter 3.0 of the submitted EIAR deals with Project Need, Site Selection and Consideration of Alternatives, under the following headings:

- Need for the Proposed Development.
- Alternative locations – highlighting the SDL designation of this landbank.
- Alternative layouts – the development is compared with the previously permitted development on this site and concluded to have a reduced environmental impact.
- Alternative processes/ technologies – alternative technologies and processes were considered, in terms of efficiency and emissions. The discharge of wastewater to ground was considered in terms of the suitability of ground conditions.

11.2.3. Having regard to the national, regional and local planning policy and zoning objectives for the area and the planning history relating to the site, it is considered that the requirements with regard to the consideration of alternatives has been adequately addressed in the application documentation.

11.3. Assessment of Likely Significant Direct and Indirect Effects

Chapter 5: Land, Soils and Geology

Impact	Effect/ Magnitude	Mitigation and Monitoring	Residual Effect
Construction Stage			
<p>Construction Stage</p> <p>Changes to Topography - Excavation and Infilling.</p> <p>Excavation and reuse of soil and rock.</p> <p>Vibration from blasting and rock breaking.</p> <p>Use of Natural Resources.</p>	<p>Likely, permanent, direct, negative effect and temporary negative effect during construction works.</p>	<p>Adherence to the provisions of the OCEMP relating to the excavation and management of excavated material.</p> <p>Surface water management and soil and stockpile management, including separation from waterbodies and areas liable to flooding.</p> <p>Geotechnical design, including foundation design and excavation methodologies.</p> <p>Adherence to noise and vibration emission limit values and best practise guidance for activities.</p> <p>Application of blasting charge limits, and only single blasts in each event, with monitoring in place.</p> <p>Reuse of surplus material on-site with no importation of soil material, and import of clean, locally sourced aggregate.</p>	<p>Not significant</p>

		Management of groundwater flows.	
Accidental spills and leakage of oils and fuels.	<p>Spillages unlikely but confined to one-off releases.</p> <p>Temporary direct negative impact on underlying soils.</p>	<p>Hazardous materials will be managed/ controlled via the OCEMP and stored to prevent/ minimise potential impact on soil.</p> <p>Refuelling of construction vehicles and the addition of hydraulic oils or lubricants within designated areas with appropriate facilities or via a mobile double skinned tank with lockable fittings and onboard spill kit.</p>	Imperceptible
Use of Concrete and Lime	<p>Highly alkaline materials can impact soil quality.</p> <p>Temporary, direct negative impact.</p>	<p>Hazardous materials will be managed and controlled via the OCEMP and stored in bunded areas.</p> <p>Minimise use of cast in-situ concrete.</p> <p>Complete a risk assessment for wet concreting to include measures to prevent discharge of wet concrete, grout, alkaline wastewaters or contaminated storm water to underlying subsoil or to the marine environment.</p> <p>Washout of concrete-transporting vehicles off site, or in managed on-site wash out areas.</p>	Not significant

Operational Stage			
Change from agricultural use or loss of agricultural land.	Permanent, direct, small negative effect.	<p>Location within a large landbank zoned for industrial use.</p> <p>Having regard to the extent of surrounding agricultural lands, the quality of the lands and current low intensity of use, this impact is regarded as being of low magnitude.</p>	Not significant
Spillages of fuel, oil, wastewater or other hazardous substances.	<p>Spillages unlikely but confined to one-off releases.</p> <p>Potential adverse impact on underlying soils or adjoining waterbodies. Direct negative small effect of temporary duration.</p>	<p>Preparation of an operational Environmental Management Plan to include management and control of hazardous materials and storage stored in bunded areas.</p> <p>Secondary containment and spill kits available for other hazardous materials / chemicals.</p> <p>Bunding of diesel fuel tanks for fire water pumps and direct drainage to an oil/ water interceptor prior to discharge to the storm water drainage system. Provide a shut off valve from the generator yard to the external surface water drainage network.</p> <p>Design and separation of drainage systems and</p>	Imperceptible

		adherence to the requirements of EPA licence	
Cumulative Effects			
Strategic Gas Reserve Facility	The Proposed Development is not functionally dependent on the Strategic Gas Reserve Facility.	If works occur concurrently with the proposed development, there is potential for cumulative impacts and effects on land and soils. Taking account of mitigation measures associated with the proposed development, including implementation of best practice standard construction environmental measures and the OCEMP the no significant cumulative construction or operational impacts on land and soils will arise.	
Gas Pipeline	Previously subject to EIA		
Future Data Centre	Will be the subject of a separate application and EIAR/ screening for EIA		
220/ 110kV and 20kV connection to Kilpaddoge and on-site substation	Will be subject to separate planning applications. Envisaged as a cable connection under the public road.		
Conclusion	I have considered all of the submissions, and I am satisfied that impacts that are predicted to arise in relation to Land, Soils and Geology would be avoided managed and mitigated by the measures which form part of the proposed scheme and the proposed mitigation measures. I am satisfied that the proposed development would not have any unacceptable direct, indirect or cumulative impacts in terms of Lands, Soils and Geology.		

Chapter 6: Water

Impact	Effect/ Magnitude	Mitigation and Monitoring	Residual Effect
Construction Stage			
Dewatering - excavation leading to groundwater seepage requiring localised dewatering within 10-50m of cut faces.	Permanent, direct, negative effect.	Localised dewatering will not lead to a net change to the quantities of groundwater discharging to the estuary.	Imperceptible
Sedimentation/ run-off of suspended solids from site works and material stockpiles could adversely impact on surface water and marine environments.	Temporary negative impact on a high sensitivity surface water environment.	<p>Standard construction control measures including implementation of the CEMP.</p> <p>Installation of the drainage system, settlement ponds and surface water outfall prior to the commencement of major works. Runoff from working areas not allowed to discharge to local watercourses.</p> <p>Management of excavated materials. Locate spoil and temporary stockpiles away from waterbodies and areas liable to flooding.</p> <p>Divert runoff from spoil heaps through settlement ponds.</p> <p>Use of clean aggregate fill.</p>	Not significant

		Dynamic estuarine environment will ensure rapid dispersion of sediments.	
Accidental spills and leakage of oils and fuels.	<p>Spillages unlikely but confined to one-off releases.</p> <p>Direct temporary negative impact on fish, aquatic flora and invertebrate communities.</p>	<p>Adherence to CEMP and procedures for management of spills.</p> <p>Use of designated bunded storage areas and handling procedures for all oils, solvents and paints during construction.</p> <p>Availability of spill kits.</p> <p>Refuelling and maintenance of construction vehicles, in appropriate designated area or refuelling outside of designated areas via a mobile double skinned tank with lockable fittings and an onboard spill kit.</p>	Imperceptible
<p>Use of Concrete and Lime</p> <p>PH effects from the use of concrete</p>	<p>High alkalinity lime and concrete can impact surface water quality. Direct negative small temporary, effect.</p>	<p>Hazardous materials will be managed and controlled via the CEMP and stored in bunded areas.</p> <p>Minimise use of cast in-situ concrete.</p> <p>Complete a risk assessment for wet concreting to include measures to prevent discharge of alkaline wastewaters or contaminated storm water to the underlying subsoil, to</p>	Not significant

		<p>surface water courses or to the marine environment.</p> <p>Washout of concrete-transporting vehicles off site, or in managed on-site wash out areas.</p>	
Changes to Groundwater Levels, Flows and Contributions to GWDTEs by Dewatering	Magnitude of any change will depend on the depth and nature of the structures.	Impacts associated with altered groundwater flow regimes are likely to be localised.	Imperceptible
Changes to Flood Risk	Temporary uncontrolled site-runoff leading to an increased flood risk from pluvial sources.	Considering the CEMP this is considered unlikely to occur.	Imperceptible
Operational Stage			
Storage of materials potentially hazardous to the aquatic environment.	Temporary direct negative impact on an extremely high sensitivity surface water environment.	<p>Handling and storage in accordance with IE licence requirements.</p> <p>Spill kits will be available to machine operators, and</p>	Imperceptible

Accidental spills and leaks of hazardous or water-polluting materials discharging to ground or the surface water environment.		<p>they will be trained in their use.</p> <p>Separate and attenuate drainage from paved/ impermeable areas from other stormwater drainage. Discharge via silt traps and Class 1 interceptor with control valves.</p> <p>Store diesel fuel within bunded areas.</p> <p>Fuel will be stored at least 50 m from a waterbody and refuelling will only take place in designated areas, on hardstanding by appropriately trained personnel.</p>	
<p>Flooding risk and drainage discharges to the water environment consisting of:</p> <p>Stormwater runoff;</p> <p>Groundwater discharge from cut faces;</p> <p>Wastewater; and</p> <p>Process effluent streams.</p>	Direct negative impact on an extremely high sensitivity environment	<p>Siting of development outside flood zones A and B.</p> <p>The sizing of watercourse crossings to have minimal impact on the hydraulic regime and negligible impact on the flood regime.</p> <p>Operate and monitor drainage systems in compliance IE licence requirements.</p> <p>Separation of drainage from paved and other impermeable areas from other stormwater drainage.</p>	Not significant

		<p>Drainage systems designed to handle anticipated volumes and incorporate treatment facilities and monitoring equipment (including silt trap, Class 1 hydrocarbon interceptor, a firewater retention facility, wastewater treatment plant and pH adjustment).</p> <p>Modelling indicates that treated effluent will be rapidly diluted and dispersed within a short distance of the outfall, and will not compromise water quality at Ballylongford Bay aquaculture site.</p>	
Cumulative Effects			
Strategic Gas Reserve Facility	Will be the subject of a separate application and EIAR/ screening for EIA	<p>Modelling indicates that following mitigation, natural dispersion in the estuary will ensure that cumulative sediment deposits do not result in significant effects. Taking account of mitigation measures associated with the proposed development, it is not considered that the cumulative construction and operational impacts of all schemes will have significant effects on the water environment.</p> <p>No significant cumulative effects on water quality are likely.</p>	
Gas Pipeline	Previously subject to EIA		
Future Data Centre	Will be the subject of a separate application and EIAR/ screening for EIA		
220/ 110kV and 20kV connection to	Will be subject to separate planning applications. This is		

Kilpaddoge and on-site substation	envisaged to be via a cable connection under the public road.	
Conclusion	I have considered all of the submissions, and I am satisfied that impacts that are predicted to arise in relation to Water would be avoided, managed and mitigated by the measures which form part of the proposed scheme and the proposed mitigation measures. I am satisfied that the proposed development would not have any unacceptable direct, indirect or cumulative impacts in terms of Water.	

Chapter 7A: Marine Ecology

Impact	Effect/ Magnitude	Mitigation and Monitoring	Residual Effect
Construction Stage			
Potential effect on marine habitats, marine mammals and fish populations due to release of sediments or pollutants during construction.	Small, localised negative impact on an extremely high sensitivity environment.	<p>Implementation of the CEMP, including standard construction best practice mitigation measures for the management of surface waters.</p> <p>Natural turbidity levels in the estuary and the natural abilities of species to navigate turbid waters.</p> <p>Naturally hydrodynamically active nature of the estuary, giving rise to rapid dispersion and low levels of deposition. Short-term duration of activities.</p>	Not significant

Underwater noise	Localised negative impact on marine mammals (including Bottlenose dolphin species of the Lower River Shannon SAC)	Adherence to 2014 DAHG Guidelines will address potential cumulative effects on Marine Mammals. No long-term cumulative impact on marine ecology or water quality will occur.	Not significant
Seabed habitat loss	Reversible Effects	Natural recolonisation of reinstatement of the affected habitat areas.	Not significant
Operational Stage			
Discharge of wastewater and Power Plant Process Heated Water Effluent during operations	Slight long-term, negative impact on water quality and prey species.	Adherence to IE licence requirements. Monitoring and PH dosing prior to discharge at effluent pump. Dispersion effects in the estuary within short distance of discharge point.	Not significant
Cumulative Effects			
Strategic Gas Reserve Facility	Will be the subject of a separate application and EIAR/ screening for EIA	If works occur concurrently with the proposed development, there is potential for cumulative impacts and effects on marine biodiversity features. Construction activities will be planned and phased and implementation of best practice standard construction environmental measures and the CEMP will ensure no	
Gas Pipeline	Previously subject to EIA		
Future Data Centre	Will be the subject of a separate		

	application and EIAR/ screening for EIA	significant cumulative effects on biodiversity arise.
220/ 110kV and 20kV connection to Kilpaddoge and on-site substation	Will be subject to separate planning applications. Envisaged as a cable connection under the public road.	Adherence to 2014 DAHG Guidelines will address potential cumulative effects on Marine Mammals. No long-term cumulative impact on marine ecology or water quality will occur.
L1010 Road works	Approved under separate consent and environmental assessment process.	Implementation of a Construction Traffic Management Plan for the works.
		Taking account of the mitigation measures associated with the proposed development, it is not considered that cumulative construction and operational impacts will have significant effects on the environment.
Conclusion	I have considered all of the submissions, and I am satisfied that impacts that are predicted to arise in relation to Marine Ecology would be avoided, managed and mitigated by the measures which form part of the proposed scheme and the proposed mitigation measures. I am satisfied that the proposed development would not have any unacceptable direct, indirect or cumulative impacts in terms of Marine Ecology.	

Chapter 7B: Terrestrial Ecology

Impact	Effect/ Magnitude	Mitigation and Monitoring	Residual Effect
Construction Stage			
General disturbance and displacement due to construction activity and lighting.	Short-term, local negative impact.	Implementation of CEMP and appointment of an ECoW. Adherence to published guidance, including:	Not significant

		<p>CIRIA guidance on water pollution,</p> <p>IFI guidelines on protection of fisheries,</p> <p>Bat Conservation Ireland guidance on lighting design, and</p> <p>NRA Guidance for treatment of badgers, bats and otters.</p> <p>Timing of works and pre-development survey of the site.</p> <p>Adherence to licensing requirements.</p>	
Bridge and culvert construction with potential impacts on water quality, habitat loss/severance, and flow.	Potential negative impacts on local watercourses and dependent species.	<p>Implementation of CEMP and appointment of an ECoW.</p> <p>Surface water management measures.</p> <p>No in-stream works in the Ralappane Stream and design and adherence to IFI guidelines.</p> <p>Timing of works and pre-construction surveys.</p> <p>Appropriate planting of disturbed ground.</p>	Not significant
Loss or removal of foraging or breeding habitats.	Long term adverse effect on local habitats and dependent species.	Implementation of CEMP and appointment of an ECoW.	Not significant

		<p>Timing of vegetation clearance and pre-development surveys.</p> <p>A detailed method statement in respect of disturbance to cliff habitat from machinery.</p> <p>Reinstatement of disturbed areas using native species and site landscaping.</p> <p>Clear delineation and fencing off of habitat conservation areas and retained trees/ vegetation.</p> <p>Relative low sensitivity of terrestrial habitats and availability of lands in the wider area.</p>	
Badger - removal of two outlier setts/ mortality/ injury, disturbance and displacement.	Significant, long-term negative effect at a local level.	<p>Implementation of CEMP and appointment of an ECoW.</p> <p>Adherence to NRA "Guidelines for the Treatment of Badgers Prior to the Construction of National Road Schemes".</p> <p>A methodology for the exclusion of Badgers from affected setts and displacement of Badgers to artificial setts will be agreed with the NPWS as part of a licence application.</p>	Moderate local significance

		<p>Timing of works.</p> <p>Monitoring of Badger setts during construction and a five-year post-construction monitoring programme.</p>	
<p>Bats - Disturbance/ displacement, loss of foraging habitat and potential roost sites.</p> <p>Loss of roost sites of low potential.</p>	<p>Negative, long-term impacts at a local level.</p>	<p>Implementation of CEMP and appointment of an ECoW.</p> <p>Adherence to NRA 'Guidelines for the Treatment of Bats during the Construction of National Road Schemes, and Bat Mitigation Guidelines for Ireland: Irish Wildlife Manuals (updated 2022).</p> <p>The low roost potential of trees and structures to be removed and pre-development surveys to be undertaken.</p> <p>Timing and management of tree removal works.</p> <p>Adherence to any derogation licence requirements.</p> <p>Construction and operational lighting design in line with Bat Conservation Ireland guidance.</p> <p>Erection of bat boxes.</p>	<p>Not significant</p>

<p>Otter - Disturbance/ displacement, loss of foraging habitat.</p>	<p>Potential negative and long-term at a local level.</p>	<p>Implementation of CEMP and appointment of an ECoW.</p> <p>Pre-construction surveys for otter holts.</p> <p>Design of works, including timing to avoid potential impacts.</p> <p>Adherence to any derogation licence requirements.</p> <p>Adherence to NRA publication, "Guidelines for the Treatment of Otter prior to the Construction of National Road Schemes".</p> <p>Species ability to habituate to disturbance.</p>	<p>Not significant</p>
<p>Common Frog - Habitat loss/ mortality/ injury</p>	<p>Potential negative, not significant and long-term at a local level.</p>	<p>Pre-development surveys and removal to alternative wet grassland habitat under licence.</p> <p>Implementation of CEMP and appointment of an ECoW.</p>	<p>Not significant</p>
<p>Birds - Habitat loss, mortality / injury, Disturbance/ displacement.</p> <p>Direct loss of breeding / foraging habitat.</p>	<p>Negative, not significant to moderate and long-term impacts.</p>	<p>Low numbers of estuarine birds recorded at the site.</p> <p>Limited value and extent of intertidal foraging habitat and the limited foraging potential of the site.</p>	<p>Not significant</p>

