

Shannon Technology and Energy Park

Planning Report

Shannon LNG Limited

Project number: PR-452891

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1. Introduction

This report has been prepared to accompany an application for planning permission made by Shannon LNG Limited, hereafter referred to as ‘the applicant’ to An Bord Pleanála (ABP) in respect of the proposed Shannon Technology and Energy Park (STEP), hereafter referred to as ‘the proposed development’. The proposed development the subject of this application for permission will be located within the townlands of Kilcolgan Lower and Ralappane, Ballylongford, Co. Kerry and on the Shannon Estuary.

The proposed development has been designated by ABP as Strategic Infrastructure Development (SID) following pre-application consultation between the applicant and ABP undertaken in accordance with the provisions of Section 37B of the Planning and Development Act, 2000, as amended – case ref. ABP-304007-19. The written correspondence from ABP dated 3rd June, 2021 confirming the proposed development to be SID is enclosed as Appendix A to this Report and the Inspector’s Report on case ref. ABP-304007-19 is enclosed as Appendix B to this Report.

The purpose of this planning report is to present an overview of the planning issues associated with the proposed development. It is intended to assist ABP in determining whether the proposed development is in accordance with the principles of proper planning and sustainable development, and accordingly whether planning permission should be granted for the proposed development.

The structure of this planning report is as follows:

Section 1: Introduction

Section 2: Appraisal of the Proposed Development

Section 3: Planning Policy and Planning History Appraisal

Section 4: Environmental Appraisal

Section 5: Conclusions

Appendices

2. Appraisal of the Proposed Development

2.1 Proposed Development Site

The proposed development site, which is illustrated in Figure 1-1, will be located within the townlands of Kilcolgan Lower and Ralappane, Ballylongford, Co. Kerry and on the Shannon Estuary.

The proposed development site is 52ha, including both onshore and offshore elements. The overall Shannon Development Landbank on which the proposed development site is located has a total area of 243ha (603 acres). It is bordered to the north by the Shannon Estuary and to the south by the Coast Road L1010 which connects Tarbert to Ballylongford. Fields in pasture and forestry lie beyond the eastern boundary and the Shannon Development Landbank extends westward beyond the proposed development site’s western boundary.

The proposed development site itself is in pasture, comprising primarily improved grassland with some wet grassland adjacent to the Shannon Estuary. There are a number of derelict, ruined structures on the proposed development site. Field boundaries predominantly consist of hedgerows with small drainage ditches. A small section of the Ralappane Stream is located in the southernmost part of the proposed development site. The proposed development site is generally undulating, sloping downward to the north towards the coastline, and varies in elevation from 30 to 35m OD along its southern boundary to 5 to 11m OD at the northern edge, where there is a low cliff, typically 2 to 5m in height, above a tidal rock or shingle coastline.

Of importance in the context of the proposed development, there are a number of significant industrial activities in the wider area include the currently coal-fired power station at Moneypoint on the opposite side of the estuary at a distance of approximately 3km; the oil-fired power station at Tarbert c.5km to the east; and the Rusal Aughinish Alumina refinery approximately 26km to the west at Foynes, where Shannon Foynes Port is also located. The Kilpaddoge 220 kV substation and the recently commissioned Kelwin-2 26MW battery energy storage system, are

located approximately 3km to the east of the proposed development site. The 18MW Leanmore Wind Farm, which began operating in 2018, is located c. 2km to the south-east.

The proposed development site, which is zoned for industrial and marine development in the Kerry County Development Plan 2015-2021, has access to deep water (approximately > 13 m depth) in the Shannon Estuary, which is suitable for navigation by large ships. The proposed development site is also close to national gas and electricity transmission grids, specifically 220 kV and 110 kV electrical transmission available from the Kilpaddoge 220 kV substation approximately 3km east of the proposed development site, and a GNI owned gas transmission pipeline located approximately 26km from the proposed development site.

The proposed development site also previously had the benefit of planning permission for an LNG Terminal (now expired) and has also approval for a gas pipeline connection to the existing natural gas network at Leahy's Co. Limerick, as well as a current planning permission for a combined Heat and Power (CHP) plant. There is also a foreshore lease for a jetty at the proposed location, and a foreshore licence for a storm water outfall pipe at the proposed location.

The Lower Shannon candidate Special Area of Conservation (cSAC) (Site code: 002165) is partly within and adjacent to the site along the northern/ north-western boundary and also along part of the eastern boundary. The Ballylongford Bay proposed Natural Heritage Area (pNHA) is adjacent to a part of the north-western boundary of the proposed development site. The Shannon-Fergus Estuary Special Protection Area (SPA) (Site code: 004077) is to the west of the proposed development site.

Figure 2-1 Proposed Development Site (generally outlined in red), relative to existing infrastructure (generally outlined in white)



The onshore part of the proposed development site is currently owned by Shannon Commercial Enterprises DAC (formerly Shannon Free Airport Development Company Limited) having its registered address at Shannon Airport, Co. Clare. The applicant has entered into an agreement for the purchase of the site. A letter of consent from Shannon Commercial Enterprises DAC is included with the planning application.

The key characteristics of the proposed development site are as follows:

- A large 52ha site principally located within a 182ha (approx.) landbank zoned for industrial and marine development in the Kerry County Development Plan 2015-2021, as also identified as such in the Regional Spatial and Economic Strategy for the Southern Region 2020, the Shannon Integrated Framework Plan 2013, and the Listowel Municipal District Local Area Plan 2020

- Location in an area which has established energy infrastructure (power stations at Tarbert and Moneypoint, Kilpaddoge substation, the Kelwin-2 battery energy storage system, and Leanamore windfarm); permitted 400 kV electricity transmission cables between Kilpaddoge substation and Moneypoint substation and a permitted windfarm at Ballylongford; proposed energy infrastructure (solar farms, and grid stabilisation facility at Kilpaddoge substation) and established port infrastructure (pilots, navigation lights etc.)
- Previous history for an LNG Terminal and Power Plant, in view of its strategic location, with an existing Foreshore Licence and an existing Foreshore Lease
- Deep Water access (>13m depth) in a sheltered location (waves <1.5m), and safe navigational area (2km wide channel) of uniform cross-sectional depth, with a width that provides adequate turning space of up to approximately 690m for LNG ships
- Proximity to high-capacity gas and electricity grids

2.2 Proposed Development

Figure 2-2 Proposed Development



The overall premise of the proposed development is to provide an alternative source of natural gas supply for Ireland in the form of regasified LNG, as well as a new source of electricity to the national electricity grid. Specifically, it will provide:

1. 600 MW of fast acting flexible thermal generation capacity to the Irish electricity market;
2. A 120 MWh battery energy storage system (BESS) to participate in the electricity ancillary services market; and
3. An LNG Terminal capable of offering up to 180,000m³ of LNG storage capacity and regasification capacity of up to 22.6 million standard cubic metres per day (MMsm³/d) of natural gas.