		<p>Implementation of CEMP and appointment of an ECoW.</p> <p>Pre-development survey of buildings for nesting birds.</p> <p>Timing of works, including site clearance.</p> <p>Erection of nesting boxes.</p> <p>A detailed method statement specifying the timing of blasting operations will be drawn up by the ECoW and agreed with the NPWS prior to commencement of works.</p> <p>Lighting design.</p> <p>Also, measures identified above in respect of Chapter 6 Water and Chapter 7a Marine Ecology.</p>	
Biodiversity and landscaping - Habitat loss	Long-term slight positive, local impact.	<p>The limited sensitivity and importance of habitats on the site.</p> <p>Implement the landscaping plan including native planting and a more diverse native wildflower/ grass mix.</p> <p>Biodiversity and landscaping management regime.</p> <p>Insect nesting boxes.</p>	Not significant
Invasive species	Not significant	Appointment of an ECoW.	Not significant

		<p>Pre-construction invasive species survey and development of an Invasive Species Management Plan, if required.</p> <p>Implement bio-security measures during construction.</p>	
Operational Stage			
General - Displacement/ disturbance	Long-term, local negative impacts.	<p>Adherence to IE licence requirements.</p> <p>Development and implementation of an environmental management plan, to include management of potentially contaminating materials.</p> <p>Drainage design (see Chapter 6 water).</p> <p>Lighting design in accordance with identified guidance.</p> <p>Control of noise and vibration as detailed in Chapter 9 – Noise and Vibration</p>	Not significant
Cumulative Effects			
Strategic Gas Reserve Facility	Will be the subject of a separate application and EIAR/ screening for EIA	<p>If works occur concurrently with the proposed development, there is potential for cumulative impacts and effects on ecological features.</p> <p>Taking account of the mitigation measures associated with the proposed development,</p>	

Gas Pipeline	Previously subject to EIA. No rare habitats or valuable habitats for rare species were recorded along the route.	including implementation of best practice standard construction environmental measures and the CEMP, it is not considered that significant cumulative effects will arise.
Future Data Centre	Will be the subject of a separate application and EIAR/ screening for EIA	
220/ 110kV and 20kV connection to Kilpaddocke and on-site substation	Subject to separate planning applications and envisaged to be via a cable connection under the public road.	
Conclusion	I have considered all of the submissions, and I am satisfied that impacts that are predicted to arise in relation to terrestrial ecology would be avoided, managed and mitigated by the measures which form part of the proposed scheme and the proposed mitigation measures. I am satisfied that the proposed development would not have any unacceptable direct, indirect or cumulative impacts in terms of terrestrial ecology.	

Chapter 8: Air Quality

Impact	Effect/ Magnitude	Mitigation and Monitoring	Residual Effect
Construction Stage			
Dust and particulate emissions during construction activity and from construction phase traffic.	Temporary negative local impacts on air quality.	<p>Separation of site works from human receptors and habitats which are sensitive to air quality impacts.</p> <p>Short-term nature of activities.</p> <p>Implementation of the CEMP, incorporating IAQM recommendations.</p> <p>Standard best practice dust mitigation measures and production and adherence to a site-specific dust minimisation control plan (Dust Management Plan).</p>	Not significant
Operational Stage			
Combustion emissions associated with generation of heat and power.	Long-term slight negative impact on air quality.	<p>Adherence to IE license limit values.</p> <p>Modelling indicates no exceedance of air quality standard values or significant contribution to N deposition.</p> <p>See also Climate Chapter 15.</p> <p>Emission release heights to encourage good dispersion.</p>	Not significant

		<p>Separation between the main continuous sources of emissions and sensitive receptors.</p> <p>Non-continuous nature of operations of the power plant.</p> <p>Use of natural gas as the primary fuel.</p> <p>Use of low and ultra-low sulphur liquid fuel only for start-up, maintenance and emergency purposes.</p>	
Cumulative Effects			
Operational emissions with other power plants in the area	Moneypoint and Tarbert Power plants currently operate using coal and Heavy Fuel Oil.	<p>Due to the distance of the limited number of receptors to the main construction activities associated with the Proposed Development significant cumulative air quality effects are not considered likely and no significant long-term impact on pollutant concentrations are anticipated.</p> <p>Commitment of the Applicant to control dust emissions as far as reasonably practicable, the risk of the Proposed Development to contribute to cumulative dust effect is not considered likely.</p> <p>Taking account of the mitigation measures associated with the proposed development it is not considered that significant cumulative construction effects will arise.</p> <p>Development of modern, efficient plant of the nature proposed will facilitate the closure or older plant at Moneypoint and Tarbert such</p>	
Strategic Gas Reserve Facility	Will be the subject of a separate application and EIAR/ screening for EIA.		
L-1010 upgrade	Works could occur concurrently with site preparation works at the subject site		
Gas Pipeline	Previously subject to EIA.		
Future Data Centre	Will be the subject of a separate		

	application and EIAR/ screening for EIA	that significant cumulative air quality effects are not considered likely and no significant long-term impact on pollutant concentrations are anticipated.
220/ 110kV and 20kV connection to Kilpaddoge and on-site substation	Will be subject to separate planning applications. This is envisaged to be via a cable connection under the public road.	No operational emissions associated with the 220kV connection, medium voltage (10/ 20kV) connection are likely.
Conclusion	I have considered all of the submissions, and I am satisfied that impacts that are predicted to arise in relation to air quality would be avoided, managed and mitigated by the measures which form part of the proposed scheme and the proposed mitigation measures. I am satisfied that the proposed development would not have any unacceptable direct, indirect or cumulative impacts in terms of air quality.	

Chapter 9: Airborne Noise and Groundborne Vibration

Impact	Effect/ Magnitude	Mitigation and Monitoring	Residual Effect
Construction Stage			
Construction Noise from site clearance and excavation works, development works, including piling activity and vibration.	Short-term negative local impacts.	Implementation of CEMP. Scheduling/ timing of works and separation from residential receptors. Locate plant and activities away from sensitive receptors.	Not significant

		<p>All plant shall be regularly maintained and shut down when not in use.</p> <p>Long-term noise monitoring stations and vibration monitors on the construction site boundary.</p> <p>Protocol for community relations and management of noise complaints.</p>	
Construction Traffic Noise including disturbance between Tarbert and the site.	Temporary, localised, negative impacts.	<p>Temporary nature of construction activity.</p> <p>Agreement of a CTMP, to include the scheduling of traffic movements.</p> <p>Coordinate construction traffic from this and concurrent development to minimise noise impacts.</p>	Not significant
Blasting Induced Noise/ Air Overpressure & Vibration	Temporary, local negative impacts.	<p>Adherence to BS6472-2:2008 CoP.</p> <p>Process management and a dedicated Public Liaison Officer.</p> <p>Protocol for community relations including prior warning of blasting and management of complaints.</p> <p>Application of blasting charge limits.</p> <p>Only single blasts in each event, with monitoring in place.</p>	Not significant

Operational Stage			
Operational Noise	Long-term local slight negative impact.	<p>Separation from human receptors.</p> <p>Application of standard forms of mitigation (inc. silencers, plant selection, relocation, barriers enclosures).</p> <p>Compliance with the conditions of the Industrial Emissions licence.</p> <p>Long-term and short-term monitoring.</p>	Not significant
Operational Traffic Noise	Not significant - negative.	<p>Best practice measures including speed limits on internal roads.</p> <p>Low volumes of operational traffic.</p>	Not significant
Cumulative Effects			
L-1010 upgrade	Works could occur concurrently with site preparation works at the subject site	<p>Works associated with the L1010 road widening will not overlap with the main noise generating processes involved in the construction phase.</p> <p>Implementation of best practice standard construction environmental measures and the CEMP for the proposed development will ensure no significant cumulative effects will result.</p> <p>No operational emissions associated with the 220 kV connection, medium voltage (10/ 20</p>	
Strategic Gas Reserve Facility	Will be the subject of a separate application and EIAR/ screening for EIA.		
Gas Pipeline	Previously subject to EIA. No		

	significant effects identified.	kV) connection and Shannon Pipeline are likely.
Future Data Centre	Will be the subject of a separate application and EIAR/ screening for EIA.	No significant cumulative effects in respect of noise and vibration are expected
220/ 110kV and 20kV connection to Kilpaddoge and on-site substation	Will be subject to separate planning applications. This is envisaged to be via a cable connection under the public road.	
Cross Shannon 400 kV Cable Project	Previously approved.	
Transition and conversion of the existing 900MW electricity generating station from coal to heavy fuel oil at Moneypoint Generating Station	Approved under separate consent and environmental assessment process (319080)	
Temporary Emergency power generation at Tarbert (315838)	Approved under separate consent and environmental assessment process.	
10 year planning permission for the proposed Open Cycle Gas Turbine	Approved under separate consent and environmental	

(OCGT) power plant fuelled by Hydrotreated Vegetable Oil (HVO) at Tarbert (318540)	assessment process.	
Conclusion	I have considered all of the submissions, and I am satisfied that impacts that are predicted to arise in relation to noise and vibration would be avoided, managed and mitigated by the measures which form part of the proposed scheme and the proposed mitigation measures. I am satisfied that the proposed development would not have any unacceptable direct, indirect or cumulative impacts in terms of noise and vibration.	

Chapter 10: Landscape and Visual

Impact	Effect/ Magnitude	Mitigation and Monitoring	Residual Effect
Changes to the baseline landscape and views	Long-term, medium/ high negative local impacts.	<p>Existing industrial/ energy infrastructure characterising this landscape and the zoning of the lands for industry.</p> <p>Landscape screening of lower sections of proposed buildings and the proposed access road.</p> <p>Façade colour scheme and lighting design.</p> <p>Measures for the protection of existing trees.</p>	Moderate - Significant

Cumulative Effects		
Strategic Gas Reserve Facility	Will be the subject of a separate application and EIAR/ screening for EIA.	Development on adjoining lands will be subject to separate assessment and cumulative effects will be assessed as part of that application. Potential significant landscape and visual impact.
Gas Pipeline	Previously subject to EIA. No significant effects identified.	If works occur concurrently with the proposed development, there is potential for cumulative construction impacts and effects. Proposed gas pipeline or routing of UGC along public roads should not result in additional operational landscape or visual effects. On-site substation and associated infrastructure will have additional effects however, in the context of the proposed development such infrastructure would not be significant in scale or contribute significantly to landscape and visual effects. Road upgrade works may have cumulative landscape impacts due to loss of vegetation; however, such impacts are not likely to be significant long-term in nature and will be generally at a remove from the main development site. Considering the existing industrial nature and the variety of building types and structures within the existing Tarbert and Moneypoint Power Station compounds, impacts are not likely to be significant. Anticipated that cumulative landscape and seascape effects between the Proposed Development and offshore wind development will be low.
L-1010 upgrade	Works could occur concurrently with site preparation works at the subject site.	
Future Data Centre	Will be the subject of a separate application and EIAR/ screening for EIA.	
220/ 110kV and 20kV connection to Kilpaddoge and on-site substation	Will be subject to separate planning applications. This is envisaged to be via a cable connection under the public road.	
Temporary Emergency power generation at Tarbert (315838)	Approved under separate consent and environmental assessment process.	No significant in-combination effects likely.
Moneypoint Transition and	Approved under separate consent	

Conversion of the Existing 900 MW Power Station	and environmental assessment process.	
ESB Green Atlantic at Moneypoint - Offshore Wind Farm	Will be the subject of a separate application and EIAR/ screening for EIA.	
Conclusion	I have considered all of the submissions, and I am satisfied that impacts that are predicted to arise in relation to visual amenity would be avoided, managed and mitigated by the measures which form part of the proposed scheme and the proposed mitigation measures. I am satisfied that the proposed development would not have any unacceptable direct, indirect or cumulative impacts in terms of visual amenity.	

Chapter 11: Traffic and Transport

Impact	Effect/ Magnitude	Mitigation and Monitoring	Residual Effect
Construction Stage			
Increased construction traffic flows on the road network resulting in a reduction in junction capacity and increased queuing. Potential congestion in Tarbert.	Negative, short-term local impact.	Existing low traffic volumes on local road network. Upgrade of L1010 prior to the construction phase. Implementation of an agreed CTMP including the routing and timing/ scheduling of traffic movements. Coordinate construction traffic from this and concurrent development to minimise traffic and noise impacts. Appointment of a logistic manager. Short duration of peak construction traffic.	Not Significant
Operational Stage			
Increased traffic on the network reducing junction capacity.	Neutral	Existing low traffic volumes on road network and relatively low operational traffic volumes. Junction Analysis demonstrates that the existing network has adequate capacity. Preparation of a MMP.	Imperceptible

Cumulative Effects		
L1010 upgrade	Works could occur concurrently with site preparation works at the subject site.	<p>If works occur concurrent with the proposed development, there is potential for cumulative construction impacts and effects on traffic and transport/ flows.</p> <p>Construction activity unlikely to overlap significantly with temporary emergency development at Tarbert Power Station.</p> <p>Construction activities will be planned and phased with associated developments.</p> <p>Subject to implementation of identified mitigation measures including implementation of an agreed CTMP and measures identified in the OCEMP, significant cumulative effects are not considered likely. There are potential beneficial effects arising from the upgrade of the L1010.</p> <p>Potential overlap in trips from construction works at Tarbert power plant is not expected to result in a significant impact and that the junctions will have capacity to deal with the additional traffic.</p> <p>No significant cumulative operational effects are likely.</p>
Gas Pipeline	Previously subject to EIA. No significant effects identified.	
Future Data Centre	Will be the subject of a separate application and EIAR/ screening for EIA	
220/ 110kV and 20kV connection to Kilpaddoge and on-site substation	Will be subject to separate planning applications. This is envisaged to be via a cable connection under the public road.	
Temporary Emergency power generation at Tarbert (315838)	Approved under separate consent and environmental assessment process.	
10 year planning permission for the proposed Open Cycle Gas Turbine (OCGT) power plant fuelled by Hydrotreated	Approved under separate consent and environmental assessment process.	

Vegetable Oil (HVO) at Tarbert (318540)		
Conclusion	I have considered all of the submissions, and I am satisfied that impacts that are predicted to arise in relation to traffic and transport would be avoided, managed and mitigated by the measures which form part of the proposed scheme and the proposed mitigation measures. I am satisfied that the proposed development would not have any unacceptable direct, indirect or cumulative impacts in terms of traffic and transport.	

Chapter 12: Cultural Heritage

Impact	Effect/ Magnitude	Mitigation and Monitoring	Residual Effect
Construction Stage			
Partial or total removal of heritage assets during site clearance. Effects on the setting of heritage assets.	Potential permanent negative impacts on features of significance.	Adherence to the provisions of the CEMP. Compliance with DAU requirements/ conditions. Areas of excavation around the known archaeological sites and areas will include a 5 m buffer zone as a minimum between the edge of the site and any archaeological features. A topographic survey will be carried out in advance of archaeological excavations to record Shannon potentially significant anomalies.	Moderate significance

		<p>Removal of topsoil will be performed by mini-digger to reduce the potential of damage caused by plant tracking over shallow archaeological features.</p> <p>Full resolution of all archaeological sites and areas identified during archaeological testing at the pre-construction phase.</p> <p>A Method Statement for Archaeological Works will be agreed with the NMS in compliance with the National Monuments Acts and Policy and Guidelines.</p> <p>Archaeological fieldwork and monitoring of ground works by a suitably qualified and licensed Archaeological contractor.</p> <p>A post-excavation assessment will be undertaken in accordance with DCHG/ NMS advice</p> <p>Embedded mitigation comprising a buffer zone around CH10 Ringfort (KE003-004), defined by permanent fencing.</p>	
Cumulative Effects			
Strategic Gas Reserve Facility	Will be the subject of a separate	Other developments will involve excavation with potential cumulative effects on cultural	

	application and EIAR/ screening for EIA.	<p>heritage. Construction activities will be planned and phased and implementation of best practice standard and DAU requirements and the CEMP for the development will ensure no significant cumulative effects will result.</p> <p>Development on adjacent lands will be subject to separate assessment and cumulative effects will be assessed as part of that application. The visual presence of the data centre combined with the visual presence of the completed Proposed Development could combine to create a cumulative impact upon the settings of Lookout Post/ Searchlight Emplacement (RPS-KY-087) and Ralappane House (RPS KY 003-001), although intervening distances and the topography of the land will reduce any possible cumulative impact.</p>
L1010 upgrade	Additional excavations could have further impacts on cultural heritage.	
Gas Pipeline	Previously subject to EIA. Additional excavations could have further impacts on cultural heritage.	
Future Data Centre	Will be the subject of a separate application and EIAR/ screening for EIA	
220/ 110kV and 20kV connection to Kilpaddoge and on-site substation	Will be subject to separate planning applications. Excavations could impact on cultural heritage.	
Conclusion	While the development will result in the removal/ excavation of number of archaeological features, I note the submission of the DAU on the proposals. I have considered all of the submissions, and I am satisfied that impacts that are predicted to arise in relation to cultural heritage would be avoided, managed and mitigated by the measures which form part of the proposed scheme and the proposed mitigation measures. I am satisfied that the proposed development would not have any unacceptable direct, indirect or cumulative impacts in terms of cultural heritage.	