The proposed Power Plant will generate power for its own needs and for the LNG Terminal, and for sale to the market via the national electricity grid exported via a 220 kV connection, which will be subject to a separate planning application. An application to connect to the national electrical transmission network via this 220 kV connection was submitted to EirGrid in September 2020. An offer has yet to be received, although Shannon LNG Limited made a successful high voltage grid application under Enduring Connection Policy (ECP2.1).

The proposed Power Plant will not be operating at full load all year round. For example, during periods of high wind (renewable) generation it is expected that the Power Plant could be turned down or off by the system operator (EirGrid) to give priority to renewable power. However, the proposed LNG Terminal will need to be operational all year round. The proposed LNG Terminal could also be operational before the Power Plant and the 220 kV grid connection are completed. Therefore, a medium voltage (10/20kV) connection to supply power to the LNG Terminal in the absence of the 600 MW Power Plant will be required. This medium voltage connection will also be subject to a separate planning application. An onsite back-up power generation, consisting of three 8 MW gas fired electricity generators will supply power to the LNG Terminal until the Power Plant is operational, in the absence of the 220 kV and medium voltage grid connections.

A 120 MW for 1 hour (120 MWh) BESS shall also be included in the development. The BESS is comprised of 27 battery containers, approximately 4.5 MWh each, containing lithium ion batteries.

LNG is natural gas that has been cooled to approximately -160°C , at which point it becomes a liquid at atmospheric pressure. As a liquid, the volume of natural gas is approximately 600 times less than the volume of the equivalent amount in the gaseous stage, making it more manageable for storage and ocean transportation. LNG is stored and transported in insulated tanks operating at pressures slightly above normal atmospheric pressure.

LNG is produced primarily in locations with large gas reserves which are too distant from market areas to be transported economically by pipeline. The natural gas from these fields is gathered and brought by pipeline to liquefaction plants where it is liquefied, pumped into LNG storage tanks and then loaded onto LNG ships and transported to the market areas of the world. Ireland is one of very few countries in Western Europe with a national gas transmission network that does not have an LNG import terminal. The LNG will be delivered to the LNG terminal, where the liquid is unloaded into the FSRU storage tanks, converted back into gas by regasification and transmitted via the gas pipeline system.

A proposed Above Ground Installation (AGI) will facilitate the export of natural gas to the national gas transmission network via the already consented 26 km Shannon Pipeline (ABP Reg. Ref. PL08.GA0003 and PL08.DA0003).

An overall masterplan for the Shannon Technology and Energy Park has been prepared and is submitted for information with the planning application. This includes a (future) Data Centre Campus. The data centre will be subject to a separate planning application.

The Data Centre Campus, the 220 kV and the medium voltage (10/ 20 kV) cables have been considered as part of the cumulative impact assessment within each technical chapter of the EIAR that accompanies this planning application.

The proposed development has a flexible design that can easily transition to alternative low carbon fuels, subject to future planning applications and once the technology and public policies are established.

Figure 2-3 Proposed Development



As described in the public notices, Shannon LNG Limited gives notice of its intention to seek a 10 year planning permission for the proposed development which will be located on the Shannon Estuary and within the townlands of Kilcolgan Lower and Ralappane, Ballylongford, Co. Kerry. The proposed development will consist of:

1. A proposed Power Plant, which will be installed adjacent to the onshore receiving facilities and will principally comprise 3no. turbine halls (approximately 6,175m² each, and approximately 30.145m in height), each containing 1no. Combined Cycle Gas Turbine (CCGT). Each turbine hall will have a capacity of approximately 200MW for a total installed capacity of 600MW. Each turbine hall will comprise:
 - 2no. gas turbines with generators;
 - 2no. heat recovery steam generators with exhaust stacks exiting at approximately 35m in height;
 - 1no. steam turbine with generator and exhaust duct;
 - 1no. electrical equipment room;
 - 1no. auxiliary control room;
 - 1no. DCS room;
 - 1no. batteries room;
 - 1no. standby diesel generator room;
 - 1no. overhead crane;
 - 1no. auxiliary transformer.

Each turbine hall will be linked via 1no. exhaust duct to 1no. Air Cooled Condenser (ACC) (approximately 2,711.9m² each, and approximately 32.605m in height). Each Air Cooled Condenser will comprise:

- 1no. single-storey air cooled condenser (ACC) electrical Power Distribution Centre (approximately 103.7m² and approximately 4.25m in height);
- 1no. condensate collection tank;
- 1no. single-storey condensate polishing equipment enclosure (approximately 103m² and approximately 5.014m in height);
- 1no. single-storey ACC air extraction and equipment enclosure (approximately 196m² and approximately 10.25m in height).