Chapter 13: Population and Human Health

Impact	Effect/ Magnitude	Mitigation and Monitoring	Residual Effect
Construction Stage			
Land Use – loss of agricultural grazing land	Long-term, slight negative effects.	None	Not Significant
Severance	Negligible short-term adverse impact.	Implementation of the Construction Traffic Management Plan, including the routing of construction traffic.	Imperceptible
Potential increase in employment during construction	Short-term, moderate positive local effects.	None required	Moderate positive
Impacts from dust, construction traffic, noise and vibration from blasting and rock breaking.	Short-term, slight negative local effect.	Separation of mains works area from human receptors. Mitigation and monitoring measures detailed in Chapter 8 - Air Quality and Chapter 9 - Noise and Vibration. Adherence to a Construction Traffic Management Plan.	Not significant
Operational Stage			
Impacts due to loss/ change of use of agricultural land and on views from Wild Atlantic Way.	Long-term, slight local negative impact.	Zoning of lands for industrial use and low intensity of existing uses on the lands. Existing industrial/ energy infrastructure characterising this landscape.	Slight

		<p>Mitigation and monitoring measures detailed in Chapter 10 – Landscape and Visual Impacts.</p> <p>Separation from tourist routes and protected views.</p>	
Potential increase in employment during operation & contribution to retained population.	Long-term, moderate positive local effects.	None required	Slight positive
Generation of GHGs leading to climate change. (also, refer to Chapter 15 - Climate below).	Negative, long-term slight impacts.	<p>Undertake operations and monitoring in accordance with all legal, regulatory and licence conditions.</p> <p>Ensure measures in the CEMP related to climate change resilience are implemented accordingly.</p> <p>Operation of the power plant in accordance with TSO rules to support greater renewal penetration.</p> <p>Embedded mitigation measures are set out in Chapter 15 - Climate.</p>	Slight negative
Potential risk to public health from a major accident or disaster.	Significant adverse effects.	<p>Compliance with HSA requirements under the COMAH regulations 2015, and on-going regulation/ monitoring.</p> <p>Design adherence to industry best practise.</p>	Not significant

		Separation distances from public/ residential receptors.	
Cumulative Effects			
Strategic Gas Reserve Facility	Will be the subject of a separate application and EIAR/ screening for EIA.	<p>If works occur concurrently with the proposed development, there is potential for cumulative construction impacts and effects on traffic and transport and air quality.</p> <p>Construction activities will be planned and phased, and subject to implementation of best practice standard construction environmental measures and the CEMP for the Proposed Development, no significant cumulative effects will result. There are potential beneficial cumulative effects with the upgrade of the L1010.</p> <p>There is potential for increased employment creation and economic activity during construction and operational stages, with potential to attract/ retain population.</p> <p>Modelling indicates that cumulative operation with the existing and proposed operations at Moneypoint and Tarbert will not result in any exceedance of air quality standards.</p>	
L1010 upgrade	To be undertaken by KCC.		
Gas Pipeline	Previously subject to EIA. No significant effects identified.		
Future Data Centre	Will be the subject of a separate application and EIAR/ screening for EIA.		
220/ 110kV and 20kV connection to Kilpaddoge and on-site substation	Will be subject to separate planning applications.		
Temporary Emergency power generation at Tarbert (315838)	Approved under separate consent and environmental assessment process.		
10 year planning permission for the proposed Open Cycle Gas Turbine (OCGT) power	Approved under separate consent and environmental assessment process.		

plant fuelled by Hydrotreated Vegetable Oil (HVO) at Tarbert (318540)		
Moneypoint Transition and Conversion of the Existing 900 MW Power Station	Approved under separate consent and environmental assessment process.	
Conclusion	I have considered all of the submissions, and I am satisfied that impacts that are predicted to arise in relation to population and human health would be avoided, managed and mitigated by the measures which form part of the proposed scheme and the proposed mitigation measures. I am satisfied that the proposed development would not have any unacceptable direct, indirect or cumulative impacts in terms of population and human health.	

Chapter 14: Major Accidents and Disasters

Impact	Effect/ Magnitude	Mitigation and Monitoring	Residual Effect
Accidental release of natural gas to atmosphere, with potential for fire/ explosion.	Unlikely but potentially high adverse effect.	<p>Design and operation in line with industry standards and adherence to HSA requirements.</p> <p>Fire control systems and firewater management design.</p> <p>Separation from habitation/ human receptors.</p> <p>Gas pipelines to have integral isolation valves to isolate the inventory and</p>	Not significant

		<p>reduce the consequences of an accident.</p> <p>Appropriate separation between uses on-site.</p> <p>Design having regard to ATEX Directives (2014, 1999) and relevant industrial standards.</p> <p>On-site training and emergency plans.</p>	
Lithium and other metal ions / organic and chemical materials in BESS	Unlikely but potential adverse effect.	<p>Design of the BESS will be to current best practice to ensure that thermal runaway risks are minimised.</p> <p>A comprehensive fire detection and firefighting system will be provided.</p>	Not significant
Loss/ spillage of other contaminants. Potential for release of contaminants in firewater.		<p>Adherence to HSA requirements for design and management.</p> <p>Stormwater design and management.</p> <p>Adherence to EPA Guidance on Firewater Retention and for the Storage and Transfer of Materials for Scheduled activities.</p> <p>Emergency plans and firefighting strategy.</p>	Not significant

Potential lightning strike or aircraft strike as an ignition source.	No significant risk	Location away from national and international flight paths.	Not significant
Flood risk/ climate impacts.	No significant risk	Location outside flood zones A and B. Design takes account of climate change impacts and potential sea level rise.	Not significant
Cumulative Effects			
Strategic Gas Reserve Facility	Will be the subject of a separate application and EIAR/ screening for EIA.	Significant cumulative effects are unlikely subject to the design and operation of the developments in accordance with industry standards and HSA requirements.	
Future Data Centre	Will be the subject of a separate application and EIAR/ screening for EIA		
Gas Pipeline	Previously subject to EIA. No significant effects identified.		
Existing COMAH sites at Moneypoint and Tarbert, including NORA storage site.		Given separation, no significant in-combination effects are likely.	
Temporary Emergency power generation at Tarbert (315838)	Approved under separate consent and environmental		

	assessment process.	
Moneypoint Transition and Conversion of the Existing 900 MW Power Station	Approved under separate consent and environmental assessment process.	
10 year planning permission for the proposed Open Cycle Gas Turbine (OCGT) power plant fuelled by Hydrotreated Vegetable Oil (HVO) at Tarbert (318540)	Approved under separate consent and environmental assessment process.	
Conclusion	I have considered all of the submissions, and I am satisfied that impacts that are predicted to arise in relation to major accidents and disasters would be avoided, managed and mitigated by the measures which form part of the proposed scheme and the proposed mitigation measures. I am satisfied that the proposed development would not have any unacceptable direct, indirect or cumulative impacts in terms of major accidents and disasters.	

Chapter 15: Climate

Impact	Effect/ Magnitude	Mitigation and Monitoring	Residual Effect
Construction Stage			
GHG Emissions from site activity and construction.	Highly likely short term, slight negative impact.	Efficient site design and layout.	Not significant

		Implementation of the CEMP including measures to reduce emissions, including transport and waste management.	
Operational Stage			
GHG Emissions from operation of proposed CCGT.	Long-term, significant negative impacts.	<p>Flexible and efficient power plant and availability of battery storage facilitating the transition of the national grid to renewable generation.</p> <p>The Power Plant will not operate at 100% capacity 24/7.</p> <p>The CCGT will facilitate displacement of existing older, more carbon intensive power generators.</p> <p>Diesel pumps and generator would not run during normal operations.</p> <p>Auxiliary boiler only operated when all CTG/ HRSG Trains are not operational.</p> <p>Adherence to IE Licence and GHG Permit requirements and operation in the EU ETS scheme.</p>	Significant

Cumulative Effects		
Operational emissions with other power plants in the area.	<p>Current use of coal and Heavy Fuel Oil at Moneypoint and Tarbert Power plants is expected to cease.</p> <p>Electricity generation at Tarbert and Moneypoint was approved under separate consent and environmental assessment process.</p>	<p>The development will result in direct emissions from the combustion of fossil fuel. Government policy recognises the requirement for such generation capacity to facilitate the transition to higher renewable generation capacity. Development of modern, efficient plant of the nature proposed will also facilitate the closure of older coal and oil burning plants.</p> <p>Moneypoint and Tarbert are scheduled to cease burning fossil fuels such that significant cumulative air quality effects are not considered likely and no significant long-term impact on pollutant concentrations are anticipated. The development does not give rise to any risk of exceedance of Air Quality Standard in the Normal Operational Scenario.</p> <p>If development works occur concurrently with the proposed development, there is potential for cumulative construction impacts and traffic and transport emissions. Excavation activities have the potential to result in cumulative carbon emissions.</p>
Conclusion	<p>I have considered all of the submissions, and I am satisfied that impacts that are predicted to arise in relation to climate would be avoided, managed and mitigated by the measures which form part of the proposed scheme and the proposed mitigation measures. I am satisfied that the proposed development would not have any unacceptable direct, indirect or cumulative impacts in terms of climate.</p>	

Chapters 16 and 17: Waste Management and Material Assets

Impact	Effect/ Magnitude	Mitigation and Monitoring	Residual Effect
Construction Stage			
Land Use – loss/ change of use of agricultural lands.	Long-term, slight negative local impact.	Location within a large landbank zoned for industrial use. Having regard to the extent of surrounding agricultural lands, the quality of the lands and current low intensity of use, this impact is regarded as being of low magnitude.	Not significant
Construction waste	Short-term local negative impact.	<p>Implementation of the CEMP.</p> <p>All excavated material will be reused onsite, within the development area, and no import of soil is required.</p> <p>Waste classification, segregation, containment, storage, transportation and disposal in compliance with IE licence requirements and waste licence requirements.</p> <p>Best practice including a Resource and Waste Management Plan (RWMP) following the waste hierarchy, including statutory requirements.</p>	Not significant

		The RWMP sets out monitoring to be undertaken during the construction phase to ensure that the embedded mitigation measures are appropriately implemented.	
Impact on existing water and gas supply infrastructure due to diversion/ connection works and operational demands.	Negative, local temporary impacts during construction.	<p>Measures to ensure no interruptions to existing services during construction unless planned and agreed with the relevant service provider and local authority.</p> <p>Prior notice to residents of any service suspensions.</p> <p>Adherence to relevant guidance documents, including that of GNI, the ESB and the HSA.</p> <p>Any temporary connections agreed in advance with the relevant service provider.</p>	Imperceptible
Operational Stage			
Operational waste	Slight local negative impact.	Implementation of the CEMP and RWMP.	Not significant
Water supply	Negative, Long-Term impact	The water supply will be tested to the satisfaction of the local authority and Uisce Éireann prior to the connection to the public potable water.	Slight

Process water/ wastewater	Slight local, negative impact.	Emissions during the operational phase will be regulated and monitored under the IE licence.	Not significant
Cumulative Effects			
Strategic Gas Reserve Facility	Will be the subject of a separate application and EIAR/ screening for EIA.	<p>If works occur concurrently with the proposed development, there is potential for cumulative construction impacts and effects, including increased demands, on utilities and services.</p> <p>Construction activities will be planned and phased with associated developments. The implementation of standard best practice construction environmental measures and the CEMP for the Proposed Development will ensure no significant cumulative effects will result.</p> <p>The developments will have a positive cumulative effect in terms of facilitating renewable generation capacity.</p>	
Gas Pipeline	Previously subject to EIA. No significant effects identified.		
Future Data Centre	Will be the subject of a separate application and EIAR/ screening for EIA.		
Renewable generation projects in the wider area	Further proposed projects subject to planning permission and screening for EIA.		
220/ 110kV and 20kV connection to Kilpaddoge and on- site substation	Will be subject to separate planning applications. Will be constructed at the same time as the Proposed Development - Negative, Moderate		

	and Short-Term effects	
Moneypoint Transition and Conversion of the Existing 900 MW Power Station	Approved under separate consent and environmental assessment process.	
10 year planning permission for the proposed Open Cycle Gas Turbine (OCGT) power plant fuelled by Hydrotreated Vegetable Oil (HVO) at Tarbert (318540)	Approved under separate consent and environmental assessment process.	
Conclusion	I have considered all of the submissions, and I am satisfied that impacts that are predicted to arise in relation to material assets would be avoided, managed and mitigated by the measures which form part of the proposed scheme and the proposed mitigation measures. I am satisfied that the proposed development would not have any unacceptable direct, indirect or cumulative impacts in terms of material assets.	

11.4. Significant Interactions

Land, soil and geology interactions	
Water	<p>Potential release of silt or other contaminants to water bodies during the construction phase.</p> <p>Changes in levels impacting on groundwater flow.</p>
Biodiversity	Habitat loss or reduction.
Air quality	Dust mobilisation during works.
Noise and vibration	Emissions from excavation and site clearance works/ blasting.
Landscape and Visual	Site clearance will impact on views.
Cultural Heritage	Site clearance removing features of interest.
Population & Human Health	Air quality, noise and vibration and amenity impacts during works.
Climate	<p>Site clearance reducing carbon sink.</p> <p>Site clearance affecting drainage/ flood risk profile.</p>

Water interactions	
Land, soils and geology	<p>Changes in ground levels impacting on groundwater flow.</p> <p>Potential release of silt or other contaminants to water bodies during works.</p>
Biodiversity	<p>Mobilisation of suspended solids and contaminants impacting on water quality and habitats.</p> <p>Disturbance during works within the marine environment.</p> <p>Reduced feedings areas in Ralappane stream.</p>
Cultural Heritage	Changes to water table potentially impacting on sub-surface features.

Biodiversity interactions	
Land, soils and geology	Habitat loss or reduction.
Water	<p>Mobilisation of suspended solids and contaminants impacting on water quality.</p> <p>Discharge of process wastewater impacting on water quality.</p>
Landscape and Visual	Loss of existing vegetation will impact on habitats and views.
Population and Human Health	Opportunities to maintain or enhance biodiversity and the natural environment for the benefit of health.
Climate	<p>Climate change impacts such as flooding, heat waves could impact on biodiversity.</p> <p>Will facilitate overall transition to renewables.</p>

Population and Human Health interactions	
Land, soils and geology	<p>Air quality, noise and amenity impacts during site works.</p> <p>Loss of/ change in the use of agricultural lands.</p>
Air Quality	<p>Dust mobilisation and deposition during construction.</p> <p>Potential odour release during operations/ accident event.</p>
Noise and Vibration	<p>Construction noise and vibration impacts.</p> <p>Operational and construction traffic noise and disturbance.</p>
Landscape and Visual	Impact on views across the estuary and from adjoining residential properties.
Traffic and transport	Air quality and noise impacts from vehicle emissions.

	Impacts on road safety and convenience from increased traffic volumes.
Cultural Heritage	Loss of features of interest. Contribution to the understanding of the archaeology of the area through investigation and excavation.
Major accidents and disasters	A major incident could result in release of pollutants to air and risks to public safety.
Climate	GHG emissions from operations and traffic movements and contribution to climate impacts. Facilitate the transition to renewable generation.
Material Assets	Increased demands on local water supply. Potential litter and vermin nuisance.

Cultural Heritage interactions	
Land, soils and geology	Excavation/ removal of features of interest.
Water	Changes to ground water regime impacting on retained features of interest.
Noise and Vibration	Vibration impacts on integrity of retained features.
Landscape and Visual	Impact on setting of adjoining/ retained features of interest.
Traffic and transport	Potential construction traffic impacts on sub-ground features.
Population and Human Health	Contribution to the understanding of the archaeology of the area through investigation and excavation.

Air Quality interactions

Biodiversity	Dust mobilisation and deposit on sensitive receptors. Deposition from operational emissions on sensitive habitats.
Cultural Heritage	Dust generated from a number of construction activities may affect the setting of cultural heritage assets.
Population and Human Health	Dust mobilisation and deposition during construction. Potential odour release during operations.
Climate	GHG emissions due to use of materials, energy and fuel.

Noise and Vibration interactions

Biodiversity	Reduction in foraging habitat due to disturbance/ loss.
Cultural Heritage	Possibility of negative effects to the setting of the designated asset by noise and vibration from construction related traffic and onsite construction activities.
Population and Human Health	Construction noise and vibration impacts on sensitive receptors. Traffic noise and disturbance.

Landscape and Visual interactions

Biodiversity	Site clearance reducing habitats.
Population and Human Health	Impact on views, particularly south across the estuary and from adjoining residential properties.
Climate	Excavation will reduce carbon sink. Landscaping and planting will provide some replacement habitats.

Traffic and Transport interactions	
Land, soils and geology	Spill or leakage of oil or fuels can impact on soils.
Water	Spill or leakage of oil or fuels can impact on water.
Biodiversity	Increased traffic may result in collision or disturbance impacts and resultant spill or leakage of oil or fuels can impact on habitats.
Air quality	Dust mobilisation from construction traffic. Emissions from construction and operational traffic.
Noise and vibration	Emissions and disturbance from construction and operational traffic.
Landscape and Visual	Increased traffic may impact on scenic/ tourist routes.
Cultural Heritage	Potential impact on sub-surface features of interest from construction traffic movements on-site.
Population and Human Health	Air quality and noise impacts from vehicle emissions. Impacts on road safety and convenience from increased traffic.
Climate	GHG emissions resulting from vehicle traffic both during the construction and operational phase.

Major Accidents and Disaster interactions	
Land, soils, geology, water, biodiversity	A release of pollutants may result in harm to the environment.
Air quality/ Population and Human Health	A major incident could result in release of pollutants to air and risk to public safety.

Climate interactions	
Water	Extreme weather events and increased flood risk.
Biodiversity	Climate impacts such as flooding, heat waves could impact on biodiversity.
Landscape and Visual	Impact on planting/ landscaping proposals.
Population and Human Health	Contribution of emissions to climate impacts. Will assist transition to renewables.
Major Accidents and Disasters	Extreme weather initiating a major accident event.

Material Assets interactions	
Land, soils and geology	Change of use/ loss of agricultural lands.
Water	Potential significant impacts on the water environment during the construction phase. Increased demand on local water supply.
Biodiversity	Utility works impacting on habitats and water quality.
Traffic and transport	Increased traffic during construction and operation.
Cultural Heritage	Utility infrastructure provision may impact on previously unknown features of cultural interest.
Population and Human Health	Incorrect management of waste could result in littering which could cause a nuisance to the public and attract vermin.

11.5. Reasoned Conclusion on the Significant Effects

Having regard to the examination of environmental information contained above, and in particular to the EIAR and other information provided by the developer, and the submissions from the planning authority, prescribed bodies and observers during the course of the application, it is considered that the main significant direct and indirect effects of the proposed development on the environment are, and will be mitigated as follows:

1. The development could give rise to impacts on surface and groundwaters as a result of run-off of sediments, accidental spillages of chemicals, hydrocarbons or other contaminants entering waterbodies during construction. These impacts would be adequately mitigated by:
 - The implementation of the CEMP and standard best practise guidance and measures, including measures for the control of soils, materials and pollutants, drainage design and the management of surface waters.
 - Soil and stockpile management, including separation from waterbodies and from areas subject to flooding.
 - Minimise use of cast in-situ concrete and measures to prevent discharge of contaminants to the underlying subsoil or to the marine environment.
2. Construction activity will give rise to noise and vibration emissions, particularly during terrestrial blasting and rock breaking activities. The impacts from such activities would be adequately mitigated by:
 - Adherence to identified emission limit values and guidelines for such activities (BS6472-2:2008).
 - The short-term nature of the activities and limits on daily blasting activities.
 - Separation from the shoreline and sensitive receptors.
 - Process management and a dedicated Public Liaison Officer and protocols for community relations.
 - On-going monitoring.

3. Construction activities, particularly from blasting, will give rise to air overpressure. The impacts from such activities would be adequately mitigated by:
- Adherence to the principles set out in BS 5607:2017 code of practice for the safe use of explosives in the construction industry.
 - No more than one blast per day.
 - Designing each blast to maximize its efficiency and reduce the transmission of vibration.
 - A protocol for community relations with regards blasting is adopted such that prior warning of blasting operations is given to members of the public.
4. Operational discharges to the marine environment, including wastewater, accidental spillages and process discharge, have the potential to impact on water quality and dependent species and habitats. The impacts from such activities would be adequately mitigated by:
- Design, operation and monitoring of drainage systems in compliance IE licence requirements.
 - Attenuation of stormwater runoff from paved/ impermeable areas.
 - Drainage systems capable of handling anticipated volumes, incorporating treatment facilities and monitoring equipment appropriate to each effluent stream (including silt trap, Class 1 hydrocarbon interceptor, a firewater retention facility, package wastewater treatment plant and pH adjustment).
 - Measures for the control and management of hazardous materials and removal of identified effluent streams off-site for treatment.
 - Adherence to EPA guidance for firewater retention and the storage and transfer of materials for Scheduled activities.
 - Availability of secondary containment and spill kits for other hazardous materials.
 - Dispersion effects within a short distance of the discharge point, given the extent and dynamic nature of waters in the estuary.

5. Construction of the development will result in the direct loss of marine environment habitats. The impacts from such activities would be adequately mitigated by:
 - The limited spatial extent of loss, where the affected habitats and community types are not uncommon or rare and where natural recolonisation can occur.
6. Development of the site will result in terrestrial habitat removal and disturbance and displacement of species occurring on or around the site. The impacts from such activities would be adequately mitigated by:
 - Implementation of CEMP and appointment of an ECoW.
 - Adherence to published guidance including CIRIA guidance on water pollution and IFI guidelines of protection of fisheries, Bat Conservation Ireland guidance on lighting design, and NRA Guidelines for the treatment of Badgers, Bats and Otters.
 - Monitoring of Badger setts during post-construction.
 - No in-stream works in Ralappane Stream.
 - A detailed method statement in respect of disturbance to cliff habitat from vehicular access.
 - Planting and landscaping works using native species.
 - Clear delineation and fencing off of habitat conservation areas and retained trees/ vegetation.
 - Timing and management of tree/ vegetation and structure removal works, with pre-development surveys of features to be removed.
 - Erection of bat boxes and bird nesting boxes.
 - Blasting vibration limits will be achieved by limiting the Maximum Instantaneous Charge (MIC).
7. Operation of the proposed power plant would give rise to an increase in operational greenhouse gas emissions with resulting impacts on the

achievement of EU and National climate change and carbon emission reduction targets. The impacts from such activities would be adequately mitigated by:

- The role of the CCGT in the overall energy generation sector and in facilitating renewable generation capacity and the transition to a low carbon system.
- Displacement of potentially more carbon intensive power generation.
- Operation in the EU ETS scheme.
- Embedded design mitigation, including high efficiency and ability to operate at a low minimum generation capacity means that it will be dispatched before less efficient plants.
- Availability of battery storage.
- The Power Plant will not operate at 100% capacity all year round.
- Stated ability to transition to alternative low carbon fuels/ hydrogen.

8. Traffic generated during construction will give rise to potential disturbance and congestion on the local road network. These impacts would be adequately mitigated by:

- Existing low traffic volumes on road network.
- Upgrade of the L1010 prior to the main construction phase.
- Short-term nature of activities.
- Implementation of a Construction Traffic Management Plan including the routing and scheduling of construction traffic to avoid coinciding with peak school times.
- Appointment of a logistics manager.

9. Excavation and redevelopment of the site will give rise to direct impacts on features of archaeological interest and previously unrecorded features. There will also be impacts on the setting of recorded monuments. The impacts would be adequately mitigated by:

- Full resolution of all archaeological sites and areas identified during archaeological testing and underwater surveys.

- Compliance with the National Monuments Acts and the CEMP.
- A Method Statement for Archaeological Works will be agreed with the National Monuments Service, with fieldwork and monitoring by a suitably qualified and licensed archaeological contractor.
- Completion of archaeological works prior to commencing enabling works.
- Designated buffer zone around recorded monument.

10. Having regard to the nature and volume of materials to be stored and processed at the facility, the development gives rise to the potential for major accident or disaster or major accident to the environment. The impacts from such activities would be adequately mitigated by:

- Design and operation in accordance with industry standards and operator requirements under the COMAH Regulations 2015.
- Integral isolation valves in pipelines to isolate the inventory and reduce the consequences of an accident.
- Design and installation in accordance with EPA guidance for firewater retention and for the storage and transfer of materials for Scheduled activities.
- Separation of uses within the site.

11.6. Cumulative Impacts and Impacts from interactions

11.6.1. It is considered that effects as a result of interactions, indirect and cumulative effects can be avoided, managed or mitigated by the measures which form part of the proposed development, the proposed mitigations measures detailed in the Environmental Impact Assessment Report, and with suitable conditions. There is, therefore, nothing to prevent the approval of the development on the grounds of significant environmental effects as a result of cumulative impacts or impacts arising from interactions between environmental factors.

11.7. Conclusion

- 11.7.1. The submitted EIAR has been considered with regard to the guidance provided in the Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment (Department of Housing, Planning and Local Government, 2018), Guidelines on the Information to be contained in Environmental Impact Assessment Reports (EPA, 2022), and (Draft) Advice Notes for Preparing Environmental Impact Statements (EPA, 2015).
- 11.7.2. The assessments provided in the individual EIAR chapters and supplementary documentation, are generally considered to be satisfactory, with the exception of the areas of clarification provided by the applicant in their response to the HAS submission in relation to major accidents and disasters. The likely significant environmental effects arising as a consequence of the proposed development have been satisfactorily identified, described and assessed. They would not require or justify refusing permission for the proposed development or require significant amendments to it.

12.0 Appropriate Assessment (AA)

12.1. Screening Determination

- 12.1.1. In accordance with Section 177U(4) of the Planning and Development Act 2000 (as amended) and on the basis of objective information provided in the AA Screening Report, and supporting information, the nature, size and location of the proposed development and its likely direct, indirect and cumulative effects, the source pathway receptor principle and proximity and functional relationship between the proposed works and the European sites and their conservation objectives, I conclude that the proposed development could result in significant effects on the Lower River Shannon SAC and the River Shannon and River Fergus Estuaries SPA.
- 12.1.2. Appropriate Assessment is therefore required to determine if adverse effects on the integrity of these sites can be ruled out. There is also the potential likelihood for significant in-combination effects with other plans or projects or activities.
- 12.1.3. The potential for significant effects on the conservation objectives of Stack's to Mullaghareirk Mountains, West Limerick Hills and Mount Eagle SPA, Moanveanlagh

Bog SAC, Tullagher Lough and Bog SAC as well as other European Sites outside of the zone of influence can be screened out with confidence because of the separation distances and the lack of substantive ecological linkages or pathways between the proposed works and these European sites.

12.1.4. It is therefore determined that Appropriate Assessment (stage 2) [under Section 177V of the Planning and Development Act 2000] is required on the basis of the effects of the project 'alone'.

12.1.5. In reaching the conclusion of the screening assessment, no account was taken of measures intended to avoid or reduce the potentially harmful effects of the project on any European Site.

(See Appendix 1)

12.2. Appropriate Assessment

12.2.1. The development of a 600MW Powerplant, 120MW Battery Energy Storage System, Above Ground Installation and associated ancillary works has been considered in light of the assessment requirements of Sections 177U and 177V of the Planning and Development Act 2000 as amended.

12.2.2. Having carried out screening for Appropriate Assessment of the project, it was concluded that it may have a significant effect on the Lower River Shannon SAC (Site code: 002165) and River Shannon and River Fergus Estuaries SPA (Site code: 004077).

12.2.3. Consequently, an Appropriate Assessment was required of the implications of the project on the qualifying features of those sites in light of their conservation objectives.

12.2.4. Following an Appropriate Assessment, it has been ascertained that the proposed development, individually or in combination with other plans or projects would not adversely affect the integrity of those European Sites in view of their Conservation Objectives.

12.2.5. This conclusion is based on a complete assessment of all aspects of the proposed project and there is no reasonable doubt as to the absence of adverse effects.

12.2.6. This conclusion is based on:

- A full and detailed assessment of all aspects of the proposed project including proposed mitigation and ecological monitoring measures.
- Detailed assessment of in combination effects with other plans and projects including historical projects, current proposals and future plans.
- Careful consideration of the implications of the loss of small areas of benthic habitat within the estuary, which is assessed as not being significant to the overall functioning of the SAC or SPA and will not impact on the overall integrity of these sites.
- No adverse effects to wintering or breeding Special Conservation Interest bird species of the SPA following the application of mitigation measures.
- Taking full account of all proposed mitigation measures which will ensure no adverse effects on the qualifying interests of the SAC, including Bottlenose Dolphin, Atlantic Salmon, Sea and River lamprey and Otter, their habitats or prey upon which they are dependant.
- No significant effects on the qualifying interests of European sites or supporting habitats, arising from operational airborne pollution.
- No reasonable scientific doubt as to the absence of adverse effects on the integrity of the Lower River Shannon SAC (Site code: 002165) and River Shannon and River Fergus Estuaries SPA (Site code: 004077).

(See Appendix 2)

13.0 Conclusions and Recommendation

- 13.1.1. The proposed development comprises of a 600MW gas fired power generation plant, associated 120MW Battery Energy Storage System, an Above Ground Installation and associated ancillary works.
- 13.1.2. The proposed development is aligned with local and regional planning policy and land use objectives. There is a range of energy and climate policy documents and statements which are relevant to the proposed development, and I have noted that the proposed development is consistent with the Climate Action Plan 2024 in facilitating the security of electricity generation/ supply.
- 13.1.3. The proposed 600MW power generation plant is supported by national energy and climate policy which identifies a requirement for additional conventional generation capacity as a priority. This is seen in the light of the wider transition to a renewables-based generation system, notwithstanding the fossil-fuel powered nature of the plant.
- 13.1.4. The assessment of the impacts of the proposed development above has concluded that, subject to the identified mitigation measures, the overall proposed development would not have significant adverse effects on the ecology of the area or on any European Sites. While some direct loss of a small area of benthic habitat within the estuary would arise from the outfall construction, such loss is not assessed as having an adverse effect on the overall functioning of the SAC or SPA and or on the overall integrity of these sites. It is concluded that, following the application of mitigation measures, the proposed development, individually or in combination with other plans or projects would not adversely affect the integrity of European Sites in view of their Conservation Objectives.
- 13.1.5. Having regard to the existing context of the site, the impacts of the development on the landscape and visual amenities of the area are not regarded as unacceptable. Significant short-term traffic movements during construction are likely, however, upgrade of the L1010 serving the development is anticipated prior to main construction activities commencing on the site, while a final CTMP will be subject to agreement with the planning authority. Operational traffic volumes are not likely to be significant. Special development contributions in respect of the upgrade of roads serving the site have been recommended by the planning authority.

- 13.1.6. Construction activity has the potential to impact on water quality in the estuary and in freshwater bodies adjoining the site, however, subject to the identified mitigation measures, significant impacts are not considered likely. Modelling indicates that rapid dispersion of discharges from the site will occur in the estuary and no significant sedimentation impacts are likely. Similar dispersion effects are predicted in respect of discharges at operational stage, and I note that operational emissions will be subject to the requirements of an IE licence.
- 13.1.7. Operation of the proposed power plant will result in the combustion of fossil fuels and emissions to the environment. It is concluded that in the conservative scenarios assessed, there will be no exceedances of Air Quality Standards, and no significant effects are likely. The facility will be subject to EPA licencing and that there is no evidence that the proposed development cannot be operated appropriately in accordance with such licence or would otherwise be unacceptable on environmental grounds.
- 13.1.8. Extensive investigations across the site have identified features of archaeological interest, while there is one recorded monument bounding the development. Detailed mitigation measures have been identified and further conditions have been recommended by the Development Applications Unit. In this context, significant negative effects on archaeological heritage are not considered likely.
- 13.1.9. I note that the development is subject to a separate regulatory process under the 2015 COMAH regulations, wherein the HSA are the competent authority, and it is considered that these matters would be most properly pursued by this authority.
- 13.1.10. Having regard to the foregoing, I recommend that permission be granted, subject to conditions, for the development of a 600MW gas fired power generation plant, associated 120MW Battery Energy Storage Facility, an Above Ground Installation and associated ancillary works within the townlands Kilcolgan Lower and Ralappane between Tarbert and Ballylongford, Co. Kerry.

14.0 Reasons and Considerations

In coming to its Decision, the Board has had regard to the following:

- (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

- Project Ireland 2040 – National Planning Framework (2018)
- National Development Plan (2021-2030)
- National Marine Planning Framework 2020
- Ireland's 4th National Biodiversity Action Plan 2023-2030
- Climate Action and Low Carbon Development Act 2015 (as amended)
- Climate Action Plan 2024
- Long-term Strategy on Greenhouse Gas Emissions Reduction (2024)
- Policy Statement on Security of Electricity Supply (November 2021)
- National Energy Security Framework (April 2022)
- National Adaptation Framework (January 2018), and the Electricity and Gas Networks Sector Climate Change Adaptation Plan (2019)
- National Energy & Climate Plan 2021-2030
- National Risk Assessment 2023 – Overview of Strategic Risks

Regional and Local Policy

- Regional Spatial and Economic Strategy for the Southern Region (2019-2031)

- Strategic Integrated Framework Plan for the Shannon Estuary (2013 – 2020)
 - Shannon-Foynes Port Company Masterplan – Vision 2041 (2013)
 - Kerry County Development Plan 2022-2028
 - Listowel Municipal District Local Area Plan 2019-2025
- (b) The location, nature, scale and layout of the proposed development.
- (c) The range of mitigation measures set out in the Environmental Impact Assessment Report and Natura Impact Statement,
- (d) The submissions received in relation to the application by all parties.
- (e) The inspector's report and recommendation.

Appropriate Assessment

AA Stage 1:

The Board noted that the proposed development is not directly connected with, or necessary for the management of a 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 for which there is a likelihood of significant effects on:

- Lower River Shannon SAC (Site code: 002165)
- River Shannon and River Fergus Estuaries SPA (Site code: 004077)

The Board determined that Appropriate Assessment was required for 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 carried out an Appropriate

Assessment of the implications of the proposed development on European Sites in view of the conservation objectives for the sites. 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 proposed 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:

- Lower River Shannon SAC (Site code: 002165)
- River Shannon and River Fergus Estuaries SPA (Site code: 004077)

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

Environmental Impact Assessment

The Board completed an Environmental Impact Assessment of the proposed development taking account of:

- a) The nature, scale and location of the proposed development.
- b) The Environmental Impact Assessment Report and associated documentation in support of the application for which approval is sought.
- c) The submissions received during the course of the application.
- d) The Inspector's report and recommendation.