The Power Plant will also include the following ancillary structures:

- 1no. 2-storey electrical (GIS) substation building (approximately 1,096m² and approximately 13.5m in height);
- 1no. air cooled heat exchangers structure (approximately 1,292.5m² and approximately 10m in height), with sound retention wall;
- 1no. single-storey workshop/stores/canteen building (approximately 732m² and approximately 8.013m in height);

- 1no. single-storey auxiliary boiler building (approximately 204m² and approximately 13.050m in height) and exhaust stack (approximately 32m in height);
 - 1no. single-storey central control operations building (approximately 318m² and approximately 6.41m in height);
 - 1no. single-storey administration building (approximately 318m² and approximately 5.435m in height);
 - 1no. single-storey firewater pumps enclosure (approximately 47m² and approximately 7.185m in height);
 - 1no. effluent sump;
 - 1no. single-storey water treatment building (approximately 630m² and approximately 7.445m in height);
 - 2no. raw/service/fire water storage tanks (approximately 24.15m in height);
 - 2no. demineralised water storage tanks (approximately 15.65m in height); and
 - 3no. generator step-up transformers (each approximately 104m² and approximately 6.004m in height), each with a sound retention wall.
2. A proposed 120 MW 1-hour (120 megawatt hour (MWh)) Battery Energy Storage System (BESS) (approximately 5,552.7m² and approximately 6.296m in height), which will comprise 27no. battery containers, approximately 4.5 MWh each, containing lithium ion batteries, and ancillary power conversion system (PCS) skids, as well as a BESS step-up transformer and sound retention wall.
3. A proposed Floating Storage and Regasification Unit (FSRU), with a Liquefied Natural Gas (LNG) storage capacity of 170,000 m³ (up to 180,000m³), 292.6m long and 43.4m wide, with a scantling draft water line of 12.9m. Measured at mid tide and with a scantling draft water line, the top of the highest structure on the FSRU (its communication mast) will be 46.0m above Ordnance Datum. The FSRU will include:
- LNG cargo tanks;
 - LNG vaporisation process equipment, designed to meet a send-out capacity of up to 22.6 million standard cubic metres per day (MMsm³/d) of natural gas, which is equivalent to approximately 250 gigawatt hours per day (GWh per day) of natural gas;
 - Seawater intake in the hull of the FSRU located approximately 2 m below water level; and
 - Heat exchangers.
- LNG will be delivered by a visiting LNG Carrier (LNGC) which will be moored to the seaward side of the FSRU.
4. A proposed jetty, the elevation of which will be set at +9 m OD (Malin Head), and which will comprise:
- 1no. hydraulic gangway tower;
 - 1no. unloading platform, with 2no. Gas Loading Arms (GLAs);
 - 8no. mooring dolphins, 2no. breasting dolphins, and catwalk;
 - 1no. access trestle, approximately 315m in length with a roadway of approximately 5m wide, pipeway, pipe rack support, mobile crane platform, sliding gangway, pontoon capable of accommodating 4no. tugs, maintenance platform, abutment and run-on slab;
 - Ancillary structures including 2no. power and control units, 2no. elevated fire water monitors, 2no. spill containment kits, lighting, CCTV system, and 1no. temporary berth and associated 2no. barges for construction purposes only.
5. Proposed onshore receiving facilities which will include:
- 1no. single-storey main control building (approximately 318m² and approximately 5.435m in height);
 - 1no. single-storey fuel gas metering enclosure (approximately 166m² and approximately 5.725m in height);
 - 1no. single-storey fuel gas regulating enclosure (approximately 166m² and approximately 5.725m in height);
 - 1no. single-storey fire water pumps enclosure (approximately 47m² and approximately 7.185m in height);
 - 1no. single-storey warehouse/workshop building (approximately 504m² and approximately 5.72m in height);
 - 1no. single-storey N₂ generation package control building (approximately 288m² and approximately 5.438m in height);
 - 1no. single-storey electrical switchgear enclosure (approximately 234m² and approximately 6.75m in height);
 - 1no. single-storey electrical switchgear enclosure (approximately 90m² and approximately 6.75m in height);

- 3no. Continuous Emissions Monitoring System (CEMS) enclosure (approximately 3.6m² and approximately 4.4m in height each);
 - 3no. single-storey nitrogen compressor buildings (approximately 103m² and approximately 5.4m in height each);
 - 1no. single-storey security building (approximately 63.8m² and approximately 3.657m in height);
 - 1no. single-storey metering & regulating area kiosk enclosure (approximately 9m² and approximately 3m in height);
 - 1no. single-storey metering & regulating area analyzer enclosure (approximately 13.2m² and approximately 3m in height);
 - 1no. single-storey metering & regulating area instrument enclosure (approximately 13.2m² and approximately 3m in height);
 - Ancillary structures to include: 3no. fuel gas heaters; 5no. SUS transformers; 1no. black start diesel generator; 3no. generator breakers; 3no. air cooled heat exchangers; 3no. gas turbines, with exhaust stack; 2no. instrument air packages; 2no. firewater storage tanks (approximately 16.15m in height); 3no. nitrogen purification skid/absorbers; and 3no. nitrogen evaporator/cold boxes.
6. A proposed Above Ground Installation (AGI) to include:
- 2no. single-storey chromatograph buildings (approximately 14.19m² and approximately 2.7m in height each);
 - 1no. single-storey control & instrumentation building (approximately 186.7m² and approximately 4.29m in height);
 - 1no. single-storey metering building (approximately 480m² and approximately 5.175m in height);
 - 5no. single-storey boiler unit buildings (approximately 42.24m² and approximately 8m in height each);
 - 1no. single-storey regulator building (approximately 243.6m² and approximately 5.27m in height);
 - 1no. single-storey generator kiosk building (approximately 60.72m² and approximately 3.25m in height);
 - The following ancillary structures: 2no. odorant tanks; heat exchangers; filtering; reverse flow valve arrangement; pig trap; and fuel gas let down units.

The AGI will facilitate the export of natural gas to the national gas transmission network via the already consented 26 km Shannon Pipeline (ABP Reg. Ref. PL08.GA0003 and PL08.DA0003)

7. All ancillary structures/works, including: the demolition of a small farm complex (in ruin), to include 2no. outhouses (in ruin) and a former habitable dwelling (in ruin), a gun emplacement structure (in ruin), a well (in ruin), and a field boundary wall structure (in ruin); 2no. oil/water separators; 1no. retaining wall; 1no. firewater retention pond; utility racks; utility sleepers; crossover platforms; water supply connection; pre-engineered/package biological waste water treatment system and a surface water drainage network, both of which will discharge directly to the Shannon Estuary via a discharge pipe; all car parking, including mobility and EV spaces, and cycle parking; new access off the L-1010 (Coast Road); 2no. culverts; internal roadways; pre-cast concrete bridge over the Ralappane Stream; all temporary construction works, including laydown area; all site development works, including earthworks to create a level platform at +18mOD for the main footprint of the proposed development (excluding the proposed AGI and jetty), 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.

Both an Environmental Impact Assessment Report (EIAR) and Natura Impact Statement (NIS) have been prepared in respect of the proposed development and accompany this application for permission.