The Board considered that the Environmental Impact Assessment Report, supported by the documentation submitted by the applicant, adequately considers alternatives

for the proposed development and identifies and describes adequately the direct, indirect and secondary and cumulative impacts of the proposed development on the environment. The Board agreed with the examination set out in the Inspector's report of the information contained in the Environmental Impact Assessment Report and associated documentation submitted by the applicant, and submissions made in the course of the application for approval.

Reasoned Conclusion on Significant Effects:

Having regard to the examination of the environmental information set out above, and in particular the Environmental Impact Assessment Report and supplementary information submitted by the applicant, and the submissions received from the planning authority, prescribed bodies and observers in the course of the application, it is considered that the main significant direct, indirect or cumulative impacts on the environment of the development permitted herein are, and will be mitigated as follows:

1. The development could give rise to impacts on surface and groundwaters as a result of run-off of sediments, accidental spillages of chemicals, hydrocarbons or other contaminants entering waterbodies during construction. These impacts would be adequately mitigated by:
 - The implementation of the CEMP and standard best practise guidance and measures, including measures for the control of soils, materials and pollutants, drainage design and the management of surface waters.
 - Soil and stockpile management, including separation from waterbodies and from areas subject to flooding.
 - Minimise use of cast in-situ concrete and measures to prevent discharge of contaminants to the underlying subsoil or to the marine environment.
2. Construction activity will give rise to noise and vibration emissions, particularly during terrestrial blasting and rock breaking activities. The impacts from such activities would be adequately mitigated by:
 - Adherence to identified emission limit values and guidelines for such activities (BS6472-2:2008).

- The short-term nature of the activities and limits on daily blasting activities.
 - Separation from the shoreline and sensitive receptors.
 - Process management and a dedicated Public Liaison Officer and protocols for community relations.
 - On-going monitoring.
3. Construction activities, particularly from blasting, will give rise to air overpressure. The impacts from such activities would be adequately mitigated by:
- Adherence to the principles set out in BS 5607:2017 code of practice for the safe use of explosives in the construction industry.
 - No more than one blast per day.
 - Designing each blast to maximize its efficiency and reduce the transmission of vibration.
 - A protocol for community relations with regards blasting is adopted such that prior warning of blasting operations is given to members of the public.
4. Operational discharges to the marine environment, including wastewater, accidental spillages and process discharge, have the potential to impact on water quality and dependent species and habitats. The impacts from such activities would be adequately mitigated by:
- Design, operation and monitoring of drainage systems in compliance IE licence requirements.
 - Attenuation of stormwater runoff from paved/ impermeable areas.
 - Drainage systems capable of handling anticipated volumes, incorporating treatment facilities and monitoring equipment appropriate to each effluent stream (including silt trap, Class 1 hydrocarbon interceptor, a firewater retention facility, package wastewater treatment plant and pH adjustment).

- Measures for the control and management of hazardous materials and removal of identified effluent streams off-site for treatment.
 - Adherence to EPA guidance for firewater retention and the storage and transfer of materials for Scheduled activities.
 - Availability of secondary containment and spill kits for other hazardous materials.
 - Dispersion effects within a short distance of the discharge point, given the extent and dynamic nature of waters in the estuary.
5. Construction of the development will result in the direct loss of marine environment habitats. The impacts from such activities would be adequately mitigated by:
- The limited spatial extent of loss, where the affected habitats and community types are not uncommon or rare and where natural recolonisation can occur.
6. Development of the site will result in terrestrial habitat removal and disturbance and displacement of species occurring on or around the site. The impacts from such activities would be adequately mitigated by:
- Implementation of CEMP and appointment of an ECoW.
 - Adherence to published guidance including CIRIA guidance on water pollution and IFI guidelines of protection of fisheries, Bat Conservation Ireland guidance on lighting design, and NRA Guidelines for the treatment of Badgers, Bats and Otters.
 - Monitoring of Badger setts during post-construction.
 - No in-stream works in Ralappane Stream.
 - A detailed method statement in respect of disturbance to cliff habitat from vehicular access.
 - Planting and landscaping works using native species.
 - Clear delineation and fencing off of habitat conservation areas and retained trees/ vegetation.

- Timing and management of tree/ vegetation and structure removal works, with pre-development surveys of features to be removed.
 - Erection of bat boxes and bird nesting boxes.
 - Blasting vibration limits will be achieved by limiting the Maximum Instantaneous Charge (MIC).
7. Operation of the proposed power plant would give rise to an increase in operational greenhouse gas emissions with resulting impacts on the achievement of EU and National climate change and carbon emission reduction targets. The impacts from such activities would be adequately mitigated by:
- The role of the CCGT in the overall energy generation sector and in facilitating renewable generation capacity and the transition to a low carbon system.
 - Displacement of potentially more carbon intensive power generation.
 - Operation in the EU ETS scheme.
 - Embedded design mitigation, including high efficiency and ability to operate at a low minimum generation capacity means that it will be dispatched before less efficient plants.
 - Availability of battery storage.
 - The Power Plant will not operate at 100% capacity all year round.
 - Stated ability to transition to alternative low carbon fuels/ hydrogen.
8. Traffic generated during construction will give rise to potential disturbance and congestion on the local road network. These impacts would be adequately mitigated by:
- Existing low traffic volumes on road network.
 - Upgrade of the L1010 prior to the main construction phase.
 - Short-term nature of activities.
 - Implementation of a Construction Traffic Management Plan including the routing and scheduling of construction traffic to avoid coinciding with peak school times.

- Appointment of a logistics manager.
9. Excavation and redevelopment of the site will give rise to direct impact on features of archaeological interest and previously unrecorded features. There will also be impacts on the setting of recorded monuments. The impacts would be adequately mitigated by:
- Full resolution of all archaeological sites and areas identified during archaeological testing and underwater surveys.
 - Compliance with the National Monuments Acts and the CEMP.
 - A Method Statement for Archaeological Works will be agreed with the National Monuments Service, with fieldwork and monitoring by a suitably qualified and licensed archaeological contractor.
 - Completion of archaeological works prior to commencing enabling works.
 - Designated buffer zone around recorded monument.
10. Having regard to the nature and volume of materials to be stored and processed at the facility, the development gives rise to the potential for major accident or disaster or major accident to the environment. The impacts from such activities would be adequately mitigated by:
- Design and operation in accordance with industry standards and operator requirements under the COMAH Regulations 2015.
 - Integral isolation valves in pipelines to isolate the inventory and reduce the consequences of an accident.
 - Design and installation in accordance with EPA guidance for firewater retention and for the storage and transfer of materials for Scheduled activities.
 - Separation of uses within the site.

Cumulative Impacts and Impacts from interactions:

It is considered that effects as a result of interactions, indirect and cumulative effects can be avoided, managed or mitigated by the measures which form part of the proposed development, the proposed mitigations measures detailed in the

Environmental Impact Assessment Report and with suitable conditions. There is, therefore, nothing to prevent the approval of the development on the grounds of significant environmental effects, or as a result of cumulative effects or effects arising from interactions between environmental factors.

Proper Planning and Sustainable Development

The proposed development comprises the following elements

- 600MW power plant and associated structures.
- 120 MW battery energy storage system, and ancillary development.
- Proposed Above Ground Installation (AGI) and ancillary structures, and
- All ancillary works.

The development accords with the relevant policy at a European, National, regional and local level. It will provide conventional power generation capacity is consistent with the provisions of the Climate Action Plan 2024, which would facilitate the transition to a more renewables based national electricity system. The proposed power generation development has been designed to provide an efficient and flexible plant in line with current design standards, which combined with the proposed battery energy storage facility, will facilitate its role as a back-up to a renewables-based electricity grid. While it is acknowledged that the operation of the development would generate greenhouse gas emissions, the need for such generation capacity is recognised as a national priority in the Government Policy Statement on Security of Electricity Supply, notwithstanding an overall commitment in the Climate Action and Low Carbon Development Act 2015 (as amended) to becoming a carbon-neutral economy by 2050. When taken in context and noting the need and policy support for the proposed development including consistency with the relevant provisions of the Climate Action Plan 2024, significant negative impacts on the global climate receptor are not likely.

While there will be landscape and visual impacts associated with the proposed development, in the context of the surrounding pattern of development and the long-term objectives for the development of these lands, such impacts are not considered to be significant adverse.

Significant ecological effects are not anticipated arising from the proposed power plant. Direct impacts on habitats are limited and are not considered to adversely affect the conservation objectives of European Sites. Low numbers of estuarine birds were recorded in the vicinity of the site, and there is noted to be limited intertidal foraging habitat of value along the shore, while the site itself provides limited foraging potential. Negative impacts on terrestrial flora and fauna, and habitats within the site will be localised, negative but not significant.

Overall, it is reasonable to conclude that the consequences for the proper planning and sustainable development of the area would be largely acceptable. While there are negative local impacts, these are not regarded as outweighing the benefits arising and it is therefore concluded that there is a clear justification in favour of granting approval for the proposed:

- 600MW power plant and associated structures.
- 120 MW battery energy storage system, and ancillary development.
- Above Ground Installation (AGI) and ancillary structures, and
- All ancillary works.

15.0 Conditions

1. This grant of permission relates to the development described in the application documentation submitted to An Bord Pleanála on the 19th day of April 2024, comprising:
 - (a) A proposed Power Plant, principally comprising 3 no. turbine halls each containing 1 no. Combined Cycle Gas Turbine (CCGT). Each turbine hall will have a capacity of approximately 200MW for a total installed capacity of 600MW and will be linked via 1 no. exhaust duct to 1 no. Air Cooled Condenser (ACC), and ancillary structures.
 - (b) A proposed 120 MW 1-hour (120 megawatt hour (MWh)) Battery Energy Storage System (BESS) and ancillary development.
 - (c) A proposed Above Ground Installation (AGI) and ancillary structures.
 - (d) All ancillary structures/ works, including new access off the L1010 local road.

Reason: In the interests of clarity.

2. This permission shall expire on 31st December 2050, unless otherwise granted permission and other relevant statutory consents to continue operating by using hydrogen, carbon-capture, or other net-zero carbon technology for the generation of electricity for output to the national grid. In such case, this permission shall expire 25 years after the date on this order.

Reason: In the interests of clarity and consistency with statutory climate action targets.

3. The proposed 600 MW of electricity generated by the power plant shall be available for export to the national grid and be used as back up to intermittent renewable energy only, unless otherwise granted permission and other relevant statutory consents to use part (up to a maximum of 247 MW) of the electricity generated otherwise. Similarly, the 120 MW of electricity stored in the BESS shall be available for export to the national grid and be used as back up to

intermittent renewable energy only, unless otherwise granted permission and other relevant statutory consents to be used otherwise.

Reason: In the interests of clarity and consistency with statutory climate action targets.

4. The proposed development shall be carried out and completed in accordance with the plans and particulars, including the mitigation measures specified in the Environmental Impact Assessment Report, the Natura Impact Statement and the Construction Environmental Management Plan, lodged with the application to An Bord Pleanála on the 19th day of April 2024.

Reason: In the interest of clarity, to mitigate the environmental effects of the development, and to protect the amenities of properties and sensitive receptors in the vicinity.

5. The period during which the development hereby permitted may be carried out shall be 10 years from the date of this order.

Reason: Having regard to the nature and scale of the proposed development, the Board considers it appropriate to specify a period of validity of this permission in excess of five years.

6. (a) The upgrade of the L1010 local road between the R551 at Tarbert and the proposed development lands at Kilcolgan Lower and Ralappane shall be completed prior to the commencement of the main construction elements of the proposed development. This shall not preclude the undertaking of site preparation and earthworks contemporaneously with the upgrading of the L1010 local road. The precise extent of works which may be carried out prior to the completion of the public infrastructure works, shall be agreed in writing with the planning authority, prior to commencement of development and in default of agreement, shall be determined by An Bord Pleanála.

(b) Final detail in relation to the design of the proposed entrance to the site from the L1010, including drainage design, shall be agreed in writing with the planning authority prior to the commencement of development on the site.

Reason: In the interests of road safety.

7. (a) Prior to commencement of development, the developer shall submit to and agree in writing with the planning authority, a detailed construction traffic management plan. This management plan shall include restrictions on traffic movements at Tarbert Comprehensive School, which shall prohibit the movement of heavy goods vehicle traffic associated with the construction of the terminal for an agreed period before and after the opening and closing times of the school. It shall also include the staggering of various shift start and finish times.
- (b) Pre and post-construction phase surveys of the public road network to be used as haul routes, shall be carried out by the applicant, to include inspections of bridges, structures and culverts at locations to be agreed with the relevant Roads Authorities to confirm their capacity to accommodate any abnormal weight load proposed.
- (c) Abnormal load licences shall be secured by the developer in advance, if required, for the transportation of components, units and materials. Consultation with the Road Authority, An Garda Síochána and all necessary stakeholders shall be carried out in advance of transportation of abnormal loads.
- (d) Any required alterations to the road network for the transportation of components, units and/ or materials shall be agreed in advance with the roads authority and reinstated thereafter to the satisfaction of roads authority. Where such works affect the national road network, they shall be undertaken in accordance with TII publications. Any temporary alterations to utilities shall be agreed with the appropriate utility provider in advance by the developer. Any land acquisition or temporary access to lands required for the conveyance of abnormal loads or materials will be incumbent on the applicant to agree with the relevant landowner. A schedule of alterations to the road network including but

not limited to signage, street furniture and vegetation shall be agreed in advance with the relevant roads authority.

(e) 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.

Reason: In the interest of road safety, orderly development and the proper planning and sustainable development of the area.

8. The developer shall facilitate the archaeological appraisal of the site and shall provide for the preservation, recording and protection of archaeological materials or features which may exist within the site. All mitigation measures set out in the Chapter 12 of the EIAR (AECOM, April 2024) shall be fully implemented prior to the commencement of developing works. In this regard, the developer shall:

- (a) Appoint a Project Archaeologist to oversee and advise on all aspects of the scheme from design through to completion. The Project Archaeologist shall liaise with the National Monuments Service (NMS) to agree in advance the appropriate scope for the full archaeological excavation of all archaeological sites and areas identified during archaeological testing which cannot be preserved in situ (as identified in Chapter 12 of the EIAR or by any subsequent investigations associated with the project).
- (b) In advance of the commencement of any construction works, the developer shall engage a suitably qualified archaeologist to carry out a full archaeological excavation (licensed under the National Monuments Act) of all archaeological sites and areas identified during archaeological testing which cannot be preserved in situ (as identified in Chapter 12 of the EIAR or by any subsequent investigations associated with the project).
 - (i) The full archaeological excavation shall be carried out according to Best Archaeological Practice and in accordance with an approved Method Statement that shall incorporate a strategy for environmental

sampling, finds retrieval and conservation and subsequent publication or other suitable dissemination of results.

- (ii) If significant archaeological features are discovered during the course of the full archaeological excavation, work on the site shall stop pending a decision of the Planning Authority, in consultation with the Department of Housing, Local Government and Heritage, regarding appropriate additional mitigation measures which may include preservation in situ or full archaeological excavation. Any additional archaeological mitigation requirements specified by the Planning Authority, following consultation with the Department of Housing, Local Government and Heritage, shall be complied with by the developer.
 - (iii) No construction works shall be carried out on site until a Preliminary Excavation Report on the full archaeological excavation has been submitted to the Department of Housing, Local Government and Heritage and to the Planning Authority and approval to proceed is agreed in writing.
 - (iv) The developer shall ensure that any necessary post-excavation analysis – as set out in the Preliminary Excavation Report – including (but not limited to) specialist analysis of finds and samples, scientific dating and conservation of artefacts is completed.
 - (v) The developer shall ensure that the results of the full archaeological excavation are adequately disseminated to the public by way of publication or other appropriate means.
- (c) A suitably qualified archaeologist shall be retained to advise on and establish appropriate exclusion zones around the external-most elements of the vulnerable heritage assets that are to be preserved in situ (as identified in Chapter 12 of the EIAR or by any subsequent investigations associated with the project).
- (i) Exclusion zones shall be fenced off or appropriately demarcated for the duration of construction works in the vicinity of the monuments. The location and extent of each exclusion zone and the appropriate

methodology for fencing off or demarcating at each location shall be agreed in advance with the Department of Housing, Local Government and Heritage and the Planning Authority.

- (ii) No groundworks of any kind (including but not limited to geotechnical site investigations) and no machinery, storage of materials or any other activity related to construction will be permitted within exclusion zones.
- (d) The Construction Environmental Management Plan (CEMP) shall include the location of any and all archaeological or cultural heritage constraints relevant to the proposed development as set out in Chapter 12 of the EIAR (AECOM, April 2024) and by any subsequent archaeological investigations associated with the project. The CEMP shall clearly describe all identified likely archaeological impacts, both direct and indirect, and all mitigation measures to be employed to protect the archaeological or cultural heritage environment during all phases of site preparation and construction activity.
- (e) The Planning Authority and the Department of Housing, Local Government and Heritage shall be furnished with a final archaeological report describing the results of all archaeological monitoring and any archaeological investigative work on site and any necessary post-excavation specialist analysis. All resulting and associated archaeological costs shall be borne by the developer.

Reason: In order to conserve the archaeological heritage of the area and to secure the preservation in-situ or by record, and protection of any archaeological remains that may exist within the site.

9. All mitigation measures set out in the Chapter 12 of the EIAR (AECOM, April 2024) shall be fully implemented prior to the commencement of developing works. In advance of the commencement of any construction works, the developer shall engage a suitably qualified archaeologist to carry out an Underwater Archaeological Impact Assessment (UAIA) that includes the following:

- (a) A desktop assessment that addresses the underwater cultural heritage (including archaeological, built, vernacular, riverine and industrial heritage) of the proposed development area. The assessment shall include a full inventory, mapping and survey (photographic, descriptive, photogrammetric, as appropriate) of underwater cultural heritage features and structures identified by fieldwork, cartographic analysis, historical research and prior archaeological investigations.
- (b) A licensed dive/ wade assessment, accompanied by a hand-held metal detection survey, centred on (but not confined to) the area(s) where in-stream works are proposed. The dive and metal detection surveys shall be undertaken by a suitably qualified and experienced underwater archaeologist. All identified underwater cultural heritage shall be surveyed (photographic, descriptive, photogrammetric) in detail as part of the assessment.
- (c) A dive/ survey licence (Section 3, 1987 National Monuments Act) and detection device consent (Section 2, 1987 National Monuments Act) will be required for the dive survey and metal detection, respectively. Licences should be applied for to the National Monuments Service and should be accompanied by a detailed Method Statement. Note a period of 3-4 weeks should be allowed to facilitate processing and approval of the licence applications and Method Statement. All archaeological wading/ diving should comply with the Health and Safety Authority's *Safety, Health and Welfare at Work (Diving) Regulations 2018/ 2019*.
- (d) Having completed the above-described works, the archaeologist shall submit a written report to the Department of Housing, Local Government and Heritage describing the results of the UAIA. The report shall include a comprehensive Archaeological Impact Statement (AIS) that comments on the degree to which the extent, location and levels of all proposed construction activities (including in-stream/ intertidal site investigation works) required for the development will impact upon any underwater cultural heritage, archaeological potential that have been identified. The AIS shall describe the potential impact(s) of all proposed in-stream development, access and ingress routes to the river, and shall also assess any proposed additional site investigation/ geotechnical impacts and potential secondary/ indirect impacts

such as souring resulting from changes in hydrology. The AIS should be illustrated with appropriate plans, sections and photographs that clearly describe any adverse effect(s) of the development on the underwater cultural heritage and proposals for their mitigation. Mitigation should include recommendations for redesign to allow for full or partial preservation in situ, the intuition of archaeological exclusion zones, further wade/ dive surveys, test-excavations, excavations ('preservation by record') and/ or monitoring, as deemed appropriate. The Department of Housing, Local Government and Heritage will advise with regard to these matters. No construction works shall commence until after the UAIA has been submitted and reviewed. All recommendations will require the agreement of the Department of Housing, Local Government and Heritage.

The Construction Environmental Management Plan (CEMP) shall include the location of any and all underwater cultural heritage constraints relevant to the proposed development as set out in Chapter 12 of the EIAR (AECOM, April 2024) and by any subsequent archaeological investigations associated with the project. The CEMP shall clearly describe all identified likely archaeological impacts, both direct and indirect, and all mitigation measures to be employed to protect the archaeological or cultural heritage environment during all phases of site preparation and construction activity.

Reason: In order to conserve the archaeological heritage of the area and to secure the preservation (in-situ or by record) and protection of any archaeological remains that may exist within the site.

10. (a) Prior to commencement of development, all trees, groups of trees, hedging and shrubs which are to be retained shall be enclosed within stout fences not less than 1.5 metres in height. This protective fencing shall enclose an area covered by the crown spread of the branches, or at minimum a radius of two metres from the trunk of the tree or the centre of the shrub, and to a distance of two metres on each side of the hedge for its full length and shall be maintained until the development has been completed.

(b) No construction equipment, machinery or materials shall be brought onto the site for the purpose of the development until all the trees which are to be retained have been protected by this fencing. No work shall be carried out within the area enclosed by the fencing and, in particular, there shall be no parking of vehicles, placing of site huts, storage compounds or topsoil heaps, storage of oil, chemicals or other substances, and no lighting of fires, over the root spread of any tree to be retained.

(c) Prior to commencement of development, an operational stage biodiversity management plan for the site shall be prepared and agreed in writing with the Planning Authority.

Reason: To protect trees and planting during the construction period in the interest of visual amenity.

11. Trees to be removed on site shall be felled in late summer or autumn. Any disturbance to bats and badger setts on site shall be in a manner to be agreed in writing with the planning authority on the advice of a qualified ecologist.

Reason: In the interest of nature conservation.

12. During the construction phase, the developer shall adhere to the measures set out in the following documents:

- a) 'Guidelines for the Treatment of Badgers prior to the Construction of National Road Schemes', published by the National Roads Authority in 2006. The mitigation measures set out in section 7B.6.1.7 of the EIAR shall be implemented in full.
- b) "Bat Mitigation Guidelines for Ireland v2". Irish Wildlife Manuals, No. 134, published by the National Parks and Wildlife Service (2022). The specific mitigation measures set out in section 7B.6.1.8 of the EIAR shall be implemented in full.
- c) "Guidelines for the Treatment of Otters Prior to the Construction of National Road Schemes", published by the National Roads Authority in 2008. The

mitigation measures set out in section 7B.6.1.9 of the EIAR shall be implemented in full.

The requirements of any licence required from the National Parks and Wildlife Service shall be strictly adhered to and details of any such licence shall be submitted to the planning authority.

Reason: In the interest of wildlife protection.

13. Water supply arrangements shall comply with the requirements of Irish Water for such works and services.

Reason: In the interest of public health.

14. The construction of the development shall be managed in accordance with a final Construction Management Plan, which shall be submitted to, and agreed in writing with, the planning authority prior to commencement of development. This plan shall provide details of intended construction practice for the development, including, inter alia:

- (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,
- (c) Details of site security fencing and hoardings,
- (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,
- (e) Measures to prevent the spillage or deposit of clay, rubble or other debris on the public road network,
- (f) Details of appropriate mitigation measures for noise, dust and vibration, and monitoring of such levels,

- (g) Containment of all construction-related fuel and oil within specially constructed bunds to ensure that fuel spillages are fully contained. Such bunds shall be roofed to exclude rainwater,
- (h) Off-site disposal of construction/demolition waste and details of how it is proposed to manage excavated soil, and
- (i) A site-specific water management plan, to include detailed drawings 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 enter estuarine waters, local surface waters or drains.

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.

Reason: In the interest of amenities, public health and safety.

15. 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.

Reason: In the interest of sustainable waste management.

16. 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.

Reason: In the interest of public health and residential amenity.

17. (a) The vibration levels from blasting shall not exceed a peak particle velocity of 12mm/sec.
- (b) Blasting shall not give rise to air overpressure values exceeding 125 dB (Lin) max peak.
- (c) Blasting shall only take place between 1000 hours to 1700 hours, Monday to Friday. Prior to the firing of any blast, the developer shall give notice of his intention to the occupiers of all dwellings within 600 metres of the site. An audible alarm for a minimum period of one minute shall be sounded. This alarm shall be of sufficient power to be heard at all dwellings adjacent to the site.
- (d) Blasting activities shall be carried out in accordance with the details submitted to An Bord Pleanála on 19th day of April 2024.

Reason: In the interest of residential amenity and public safety.

18. Details of the material, colours and textures of all external finishes to the proposed buildings and structures shall be as submitted with the application, unless otherwise agreed in writing with the planning authority prior to the commencement of development.

Reason: In the interests of landscape and visual amenity.

19. (a) The development shall be carried out in accordance with the Guidance to Manage the Risk to Marine Mammals from Man-Made Sound Sources in Irish Waters (Department of Arts, Heritage and the Gaeltacht, 2014).
- (b) The developer shall employ suitably qualified marine mammal observers for the duration of on-shore blasting. Commencement of blasting shall be delayed if the marine mammal observers note dolphins within 500 metres of the site within 20 minutes of the planned commencement of works. No action shall be necessary if a dolphin approaches once operations have commenced. A log of the marine mammal observer operations shall be submitted to the planning authority, following completion of these works.

Reason: In the interest of wildlife protection.

20. The firewater retention pond shall be sized and designed in accordance with the Environmental Protection Agency (EPA) Guidance on Retention Requirements for Firewater Run-off (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.

Reason: In the interests of environmental protection.

21. Prior to commencement of development, the developers shall agree the location and nature of any obstacle lights, which may be necessary, with the Irish Aviation Authority. Details of such lights, if any, shall be submitted for the records of the planning authority.

Reason: In the interest of public safety.

22. Prior to commencement of development, a comprehensive lighting scheme for the development prepared by a suitably qualified lighting specialist in accordance with Guidance Note 01/21 The Reduction of Obtrusive Light at Night (Institute of Lighting Professionals (2021)) shall be submitted to and agreed in writing with the planning authority. Lighting for the facility shall be designed to incorporate relevant best-practice mitigation measures to minimise light pollution, and shall avoid the use of unfiltered, white LED, metal halide, white fluorescent, halogen and mercury vapour lighting. Full cut-off lighting shall be employed for all lighting.

LED lighting used on the site should have CCT values at or below 3000K, where possible and light spill onto the estuary should be restricted. Consideration may be given to the use of variable lighting levels or other controls to minimise unnecessary lighting. The scheme shall also set out practices to minimise light pollution during construction.

Reason: In the interest of visual amenity and to reduce impacts on wildlife and habitats.

23. The developer shall pay to the planning authority a financial contribution in respect of public infrastructure and facilities benefiting development in the area of the planning authority that is provided or intended to be provided by or on behalf of the authority in accordance with the terms of the Development Contribution Scheme made under section 48 of the Planning and Development Act 2000, as amended. The contribution shall be paid prior to commencement of development or in such phased payments as the planning authority may facilitate and shall be subject to any applicable indexation provisions of the Scheme at the time of payment. Details of the application of the terms of the Scheme shall be agreed between the planning authority and the developer or, in default of such agreement, the matter shall be referred to An Bord Pleanála to determine the proper application of the terms of the Scheme.

Reason: It is a requirement of the Planning and Development Act 2000, as amended, that a condition requiring a contribution in accordance with the Development Contribution Scheme made under section 48 of the Act be applied to the permission.

24. The developer shall pay to the planning authority a financial contribution as a special contribution under section 48(2) (c) of the Planning and Development Act 2000 in respect of works which will facilitate the proposed development, comprising:

a) The upgrade of the public road (L1010) between the proposed development site and the R551.

b) Improvements at the junction of the R551 and L1010 to accommodate the projected nature and volume of traffic travelling along the L1010 Coast Road.

The amount of the contribution shall be agreed between the planning authority and the developer or, in default of such agreement, the matter shall be referred to An Bord Pleanála for determination. The contribution shall be paid prior to commencement of development or in such phased payments as the planning authority may facilitate and shall be updated at the time of payment in accordance with changes in the Wholesale Price Index – Building and Construction (Capital Goods), published by the Central Statistics Office.

Reason: It is considered reasonable that the developer should contribute towards the specific exceptional costs which are incurred by the planning authority which are not covered in the Development Contribution Scheme and which will benefit the proposed development.

25. (i) Prior to commencement of development, the developer shall lodge with the planning authority a cash deposit, a bond of an insurance company, or other security to secure the provision and satisfactory reinstatement of public roads damaged by the transfer of materials or use as haul routes associated with the proposed development, coupled with an agreement empowering the local authority to apply such security or part thereof to the satisfactory completion of such works. The form and amount of the security shall be as agreed between the planning authority and the developer or, in default of agreement, shall be referred to An Bord Pleanála for determination.

(ii) Prior to commencement of development, the developer shall lodge with the planning authority a cash deposit, a bond of an insurance company, or such other security as may be acceptable to the planning authority, to secure the satisfactory reinstatement of the site on cessation of the project coupled with an agreement empowering the planning authority to apply such security or part thereof to such reinstatement. The form and amount of the security shall be as agreed between the planning authority and the developer or, in default of agreement, shall be referred to An Bord Pleanála for determination.

Reason: To ensure the satisfactory completion of the development.

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.

Liam Bowe
Senior Planning Inspector

14th November 2024

Appendix 1: AA Screening Determination

Screening for Appropriate Assessment

Screening Determination

Description of the project

The proposed development, as described in section 3.0 of this report and in Section 2 of the Screening Statement for Appropriate Assessment and Natura Impact Statement, generally comprises the construction of a new 600MW power station, a 120MW Battery Energy Storage System (BESS), an Above Ground Installation and associated development.

The Power Plant will be operated using natural gas as its primary fuel, and generate power exported via a 220 kV connection to the national electricity grid. It is also proposed to provide electricity for its own needs.

The 120 megawatt hour (MWh) BESS will comprise 27 battery containers, approximately 4.5 MWh each, containing lithium ion batteries.

The AGI will accommodate the valves and control equipment to facilitate the connection to the already consented 26km natural gas pipeline. It will facilitate the transportation of gas between the national gas transmission network. The AGI is located in a separate fenced compound within the Site covering an area of approximately 11,282m².

The site is bounded by, and partially overlaps, the Lower River Shannon candidate Special Area of Conservation (SAC) (Site code: 002165) and the River Shannon and River Fergus Estuaries Special Protection Area (SPA) (Site code: 004077). The AA Screening Statement and NIS identify the key activities proposed for the construction and operational phases relevant to conservation features.

Potential impact mechanisms from the project

The installation of the drainage outfall pipe to be installed in the seabed will result in the direct loss of benthic habitats and associated fauna. The two areas of Annex I habitat types directly impacted by the proposed development are Estuaries (1130) and Reefs (1170). These comprise extensive areas within the overall SAC.

Sources of impact identified in the AA Screening report include:

Impact Mechanisms		Phase	Description
1.	Release of pollutants during construction	Construction Phase	<p>Accidental release of chemical pollutants or other waste material/ pollutants to nearby habitats, watercourses and waterbodies.</p> <p>Possible pollutants include fuels, oils, greases, hydraulic fluids or construction materials including concrete. Runoff from excavated material may result in the release of sediment, impacting on habitat and water quality.</p>
2.	Noise, visual and vibration disturbance	Construction and Operation Phase	<p>Initial site preparation/ clearance works and construction activities will result in noise, vibration and light disturbance, potentially displacing fauna.</p> <p>Mobile conservation feature species (e.g. birds, otter) may occur in the area and be affected.</p>
3.	Underwater noise	Construction Phase	<p>Potential that controlled rock blasting on land will generate underwater noise disturbance.</p>
4.	Seabed habitat loss	Construction Phase	<p>Installation of the drainage outfall pipe to be installed in the seabed will result in the direct loss of habitats and associated fauna.</p> <p>Construction of a trenched water outfall across the shoreline into the Estuary will result in the direct loss of habitats and associated fauna.</p>
5.	Discharge of Wastewater and Power Plant	Operation Phase	<p>Potential environmental impact associated with the disposal of secondary treated wastewater.</p>

	Process Heated Water Effluent		Discharge of heated water to the estuary via the storm water outfall point, may affect local water conditions.
6.	Barrier to connectivity	Construction Phase	Construction of the drainage outfall pipe along the shoreline of the Shannon Estuary has the potential to temporarily prevent movement of fauna along the shoreline. Increased noise and visual disturbance (including lighting) during construction may create a barrier to connectivity.
7.	Loss of prey biomass	Construction and Operation Phase	Potential release of pollutants, the underwater noise and sediment plumes during piling works could lead to fish mortality. Removal of wet grassland could lead to a reduction in common frog and prey biomass. Discharge of treated cooled seawater, wastewater, entrainment and impingement during operation could lead to fish mortality.
8.	Release of emissions during operation	Operational Phase	Emissions during operation of the Power Plant could affect sensitive conservation features e.g. raised bog habitats.

European Sites at Risk

The Proposed Development is located within the Lower River Shannon SAC (Site code: 002165). The Proposed Development area also overlaps the River Shannon and River Fergus Estuaries SPA (Site code: 004077), while the Stack's to Mullaghareirk Mountains, West Limerick Hills and Mount Eagle SPA (Site code: 004161) is located 10km south of the Proposed Development.

Further to these, the Moanveanlagh Bog SAC (002351) is located 12.4km south of the Proposed Development area and Tullaher Lough and Bog SAC (Site code: 002343) is located 14km northwest of it.