The proposed development relates to development which comprises an activity requiring an Industrial Emission Licence.

The proposed development is an establishment for the purposes of the Chemicals Act (Control of Major Accident Hazards Involving Dangerous Substances) Regulations 2015 (S.I.209 of 2015). The COMAH Regulations implement the latest version of the 'Seveso III' Directive (Directive 2012/18/EU of the European Parliament and of the Council of 4 July 2012).

The key development statistics are set out in Table 2-1 below.

Table 2-1 Development Statistics

Statistic	Detail ¹
Site Area	52ha
Demolition	51.71m ² , to include: <div style="text-align: right; margin-right: 20px;">Farm complex (48.67m²) Well (3.04m²)</div> (Gun Emplacement and field boundary wall structure also to be demolished)
Proposed Development – Buildings and Enclosures	41,787.9m ² , of which: 2,232m ² relates to the LNG Terminal Buildings and Enclosures, to include: 1no. single-storey main control building (318m ²) 1no. single-storey fuel gas metering enclosure (166m ²) 1no. single-storey fuel gas regulating enclosure (166m ²) 1no. single-storey fire water pumps enclosure (47m ²) 1no. single-storey warehouse/workshop building (504m ²) 1no. single-storey N ₂ generation package control building (approximately 288m ²) 1no. single-storey electrical switchgear enclosure (234m ²) 1no. single-storey electrical switchgear enclosure (90m ²) 3no. Continuous Emissions Monitoring System (CEMS) enclosures (3.6m ² each) 3no. single-storey nitrogen compressor buildings (103m ² each) 1no. single-storey security building (63.8m ²) 1no. single-storey metering & regulating area kiosk enclosure (9m ²) 1no. single-storey metering & regulating area analyzer enclosure (13.2m ²) 1no. single-storey metering & regulating area instrument enclosure (13.2m ²) 32,818.3m ² relates to the Power Plant Buildings and Enclosures, to include: 3no. turbine halls (6,175m ² each) 3no. air cooled condensers (ACC) (2,711.9m ² each), to also include 3no. electrical Power Distribution Centres (103.7m ² each), 3no. condensate polishing equipment enclosures (103m ² each), and 3no. ACC air extraction and equipment enclosures (196m ² each) 1no. electrical (GIS) substation building (1,096m ²) 1no. air cooled heat exchangers structure (1,292.5m ²) 1no. workshop/stores/canteen building (732m ²) 1no. auxiliary boiler building (204m ²) 1no. central operations building (318m ²) 1no. administration building (318m ²) 1no. firewater pumps enclosure (47m ²) 1no. water treatment building (630m ²) 3no. generator step-up transformers (104m ² each)

¹ All areas referenced are approximate

	<p>5,527m² relates to the Battery Energy Storage System</p> <p>1,210.6m² relates to the AGI, to include:</p> <ul style="list-style-type: none"> 2no. single-storey chromatograph buildings (14.19m² each) 1no. single-storey control & instrumentation building (186.7m²) 1no. single-storey metering building (480m²) 5no. single-storey boiler unit buildings (42.24m² each) 1no. single-storey regulator building (243.6m²) 1no. single-storey generator kiosk building (60.72m²) <p>Ancillary structures to include: 2no. odorant tanks; heat exchangers; filtering; reverse flow valve arrangement; pig trap; and fuel gas let down units.</p>
<p>Proposed Development - Tanks</p>	<p>21,255.4m³, of which:</p> <p>4,926m³ relates to the LNG Terminal tanks to include:</p> <ul style="list-style-type: none"> 2no. firewater tanks (2,463m³ each) <p>16,329.4m³ relates to the Power Plant tanks, to include:</p> <ul style="list-style-type: none"> 2no. raw/service/firewater tanks (6,107.3m³ each) 2no. demineralized water tanks (2,057.4m³ each)
<p>Proposed Development – Equipment & Structures</p>	<p>15,479m³, of which:</p> <p>15,479m³ relates to LNG Terminal Equipment & Structures, to include:</p> <ul style="list-style-type: none"> 3no. fuel gas heater – water bath (1,763.4m³ each) 5no. SUS transformers (23.9m³ each) 1no. black start diesel generator (217.6m³) 3no. generator breakers (20.1m³ each) 3no. air cooled heat exchangers (35.1m³ each) 3no. gas turbine generators (1,000.7m³ each) 2no. instrument air packages (134.1m³ each) 3no. nitrogen purification skid/absorbers (169.6m³ each) 3no. nitrogen evaporator/cold box (1,969m³ each) <p>Ancillary equipment/structures to includes retaining wall; 2no. crossover platforms; utility racks; utility sleepers; and fire water retention pond</p> <p>Ancillary equipment & structures for the Power Plant relates to utility racks.</p>
<p>Proposed Development – FSRU and jetty</p>	<p>The FSRU has a Liquefied Natural Gas (LNG) storage capacity of 170,000 m³ (up to 180,000m³), 292.6m long and 43.4m wide, with a scantling draft water line of 12.9m. Measured at mid tide and with a scantling draft water line, the top of the highest structure on the FSRU (its communication mast) will be 46.0m above Ordnance Datum.</p> <p>A proposed jetty, the elevation of which will be set at +9 m OD (Malin Head), and which will comprise:</p> <ul style="list-style-type: none"> 1no. hydraulic gangway tower; 1no. unloading platform, with 2no. Gas Loading Arms (GLAs);

	8no. mooring dolphins, 2no. breasting dolphins, and catwalk; 1no. access trestle, approximately 315m in length with a roadway of approximately 5m wide, pipeway, pipe rack support, mobile crane platform, sliding gangway, pontoon capable of accommodating 4no. tugs, maintenance platform, abutment and run-on slab; Ancillary structures including 2no. power and control units, 2no. elevated fire water monitors, 2no. spill containment kits, lighting, CCTV system, and 1no. temporary berth and associated 2no. barges for construction purposes only
Employees	Construction – up to 975 no. employees at peak period Operation – 101no. employees ²
Car Parking Spaces	422no. temporary spaces during construction; 42no. spaces during operation (of which 2no. are disabled spaces and 2no. are EV spaces)
Cycle Spaces	40no. cycle spaces