Likely significant effects on the European sites 'alone'

Lower River Shannon SAC (002165)		Potential Impact mechanism	Likely significant effects (Y/N)
Interest	Conservation Objective		
1110 Sandbanks slightly covered by seawater all the time	Maintain the favourable conservation condition	N/A	N
1130 Estuaries	Maintain the favourable conservation condition	1, 3, 5	Y
1140 Mudflats and sandflats not covered by seawater at low tide	Maintain the favourable conservation condition		
1150 Coastal lagoons	Restore the favourable conservation condition		
1160 Large shallow inlets and bays	Maintain the favourable conservation condition		
1170 Reefs	Maintain the favourable conservation condition		
1220 Perennial vegetation of stony banks	Maintain the favourable conservation condition		
1230 Vegetated sea cliffs of Atlantic and Baltic coasts	Maintain the favourable conservation condition	N/A	N
1310 Salicornia and annuals colonising mud & sand	Maintain the favourable conservation condition	1, 3, 5	Y
1330 Atlantic salt meadows	Restore the favourable conservation condition		
1410 Mediterranean salt meadows	Restore the favourable conservation condition		

3260 Water courses of plain to montane levels	Maintain the favourable conservation condition	N/A	N
6410 Molinia meadows on calcareous, peaty or clayey-silt-laden soil	Maintain the favourable conservation condition	N/A	N
91E0 Alluvial forests	Maintain the favourable conservation condition	N/A	N
1029 Freshwater Pearl Mussel	Restore the favourable conservation condition	N/A	N
1095 Sea Lamprey	Restore the favourable conservation condition	1, 3, 5	Y
1096 Brook Lamprey	Maintain the favourable conservation condition		
1099 River Lamprey	Maintain the favourable conservation condition		
1106 Atlantic Salmon	Restore the favourable conservation condition		
1349 Common Bottlenose Dolphin	Maintain the favourable conservation condition	1, 3, 5	Y
1355 Otter	Restore the favourable conservation condition	1, 2, 3, 5	Y

River Shannon and River Fergus Estuaries SPA (004077)		Potential Impact mechanism	Likely significant effects (Y/N)
Interest	Conservation Objective		
A999 Wetland	To maintain the favourable conservation condition of the wetland habitat as a resource for the regularly- occurring	Given the small size of the Proposed Development within this area, will	N

	migratory waterbirds that utilise it.	not represent a significant change	
A017 Cormorant	Maintain the favourable conservation condition	1, 2, 3, 5, 6, 7	Y
A052 Teal	Maintain the favourable conservation condition	1, 3, 5	Y
A054 Pintail			
A062 Scaup			
A050 Wigeon			
A056 Shoveler			
A048 Shelduck			
A137 Ringed Plover			
A140 Golden Plover			
A141 Grey Plover			
A143 Knot			
A149 Dunlin			
A156 Black-tailed Godwit			
A157 Bar-tailed Godwit			
A160 Curlew			
A162 Redshank			
A164 Greenshank			
A142 Lapwing			
A046 Light-bellied Brent Goose			
A038 Whooper Swan			
A179 Black-headed Gull			

Stack's to Mullaghareirk Mountains, West Limerick Hills and Mount Eagle SPA (004161)		Potential Impact mechanism	Likely significant effects (Y/N)
Interest	Conservation Objective		
A082 Hen Harrier	Restore the favourable conservation condition.	Given the habitats within the Proposed Development site, it is of negligible value for breeding Hen Harrier and of low potential value for foraging Hen Harrier.	N

Moanveanlagh Bog cSAC (002351)		Potential Impact mechanism	Likely significant effects (Y/N)
Interest	Conservation Objective		
7110 Active raised bogs	To restore the favourable conservation condition	Determined that the operation of the Proposed Development will not contribute significantly to any exceedance of the Critical Loads for acid and nitrogen deposition and that the impact will not have a significant effect.	N
7120 Degraded raised bogs still capable of natural regeneration	Not set		
7150 Depressions on peat substrates of Rhynchosporion	Not set		

Tullagher Lough and Bog cSAC (002343)		Potential Impact mechanism	Likely significant effects (Y/N)
Interest	Conservation Objective		
7110 Active raised bogs	To restore the favourable conservation condition	Determined that the operation of the Proposed Development will not contribute significantly to any exceedance of the Critical Loads for acid and nitrogen deposition and that the impact will not have a significant effect.	N
7120 Degraded raised bogs still capable of natural regeneration	Not set		
7140 Transition mires and quaking bogs	To maintain the favourable conservation condition		
7150 Depressions on peat substrates of Rhynchosporion	Not set		

Further assessment in-combination with other plans and projects is not required at this time.

Overall Conclusion - Screening Determination

On the basis of the information and submissions on the file, including the AA Screening Report and supporting information, the nature, size and location of the proposed development and its likely direct, indirect and cumulative effects, the source pathway receptor principle and proximity and functional relationship between the proposed works and the European sites and their conservation objectives, I conclude that the proposed development could result in significant effects on the Lower River Shannon SAC and the River Shannon and River Fergus Estuaries SPA.

Appropriate Assessment is therefore required to determine if adverse effects on the integrity of these sites can be ruled out. There is also the potential likelihood for significant in-combination effects with other plans or projects or activities.

The potential for significant effects on the conservation objectives of Stack's to Mullaghareirk Mountains, West Limerick Hills and Mount Eagle SPA, Moanveanlagh Bog SAC, Tullaher Lough and Bog SAC as well as other European Sites outside of the zone of influence can be screened out with confidence because of the separation distances and the lack of substantive ecological linkages or pathways between the proposed works and these European sites.

In reaching the conclusion of the screening assessment, no account was taken of measures intended to avoid or reduce the potentially harmful effects of the project on any European Site.

It is therefore determined that Appropriate Assessment (stage 2) [under Section 177V of the Planning and Development Act 2000] is required on the basis of the effects of the project 'alone'.

Appendix 2: Appropriate Assessment

The requirements of Article 6(3) as related to appropriate assessment of a project under part XAB, sections 177U and 177V of the Planning and Development Act 2000 (as amended) are considered fully in this section. The areas addressed in this section are as follows:

- Compliance with Article 6(3) of the EU Habitats Directive,
- The Natura Impact Statement and associated documents, and
- Appropriate assessment of implications of the proposed development on the integrity of each European site.

Compliance with Article 6(3) of the EU Habitats Directive

The Habitats Directive deals with the conservation of natural habitats and of wild fauna and flora throughout the European Union. Article 6(3) of this Directive requires that any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects shall be subject to appropriate assessment of its implications for the site in view of the site's conservation objectives. The competent authority must be satisfied that the proposal will not adversely affect the integrity of the European site before consent can be given.

The proposed development is not directly connected to or necessary to the management of any European site and therefore is subject to the provisions of Article 6(3).

The Natura Impact Statement

The application included a Natura Impact Statement prepared by AQUAFACT International Services Limited dated April 2024, which examines and assesses potential adverse effects of the proposed development on the following European Sites:

- Lower River Shannon SAC (Site code: 002165), and

- River Shannon and River Fergus Estuaries SPA (Site code: 004077).

The applicant's NIS was prepared in line with current best practice guidance. The applicant's NIS concluded that:

- all aspects of the proposed development project have been identified which, in the light of the best scientific knowledge in the field, can by themselves or in combination with other plans or projects, affect the European sites in the light of its conservation objectives;
- there are complete, precise and definitive findings and conclusions regarding the identified potential effects on any European site;
- on the basis of those findings and conclusions, the competent authorities are able to determine that no scientific doubt remains as to the absence of the identified potential effects; and
- thus, the competent authorities may determine that the proposed development will not adversely affect the integrity of any European Site.

Having reviewed the documents, submissions and consultations with the NPWS etc, I am satisfied that the information allows for a complete assessment of any adverse effects of the development, on the conservation objectives of the following European sites alone, or in combination with other plans and projects:

- Lower River Shannon SAC (Site code: 002165), and
- River Shannon and River Fergus Estuaries SPA (Site code: 004077).

Appropriate Assessment of implications of the proposed development

The following is a summary of the objective scientific assessment of the implications of the project on the qualifying interest features of the European sites using the best scientific knowledge in the field as presented in the NIS. All aspects of the project which could result in significant effects are assessed and mitigation measures designed to avoid or reduce any adverse effects are considered and assessed.

The following Guidance was adhered to in my assessment:

- Appropriate Assessment of Plans and Projects in Ireland: Guidance for Planning Authorities (Department of the Environment, Heritage and Local Government, 2009).
- Assessment of plans and projects significantly affecting Natura 2000 sites - Methodological guidance on the provisions of Article 6(3) and 6(4) of the Habitats Directive 92/43/EC (European Commission, 2001).
- Guidelines on the implementation of the Birds and Habitats Directives in estuaries and coastal zones (European Commission, 2011).
- Managing Natura 2000 sites - The provisions of Article 6 of the 'Habitats' Directive 92/43/EEC (European Commission, 2018).

European Sites

The following sites are subject to Stage II Appropriate Assessment:

- Lower River Shannon SAC (Site code: 002165)
- River Shannon and River Fergus Estuaries SPA (Site code: 004077)

A description of these sites and their Conservation Objectives and Qualifying Interests are set out in the NIS and are summarised above. I have also examined the Natura 2000 data forms as relevant and relevant Conservation Objectives Supporting Documents for these sites available through the NPWS and European websites (www.npws.ie and <https://natura2000.eea.europa.eu>).

The main mechanisms by which the proposed development could adversely affect the conservation objectives of European sites are identified in the NIS as follows:

1. Release of pollutants during construction.
2. Noise, visual and vibration disturbance.
3. Underwater noise.
4. Seabed habitat loss.
5. Discharge of Wastewater and Power Plant Process Heated Water Effluent.

6. Barrier to connectivity
7. Loss of prey biomass.

Receiving Environment

Lower River Shannon SAC

The Lower River Shannon SAC is designated for a total of twenty-one Annex I Habitat and Annex II species. The SAC stretches along the Shannon valley from Killaloe in Co. Clare to Loop Head/ Kerry Head, a distance of some 120km.

Marine/ Coastal Annex I Habitats: Two habitat types are directly impacted by the proposed development – Estuaries (1130) and Reefs (1170), which comprise extensive areas within the overall SAC. The intertidal habitats encountered during site investigations are described as typical of cobbly rocky shores in Ireland. No rare, protected or unusual species were observed. All observed species are identified as typical of this area of the SAC and all sites examined were described as either undisturbed or slightly disturbed.

Annex II Species: Two critical habitat areas for Bottlenose Dolphin are identified within the estuary through which at least part of the resident population migrates throughout the year, the smaller of which is located off Moneypoint. The area around the site at Ardmore Point has not been identified as a hot spot for bottlenose dolphin occurrence. While the adjoining waters are regularly used by the dolphin passing through the area, they rarely stop and socialize or forage there. Use of this area is therefore described as more likely a transition corridor to move between the outer and inner estuary.

There are no spawning sites for Atlantic Salmon at the project area; however, adult fish will pass the site when travelling up the river to spawn or on return to the sea or as smolts on their first migration to the sea. There is potential that Sea Lamprey and River Lamprey to pass in close proximity to the site.

Activity recorded in otter surveys in 2007, 2011 and 2021-2024 was concentrated outside the western boundary of the site, along the Ralappane Stream and Shannon Estuary. A well-worn Otter track was recorded running alongside the tidal section of

the stream. However, no holts were recorded within 150m of the development site boundary.

River Shannon and River Fergus SPA

The estuaries of the River Shannon and River Fergus form the largest estuarine complex in Ireland. The SPA is designated for a total of twenty-one bird species. The site has vast expanses of intertidal flats which contain a diverse macroinvertebrate community which provides a rich food resource for the wintering birds.

The application provides the results of bird surveys undertaken in respect of the subject development in 2021-2023. Thirteen of the 21 SCI species for the River Shannon and River Fergus Estuaries SPA were recorded during estuarine bird surveys. With the exception of black-headed gull, bird numbers foraging in the Shannon Estuary to the north of the proposed development site are low. This reflects the lack of suitable intertidal foraging habitat in this area. The numbers of birds recorded were relatively low and no species were recorded in nationally important numbers. Small numbers of conservation feature bird species were recorded within 500m of the site during both winter and summer bird counts. Curlew were recorded foraging on wet grassland habitat to the west of the site. No terrestrial foraging conservation feature bird species were recorded within the development site boundary.

Impact Prediction

Section 3.4 of the NIS considers each Impact Mechanism and potential impacts on relevant conservation features, in respect of which I note the following:

Impact Mechanism No.1: Release of pollutants during construction
Any effect of increased turbidity or localised sediment deposition will be short-term due to rapid dispersion by local currents.
As the area is naturally turbid and hydrodynamically active and experiences a high degree of natural suspended solids, there is no risk of significant effects to benthic habitats.

Accidental release of hydrocarbons will potentially contaminate the seabed sediments adjacent to the site, inhibiting recolonisation of the area. Spills of hydrocarbons and chemicals can give rise to tainting of fish or, if large enough, fish kills and invertebrate kills.

Conclusion:	Subject to implementation of identified mitigation, there will be no adverse effects on the integrity of European sites.
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Impact Mechanism No.2: Noise, visual and vibration disturbance

All blasting locations are confined to the onshore habitats and significant noise will dissipate quickly outside the immediate works area. Proposed blasting locations are located at the east of the site and no more than one blast per day is envisaged. There are no blasting locations within the SAC or SPA and the blasting areas at the east of the site are a considerable distance from areas used by conservation feature birds and otter. Blast frequency and vibration emissions will be limited. Given the temporary nature of the activity and the distribution of conservation feature species in the vicinity, significant impacts are not predicted.

Small numbers of wading birds were recorded foraging along the shoreline in the vicinity of the drainage outfall location and along the shoreline adjoining the Power Plant and construction noise levels will fall off quickly outside the site boundary.

The power plant buildings will be visible within the Shannon Estuary (and SPA) north of the site. There will be no visible structures or regular maintenance activity within the estuary during operation and the drainage outfall pipe will be buried under the estuarine muds. This represents a low to moderate level of noise and visual disturbance to which birds are likely to become habituated to over time.

Artificial lighting could potentially result in disruption of SCI species. Mitigation measures during construction will limit light-spill into the SPA from the site. In the medium to long term birds are likely to habituate to additional lighting and foraging rates will return to pre-construction levels

Construction works are likely to result in temporary to short-term displacement of a small number of waterbirds. Having regard to the limited numbers of birds frequenting this area and their ability to habituate to predictable disturbance, no significant effect from visual or noise disturbance during construction or operation is predicted.

Otter have been recorded using lands to the west of the site, however, no holts/ couches were recorded within 150m of the site. While otters are likely to avoid bridge works on the Ralappane Stream due to disturbance during construction, this is not likely to be a critical

foraging area. Construction works will not have a significant impact on otter due to disturbance or impacts on prey availability. Short-term displacement due to increased noise and disturbance is unlikely to significantly impact on otter due to their ability to move away from or adapt to short-term disturbance.

Conclusion:	Subject to implementation of identified mitigation, there will be no adverse effects on the integrity of European sites.
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Impact Mechanism No.3: Underwater noise

Sound levels occurring in the water will be relatively low with the only predicted impact from blasting would be to pinniped species (seals) within 75m from the shoreline. Potential impact of noise on juvenile and adult fish in open water are considered to be minimal as they can readily move away from the noise source.

Bottlenose dolphins using industrially developed coastal waters such as the Shannon Estuary are particularly vulnerable to anthropogenic disturbance and to habitat degradation.⁶ Although dolphins were regularly recorded at the site there use seems largely transitory. Given that the area impacted by noise coming from onshore blasting is restricted to within 75m of the shoreline along the site of the proposed development the potential for the bottlenose dolphin population to be affected is very low.

The potential zone of impact will be confined to an area 75m from the shoreline and no signs of otter were recorded in this part of the estuary, either within the water or along the shoreline. Given that there are no records of otter within the potential zone of impact, no Permanent Threshold Shift or other injuries would be expected.

Grey seals rarely occur in the Shannon Estuary, and harbour seals are uncommon. The numbers of cormorant recorded in vicinity of the works area are very low. Underwater noise created by onshore blasting works would be significantly below the threshold for mortality or injury in diving birds and all other activity during construction and operation will be significantly below noise thresholds.

Conclusion:	Subject to implementation of identified mitigation, there will be no adverse effects on the integrity of European sites.
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Impact Mechanism No.4: Seabed habitat loss

The only activity associated with the Proposed Development that will result in seabed habitat loss is the installation of a trenched water outfall across the shoreline into the

⁶ P.3, Bottlenose dolphin survey in the Lower River Shannon SAC (November 2018), E. Rogan, M. Garagouni, M. Nykänen, A. Whitaker & S.N. Ingram, Report to the National Parks and Wildlife Service, Department of Culture, Heritage and the Gaeltacht.

Shannon estuary. The proposed outfall overlaps Annex I habitats: 1130 Estuaries and 1170 Reefs.

In respect of the Estuary habitat specifically, this is calculated as approximately 100m² or 0.000041% of the total habitat occurring within European Site. The development will also lead to the loss of 65m² of reef habitat, which equates to approximately 0.00003% of the total habitat area within the SAC. It is maintained that following decommissioning of the development, these habitats will become re-established at the site.

Estuaries and Reefs habitat types are well represented within the SAC. The proposed development will lead to the permanent loss of an extremely small area of these habitats relative to the overall SAC site.

Based on the evidence presented, I do not consider that the proposed development, occurring within this dynamic environment, will give rise to an adverse effect on the integrity of the Lower River Shannon SAC as the loss of this very small amount of benthic habitat would not adversely impact on the ecological structure or function of the site or of the habitats and community complexes therein.

Conclusion:	The loss of this magnitude will have no impact on the structure and functioning of these Annex I habitats and on the integrity of the Lower River Shannon SAC or the SPA.
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Impact Mechanism No.5: Discharge of Wastewater and Power Plant Wastewater and Power Plant Process Heated Water Effluent

The process effluent in the sump will be monitored for compliance with the IE licence limits and then discharged, via the storm water outfall pipe, to the Shannon Estuary.

The parameters of interest modelled were temperature, BOD, Ammonia, Total Phosphorus and E. coli. Modelling shows a very local rise in temperature at the outfall site having a maximum increase of < 1°C and mean increase of 0.069°C. The maximum temperature increase reduces within 100m of the discharge point to +0.171°C which is an insignificant impact.

The predicted E.coli concentration plume shows no impact on Ballylongford and Glencloosagh Bays where shellfish activities are located. All of the modelled water quality parameters easily satisfy the limits set out in the surface water regulations and will not impact the water quality status of the receiving waters.

No significant effects on water quality of qualifying interests of European sites is likely from such discharges.

Conclusion:	There will be no adverse effects on the integrity of European sites from Impact Mechanism 5.
Impact Mechanism No.6: Barrier to Connectivity	
<p>The NPWS map⁷ for the designated site shows a 250m wide Otter commuting buffer to be present all along the Shannon Estuary, including the area proposed for the drainage outfall discharge works. Given otter's ability to adapt to disturbance they are likely to continue to use the habitats in the vicinity of the proposed development during operation. Therefore, no significant physical or disturbance barriers to connectivity for otter have been identified during the construction phase.</p> <p>Cormorants using waters within approximately 250m of the works area could potentially be displaced during construction works along the shoreline. However, as with other SCI species small numbers of cormorant were recorded within the Shannon Estuary north of the site and in the vicinity of the proposed outfall location. It should also be noted that cormorants are considerably more tolerant to disturbance than other diving bird species.</p> <p>Based on the tolerance of cormorant and otter to anthropogenic disturbance, no significant effects from disturbance or noise during construction have been identified.</p>	
Conclusion:	Subject to implementation of identified mitigation, there will be no adverse effects on the integrity of European sites.
Impact Mechanism No.7: Loss of prey biomass	
<p>There is potential for the release of pollutants that could lead to fish mortality. This could lead to loss of prey biomass for SCI birds and otter during construction and operation. The removal of wet grassland habitat within the proposed development site, where small numbers of common frog are known to occur, could also lead to a reduction in prey species for otter.</p> <p>However, given the limited area of suitable habitat and therefore the small numbers of common frog at the Proposed Development site there will be no significant impact from loss of prey biomass.</p>	
Conclusion:	There will be no significant adverse effects on the integrity of European sites from Impact Mechanism 7.

⁷ Map 17: Lower River Shannon SAC, Conservation Objectives - Otter commuting; Lower River Shannon SAC 002165, Conservation Objective Series (NPWS, DoAH&G, 2012).

Mitigation Measures

The applicant has proposed a series of mitigation measures to avoid adverse effects on the Lower River Shannon SAC and the River Shannon and River Fergus Estuaries SPA. A summary assessment of these measures is provided in the table below.

Summary of assessment of mitigation measures			
Mitigation Measures	Assessment	Implementation	Monitoring
Implementation of the CEMP and standard construction best practice - including measures to ensure no significant release of pollutants, sediment laden water, runoff chemicals or other waste material pollution into the nearby habitats, watercourses and waterbodies.	Reduce potential of adverse effects to water quality of Shannon Estuary if implemented	Applicant/ Contractor	Appointment of qualified person to implement CEMP during period of construction
Standard construction best practice used to manage the risk of potential for loss of hydrocarbons such as diesel and hydraulic fluids.	As above	Applicant/ Contractor	As above

Storage and availability of oil spill response equipment.	As above	Applicant/ Contractor	As above
Imported backfill material will be washed (cleaned) to remove fines and checked for invasive species before use.	As above	Applicant/ Contractor	As above
Measures to avoid the release of sediment will be implemented (including silt fences).	As above	Applicant/ Contractor	As above
Clean (washed) rock material will be used as rock protection to minimise the risk of introducing fine materials.	As above	Applicant/ Contractor	As above
Application of standard mitigation measures during land-based blasting, with only single blasts to take place each day.	Reduce potential of adverse effects to marine mammals and birds of SCI.	Applicant/ Contractor	As above
Marine mammal monitoring programme will be continued into the construction phase.	Reduce potential of adverse effects to marine mammals	Applicant/ Irish Whale and Dolphin Group	As above

Lighting will be provided with the minimum luminosity necessary for safety and security purposes.	Reduce potential of adverse effects to marine mammals and birds of SCI.	Applicant	As above
During construction, lighting will be positioned and directed so that it does not unnecessarily intrude on adjacent ecological receptors and structures used by protected species.	Reduce potential of adverse effects to marine mammals and birds of SCI.	Applicant/ Contractor	As above
A regime of noise and vibration monitoring will be undertaken during the construction phase.	Reduce potential of adverse effects to ecological receptors.	Applicant/ Contractor	As above
Industrial Emission Licence	Emission limit values (ELVs) for air, dust, noise, and surface water.	Applicant	Ongoing by the EPA

Potential for Adverse Effects on Site Integrity

In relation to benthic habitat loss of areas of Annex I habitats, Estuaries and Reefs, I note that these community types are not rare and occur widely within the estuary and around the coasts of the country. They occur in dynamic environments and are not highly vulnerable to change. The effect of the limited extent of loss of 'Subtidal sand to mixed sediment with *Nucula nucleus* community complex' and 'Fucoid-dominated

intertidal reef' community types is not therefore regarded as significant or likely to affect the ecological structure or function of the SAC. I also note and draw the Board's attention to the conservation objective for both Estuaries 1130 and Reefs 1170, which is to maintain their favourable conservation conditions, with a target stated as:

The permanent habitat area is stable or increasing, subject to natural processes.

I note the comments of the DAU in this regard whereby they state in their submission that the construction of the Proposed Development would not allow for the target for the Qualifying Interest area of *Estuaries* and *Reefs* to remain "stable" subject to natural processes. However, I also note that the habitat areas for *Estuaries* and *Reefs* is estimated as 24,273 ha. and 21,421 ha., respectively.⁸

Based on the evidence presented or otherwise available, I do not consider that the proposed development, occurring within this dynamic environment, will give rise to a significant adverse effect on the integrity of the Lower River Shannon SAC as the loss of this very small amount of benthic habitat would not adversely impact on the ecological structure or function of the site or of the habitats and community complexes therein. Furthermore, I am satisfied from the evidence presented that these habitats will become re-established at the site once initial works are completed and, most certainly, upon decommissioning.

Similarly, having examined the information and data provided or otherwise available, I am satisfied that the very minor loss of habitat along the periphery of River Shannon and River Fergus Estuaries SPA will not affect the overall integrity of the site in this instance due to the very small area affected and the low-quality habitat for SPA birds at this location, which is reflected in the low numbers of birds recorded utilising this area of the estuary.

In-Combination Effects

There is potential for air and water emissions from the project alone and in combination with other plans and projects to undermine the conservation objectives of the Natura 2000 network. The applicant's Natura Impact Statement identifies the

⁸ P.'s 26 and 30, Conservation Objective Series: Lower River Shannon SAC 002165 (NPWS).

following plans/ projects as presenting a risk of acting in-combination with the Proposed Development:

- 220 kV and 20 kV power connections from the site to the national grid at Kilpaddoge, to be subject to future planning applications.
- 10-year permission for a Battery Energy Storage Project at Kilpaddoge, Tarbert, previously subject to AA Screening.
- LNG pipeline, previously subject to AA Screening.
- Cross Shannon 400 kV Cable Project between Moneypoint and Kilpaddoge, subject to AA and granted permission under ABP-313661.
- Moneypoint Synchronous Condenser (PA ref: 20/318), previously subject to AA (complete).
- ESB Green Atlantic@Moneypoint project, subject to future planning applications.
- Future adjacent data centre to be subject to separate future planning application.
- Proposed temporary emergency electricity generation capacity at Tarbert Generating Station.
- Survey of pipelines between Tarbert Generating Station and Kilkerin Point, Co. Clare, understood to be complete.
- It is stated that previous planning applications and foreshore licence applications for projects at the site of the proposed development have been considered in full in the screening exercise.

This analysis is considered to be complete and robust in terms of plans and projects and no potentially significant impacts are identified taking into account any residual impacts from the proposed development.

Summary of Appropriate Assessment of implications of the proposed development on the integrity of European Sites alone and in combination with other plans and projects in view of the sites Conservation Objectives:

Lower River Shannon SAC				
Summary of appropriate assessment				
Conservation objective	Targets and attributes	Potential adverse effects	Potential In-combination effects	Can adverse effects on integrity be excluded?
1130 Estuaries	Habitat Area, Community distribution	Direct loss of habitat area. The area loss is de minimis relative to the habitat area within the SAC and will not have an adverse effect on site integrity.	Operational airborne emissions with Moneypoint and Tarbert.	Yes. The loss of a very small area of habitat will not affect the overall structure or functioning of this habitat.
1170 Reef	Habitat Distribution Habitat Area Community distribution	Disturbance during construction activity will be temporary and not significant. Modelling of air emissions and deposition indicates that the effects of the proposed development will be minor and localised and will not have an adverse effect on site integrity.		

		No significant from airborne pollution likely.		
1140 Mudflats and sandflats not covered by seawater at low tide	Area Community Distribution	Discharges/ emissions during construction and operation have potential to impact on water quality.	Cross-Shannon 400kV cable project.	Yes. The conclusions regarding the absence of long-term effects are reasonable.
1150 Coastal lagoons	Area Distribution Salinity regime Hydrological regime Barrier: connection to sea. Water quality Depth of macrophyte colonisation Typical plant and animal species Negative indicator species	Subject to identified mitigation, impacts will be minor and localised, and will not have an adverse effect on site integrity. Modelling indicates that sediment deposition is not likely to have adverse effects. Where cable activities occur concurrently, there is potential for sediment plumes to overlap. The combined sediment deposition depths are not sufficient to impact on habitats and faunal communities.	Operational airborne emissions with Moneypoint and Tarbert, including emergency generation development at Tarbert.	
1160 Large shallow inlets and bays	Area Community Distribution			
1220 Perennial	Area			

vegetation of stony banks	<p>Distribution</p> <p>Physical structure: functionality and sediment supply</p> <p>Vegetation structure: zonation.</p> <p>Vegetation composition:</p> <ul style="list-style-type: none"> - typical species & sub-communities - negative indicator species 	No significant effects from airborne pollution are likely.		
1310 Salicornia and annuals colonising mud & sand	<p>Area</p> <p>Distribution</p> <p>Physical Structure</p> <p>Vegetation Structure</p> <p>Vegetation Composition</p>			
1330 Atlantic salt meadows	<p>Area</p> <p>Distribution</p>			
1410 Mediterranean salt meadows	<p>Physical Structure</p>			

	Vegetation Structure Vegetation Composition			
1095 Sea Lamprey	Distribution Population structure of juveniles Extent and distribution of spawning habitat Availability of juvenile habitat	Discharges/ emissions during construction and operation have potential to impact on water quality. Subject to identified mitigation, impacts will be minor and localised, and will not have an adverse effect on site integrity. The impact of construction noise will be localised with no adverse effects on the conservation feature. As larvae will not be present in the project area, no risk of impingement or entrainment arises.	None	Yes. The conclusions regarding the absence of long-term effects are reasonable.
1096 Brook Lamprey				
1099 River Lamprey				
1106 Atlantic Salmon	Distribution Adult spawning fish Fry abundance Smolt abundance Redds no. and distribution. Water quality			
1349 Common Bottlenose Dolphin	Access to suitable habitat Habitat use: Critical areas	Noise disturbance and associated impacts could constitute a negative effect on site	Cross-Shannon 400kV cable project	Yes. The conclusions regarding the absence of long-term

	Disturbance	<p>integrity. Subject to identified mitigation measures, adverse effects will be avoided.</p> <p>Discharges/ emissions during construction and operation have potential to impact on water quality and prey abundance. Subject to identified mitigation, impacts will be minor and localised, and will not have an adverse effect on site integrity.</p> <p>No significant increase in shipping activities is likely.</p>		effects are reasonable.
1355 Otter	<p>Distribution</p> <p>Habitat extent</p> <p>Couching sites and holts</p> <p>Fish biomass</p> <p>Barriers to connectivity</p>	<p>Temporary disturbance and displacement during construction along foraging habitats.</p> <p>Minor loss of foraging habitat of lower importance will not have adverse effects and there is no likely significant loss of prey.</p>	None	As above

		<p>No physical barriers to movement and disturbance of nocturnal movements at operation stage not likely.</p> <p>No adverse effects on the conservation feature are anticipated.</p>		
<p>Overall Conclusion: Integrity test</p> <p>Following the implementation of mitigation, the construction and operation of this proposed development will not adversely affect the integrity of the European Sites in view of the site's conservation objectives. No reasonable scientific doubt remains as to the absence of such effects.</p>				
<p>1110 Sandbanks slightly covered by seawater all the time, 91E0 Alluvial forests, 6410 Molinia meadows on calcareous, peaty or clayey-silt-laden soil, 3260 Water courses of plain to montane levels, 1230 Vegetated sea cliffs of the Atlantic and Baltic coasts, 1029 Freshwater Pearl Mussel were screened out.</p>				

River Shannon and River Fergus Estuaries SPA				
Summary of appropriate assessment				
Conservation objective	Targets and attributes	Potential adverse effects	Potential In-combination effects	Can adverse effects on integrity be excluded?
A017 Cormorant	Distribution: no significant decrease in the range, timing or	Potential noise and visual disturbance and displacement during construction, however, generally small number	Cross Shannon 400 kV Cable Project.	Yes Low number of SCI birds use the area in the

	<p>intensity of use of areas</p> <p>Breeding population abundance</p> <p>Productivity rate</p> <p>Prey biomass available</p> <p>Barriers to connectivity</p> <p>Disturbance at the breeding site</p> <p>Population trend</p>	<p>of birds occur in the vicinity of the works and works are relatively short-term in nature.</p> <p>Operational noise emissions may result in limited disturbance but some habituation to noise is also likely.</p> <p>Underwater noise would be significantly below the threshold for mortality or injury in diving birds.</p> <p>There is potential for lighting disturbance during construction and operations. Design will minimise extent and intensity of impacts.</p> <p>Discharges/ emissions during construction and operation have potential to impact on water quality and prey biomass. Subject to identified mitigation, impacts will be minor and localised, including impacts on prey biomass, and will not</p>		<p>vicinity of the site. No significant change in numbers of birds or distribution in the SPA is likely.</p> <p>No doubt regarding the effectiveness or implementation of mitigation measures proposed to prevent indirect effects.</p>
A052 Teal	<p>Population trend</p> <p>Distribution: no significant decrease in the range, timing or intensity of use of areas</p>			
A054 Pintail				
A062 Scaup				
A050 Wigeon				
A056 Shoveler				
A048 Shelduck				
A137 Ringed Plover				
A140 Golden Plover				
A141 Grey Plover				
A143 Knot				

A149 Dunlin		have an adverse effect on site integrity.		
A156 Black-tailed Godwit		Where cable activities occur concurrently there is potential for sediment plumes to overlap. The combined sediment deposition depths are not sufficient to impact on habitats and faunal communities or on prey biomass; consequently in-combination effect will not occur.		
A157 Bar-tailed Godwit				
A160 Curlew				
A162 Redshank				
A164 Greenshank				
A142 Lapwing				
A046 Light-bellied Brent Goose				
A038 Whooper Swan				
A179 Black-headed Gull	Low risk of accident or fire events. Pollution and spillage response plans, including containment and remediation measures, and adherence to HSA requirements, address potential impacts.			
Overall Conclusion: Integrity test				
Following the implementation of mitigation, the construction and operation of this proposed development will not adversely affect the integrity of the European Sites in view of the site's conservation objectives. No reasonable scientific doubt remains as to the absence of such effects.				
A999 Wetland was screened out.				

Integrity Test

Following the appropriate assessment and the consideration of mitigation measures, I am able to ascertain with confidence that the project would not adversely affect the integrity of the Lower River Shannon SAC (Site code: 002165) and the River Shannon and River Fergus Estuaries SPA (Site code: 004077) in view of the Conservation Objectives of these sites.

Appropriate Assessment Conclusion

Having carried out screening for Appropriate Assessment of the project, it was concluded that it may have a significant effect on the Lower River Shannon SAC (Site code: 002165) and River Shannon and River Fergus Estuaries SPA (Site code: 004077).

Consequently, an Appropriate Assessment was required of the implications of the project on the qualifying features of those sites in light of their conservation objectives.

Following an Appropriate Assessment, it has been ascertained that the proposed development, individually or in-combination with other plans or projects would not adversely affect the integrity of those European Sites in view of their Conservation Objectives.

This conclusion is based on a complete assessment of all aspects of the proposed project and there is no reasonable doubt as to the absence of adverse effects.

This conclusion is based on:

- A full and detailed assessment of all aspects of the proposed project including proposed mitigation and ecological monitoring measures.
- Detailed assessment of in-combination effects with other plans and projects including historical projects, current proposals and future plans.
- Careful consideration of the implications of the loss of small areas of benthic habitat within the estuary, which is assessed as not being significant to the overall functioning of the SAC or SPA and will not impact on the overall integrity of these sites.

- No adverse effects to wintering or breeding Special Conservation Interest bird species of the SPA following the application of mitigation measures.
- Taking full account of all proposed mitigation measures which will ensure no adverse effects on the qualifying interests of the SAC, including Bottlenose Dolphin, Atlantic Salmon, Sea and River lamprey and Otter, their habitats or prey upon which they are dependant.
- No significant effects on the qualifying interests of European sites or supporting habitats, arising from operational airborne pollution.
- No reasonable scientific doubt as to the absence of adverse effects on the integrity of the Lower River Shannon SAC (Site code: 002165) and River Shannon and River Fergus Estuaries SPA (Site code: 004077).