The principal materials for the proposed buildings and structures are set out in Table 2-2:

Table 2-2 Proposed Materials

Proposed Building/Structure	Proposed Materials/Colours
LNG Terminal Buildings and Enclosures and Tanks	Walls: composite PVC/Plastisol laminated insulated vertical profiled modular steel cladding. Colour: Olive Green RAL 6003 Fascias & Trims, including doors, windows, ventilation openings & services penetration frames. Colour: Traffic Grey RAL 7043 Roof: composite PVC/Plastisol laminated insulated membrane with integral steel support decking. Colour: Chrome Green RAL 6020 Tanks: equipment and sound walls: Colour Olive-grey RAL 606
Power Plant Building and Enclosures and Tanks and Equipment	Walls: composite PVC/Plastisol laminated insulated vertical profiled modular steel cladding. Colour: Olive Green RAL 6003 Fascias & Trims, including doors, windows, ventilation openings & services penetration frames. Colour: Traffic Grey RAL 7043 Roof: composite PVC/Plastisol laminated insulated membrane with integral steel support decking. Colour: Chrome Green RAL 6020 Tanks and equipment: equipment and sound walls: Colour Olive-grey RAL 606
Retaining Wall	Concrete - unpainted
Crossover Platform, utility racks and sleepers	Galvanised steel - unpainted
AGI structures	Chromatograph Building: GRP Panel. Colour: Olive Green RAL 6003

² This excludes FSRU and tug boat crews who are not expected to be STEP employees

	Control & Instrumentation Building: Nordman Tile Sheeting Chrome Green RAL 6020 Metering Building: Corrugated Roof Sheeting. Colour: Chrome Green RAL 6020; GRP Panel. Colour: Olive Green RAL 6003 Regulator Building: Nordman Tile Sheeting Chrome Green RAL 6020; NAP Plaster finish. Colour: Olive Green RAL 6003 General Kiosk Building: Corrugated Roof Sheeting. Colour: Chrome Green RAL 6020; GRP Panel. Colour: Olive Green RAL 6003
Jetty and Access Trestle	Concrete precast panel; concrete pile cap; CIP slab; Pre-cast concrete Tee Beam; Steel Piles;

The proposed development will be regulated by the following bodies:

- Environmental Protection Agency;
- Commission for Regulation of Utilities;
- Health and Safety Authority;
- Marine Survey Office; and
- Kerry County Council

In addition to planning permission from An Bord Pleanála, the proposed development will require the following permits/licences/authorisations:

Table 2-3 Permits/Licences/Authorisations required for the proposed development

Permit/Licence/Authorisations	Awarding Body
Industrial Emissions Directive (IED) Licence ³	Environmental Protection Agency (EPA)
Greenhouse Gas Emissions Permit	Environmental Protection Agency (EPA)
Approval of the pre-construction Safety Report and Corporate Major Accident Prevention Policy (MAPP)	Health and Safety Authority (HSA)
Authorisation to construct the proposed Power Plant (and back-up power generation)	Commission for Energy Regulation (CRU)
Licence to generate electricity for the proposed Power Plant (and backup power generation)	Commission for Energy Regulation (CRU)
Approval of the Energy Safety Case	Commission for Energy Regulation (CRU)
Surface Water Drainage Discharge Licence	Kerry County Council
Amendments to the Foreshore Lease and Licence (as may be required)	Minister for Environment, Climate and Communications
Commencement Notices	Kerry County Council
Fire Safety Certificates	Kerry County Council Fire Brigade
Disability Access Certificates	Kerry County Council
Section 50 Consent (Consent to construct a culvert)	Office of Public Works (OPW)
Section 254 Road Opening Licence	Kerry County Council
Archaeological Licences	National Monuments Service
Ecological Licences (where required)	National Parks & Wildlife Service (NPWS)

In addition, the proposed development will be required to comply with Shannon Foynes Port Company Byelaws and Harbour Master Directions; SOLAS Convention on international navigation; regulations of the ship's registries; the International Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk (IGC Code); and the International Convention for the Prevention of Pollution from Ships (MARPOL) as appropriate.

³ The conditions of an IE licence require that the emission limit values must be based on the Best Available Techniques (BAT). A BAT assessment has been prepared, and the Proposed Development will comply with the assessment findings.

Subject to planning consent and other approvals an arbitrary start date of January, 2023 is taken as a construction start date (however this is subject to change). It is envisaged that the initial construction phase will last approximately 32 months, with an additional 6 months' commissioning prior to operation. During the initial phase, approximately 975 people will be employed onsite at peak.

The construction phase will comprise:

- Enabling, earthworks and site preparation;
- Construction of the LNG Terminal, Power Plant and AGI;
- Construction of the drainage outfall.

During the construction phase, electricity will be supplied via a series of portable site units prior to the medium voltage electricity connection becoming available and water will be obtained from a water main along the L1010 (up to 98 m³/day). Sewerage effluent will be collected in tanks for removal by tanker and temporary surface water drainage and silt ponds will be constructed to control runoff. Construction materials will be sourced locally from authorised quarries, where possible to minimise the environmental impact of transportation.

Following completion of construction and installation of equipment, and before the LNG Terminal commences operations, there will be a testing and commissioning phase. This phase will comprise:

- Installation compliance checks;
- Commissioning tests; and
- Performance demonstration tests.

The proposed development is expected to have a design life of 50 years, but this could be extended by maintenance, equipment replacement and upgrades or by the transition of the site to hydrogen (which will be subject to a future planning application). It is expected that it would be a condition of IED Licence for the proposed development that a closure and residuals management plan, including a detailed decommissioning plan, be submitted to the EPA for their approval.

Given the nature and extent of the proposed development, the nature and extent of the consents required to be in place to be able to construct the proposed development, if permission is granted, and the proposed construction strategy as outlined in Chapter 2 of the EIAR, a 10 year permission is being sought in this instance.

Chapter 2 of the EIAR describes the nature and extent of the proposed development in detail.

Figure 2-4 Proposed Site Layout Plan

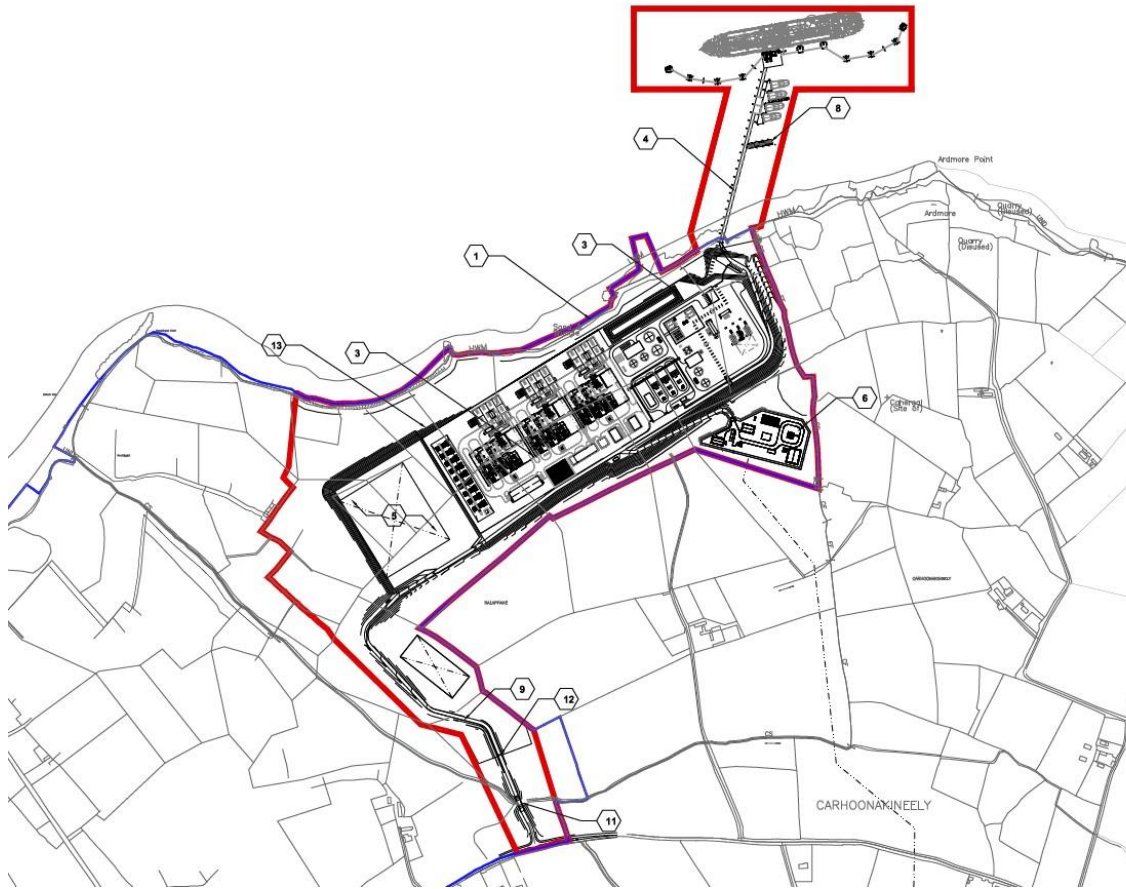


Figure 2-5 Proposed FSRU and Jetty

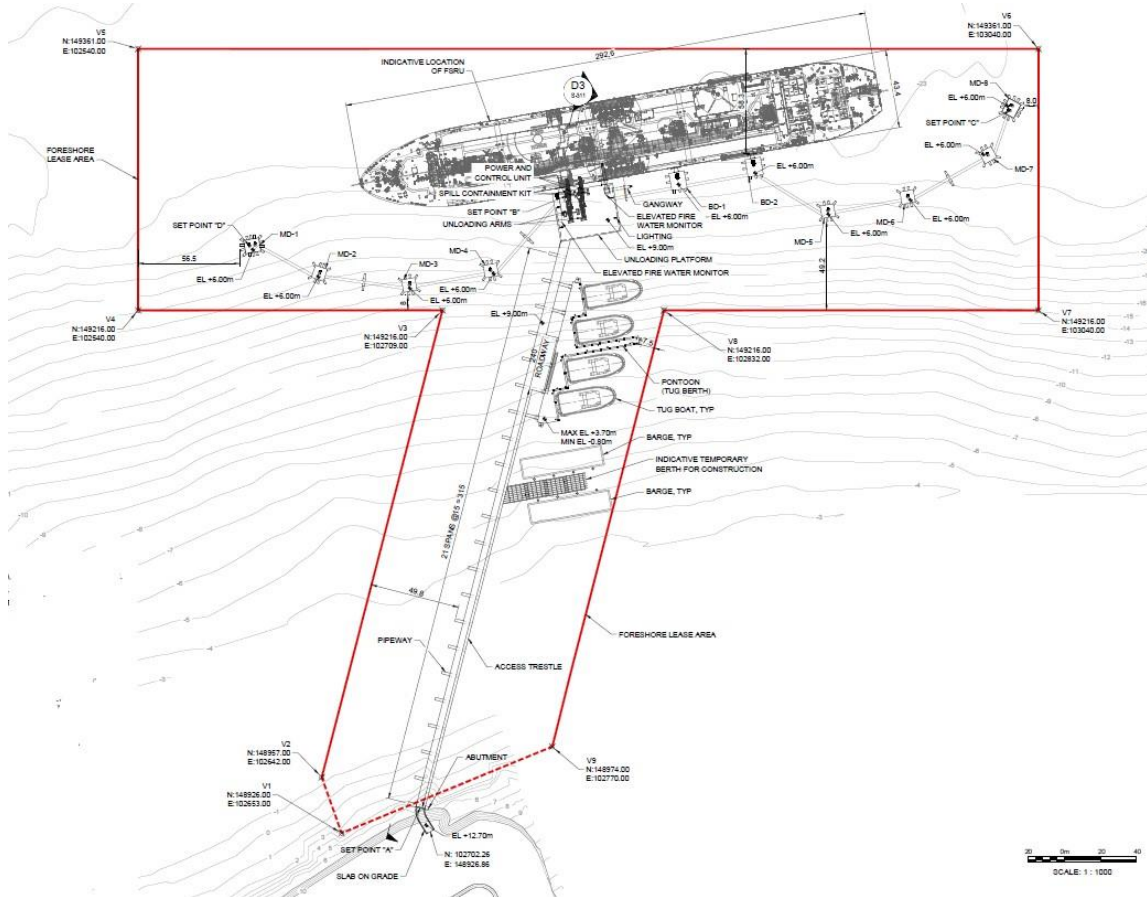


Figure 2-6 Proposed Onshore Receiving Facilities

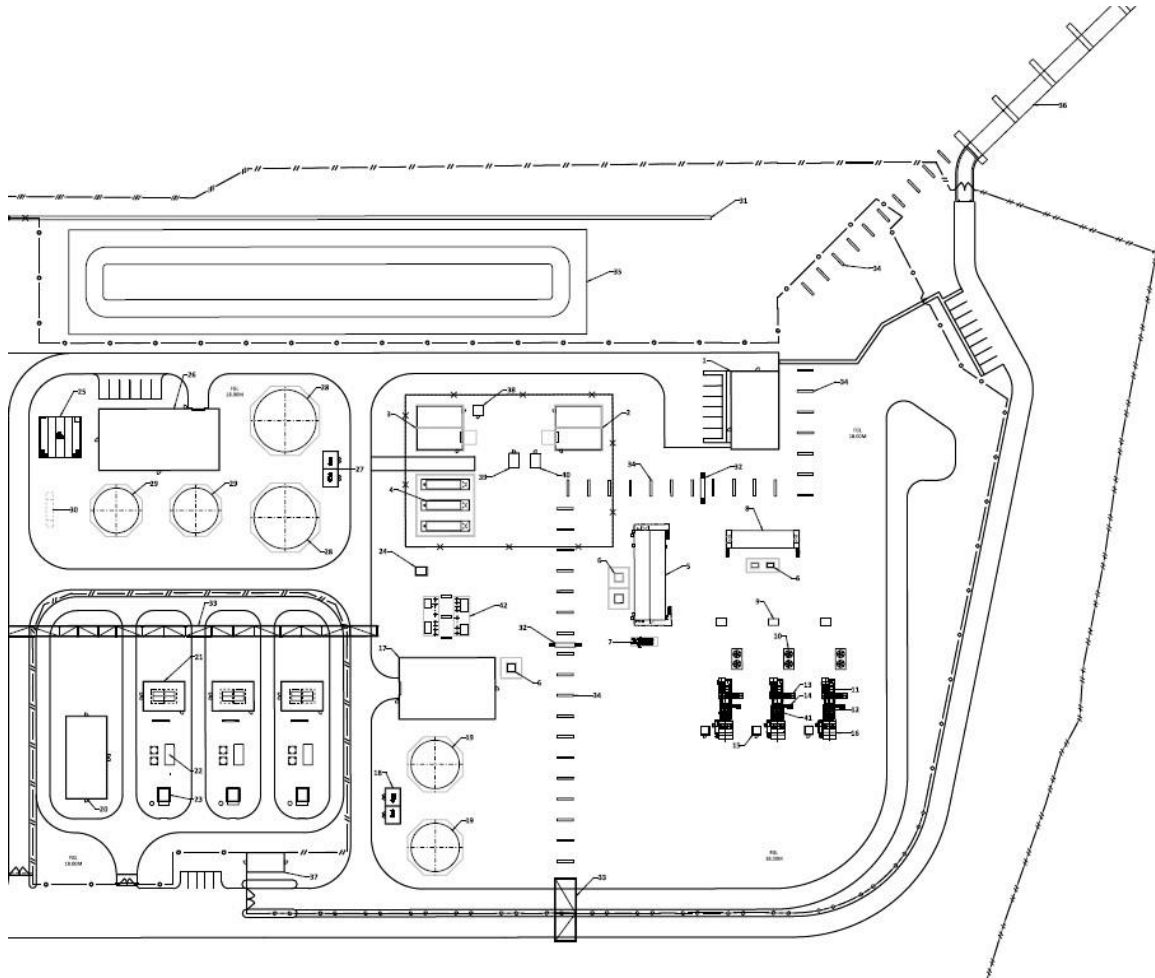


Figure 2-7 Proposed Power Plant and BESS

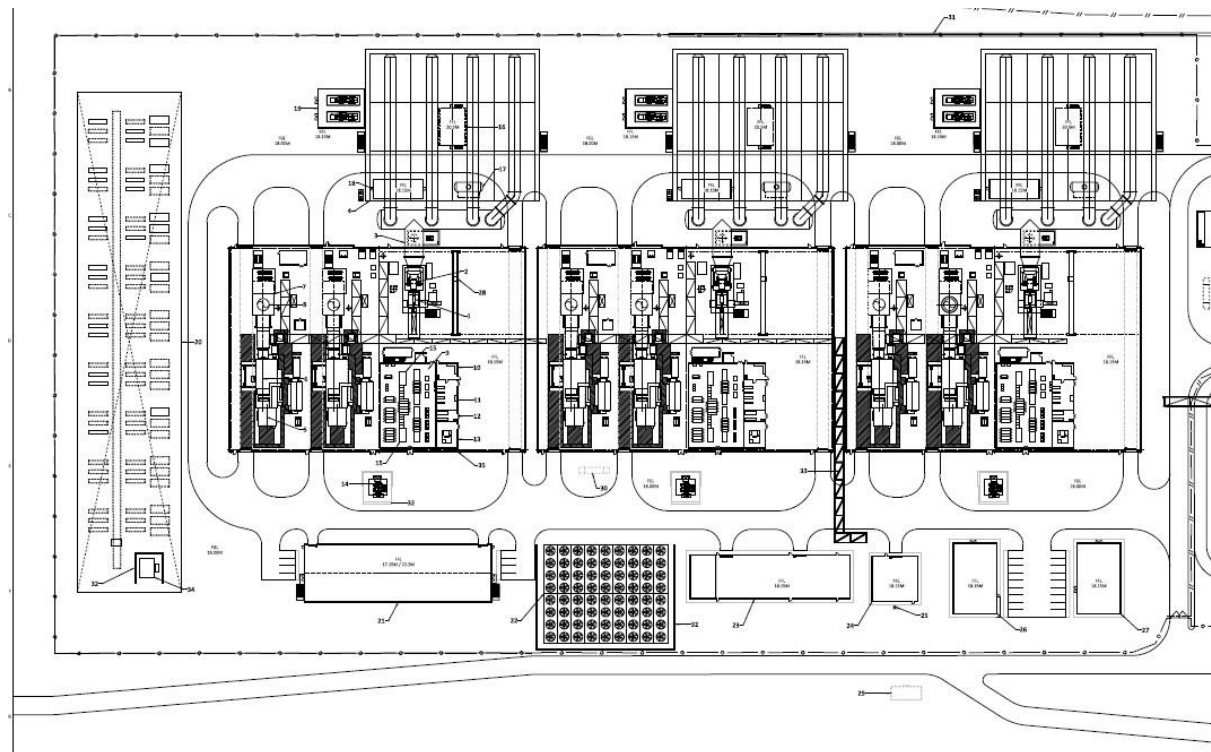
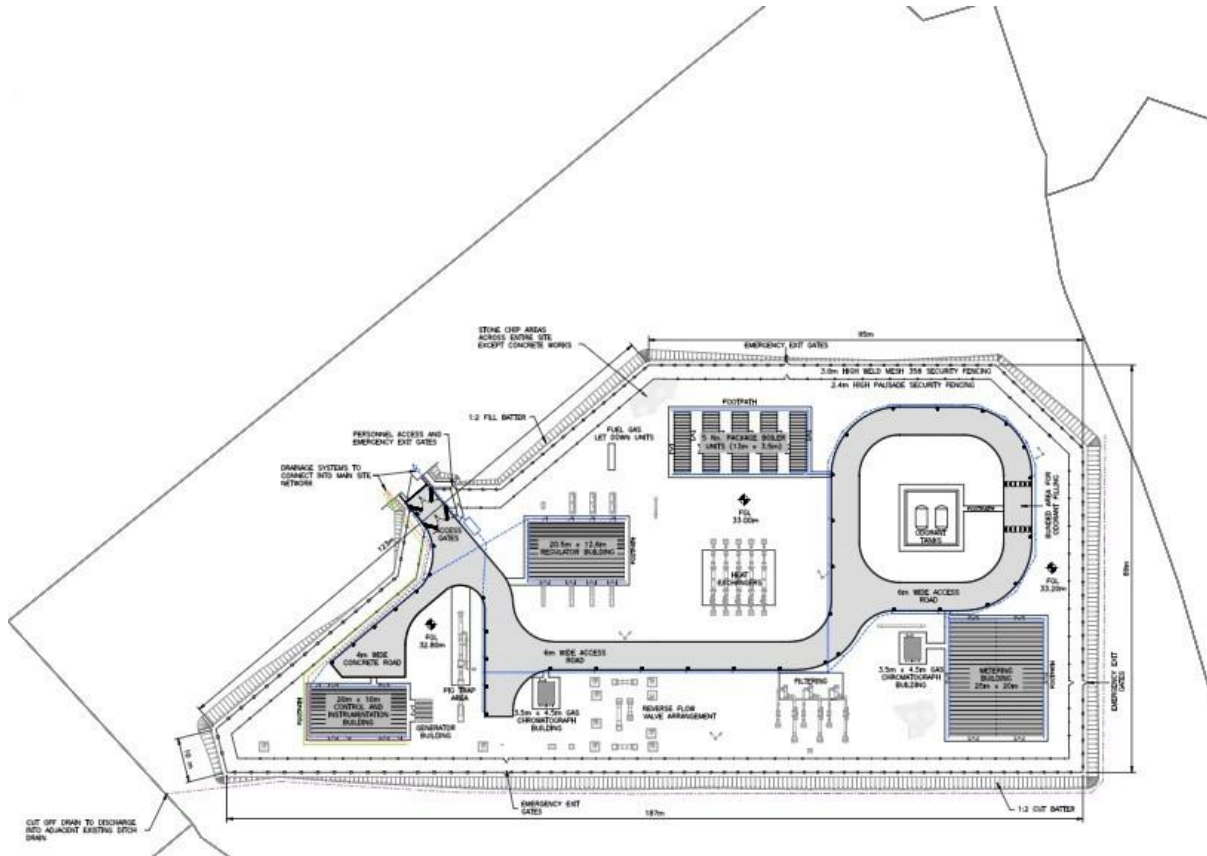


Figure 2-8 Proposed AGI



Figures 2-4 to 2-8 illustrate the nature and extent of the proposed development. It is considered that:

- The proposed development is characteristic of an industrial development of the nature and form proposed;
- The proposed development has a relatively concentrated footprint within the overall landholding close to the shore;
- The proposed development is logically configured, with the onshore receiving facilities located in close proximity to the jetty, and the power station and battery storage adjacent, and the AGI located close by, but separated from the LNG Terminal and Plant to meet Gas Networks Ireland (GNI) operational requirements.

As demonstrated in Figures 2-9 to 2-16, the proposed development can be successfully absorbed into the existing landscape, being a form of development that is contemplated by the industrial and marine development zoning objective of the Kerry County Development Plan 2015-2021 that applies to the site, as also envisaged in the Regional Spatial and Economic Strategy for the Southern Region 2020, the Shannon Integrated Framework Plan 2013, and the Listowel Municipal District Local Area Plan 2020, and having regard to the planning history of the proposed development site for a more extensive development than is proposed in this instance.

Figure 2-9 Existing Photomontage: Viewpoint 2 from the south of the proposed development site, looking north-east



Figure 2-10 Proposed Photomontage: Viewpoint 2 from the south of the proposed development site, looking north-east



Figure 2-11 Existing Photomontage: Viewpoint 4 from the west of the proposed development site, looking east



Figure 2-12 Proposed Photomontage: Viewpoint 4 from the west of the proposed development site, looking east



Figure 2-13 Existing Photomontage: Viewpoint 12 from the north of the proposed development site, looking south (night time)



Figure 2-14 Proposed Photomontage: Viewpoint 12 from the north of the proposed development site, looking south (night time)



Figure 2-15 Existing Photomontage: Viewpoint 15 from the east of the proposed development site, looking west



Figure 2-16 Proposed Photomontage: Viewpoint 15 from the east of the proposed development site, looking west



2.3 Need for the Proposed Development

Chapter 3 of the EIAR explains in detail the need for the proposed development in the context of current energy policy as elaborated in Chapter 4 of the EIAR.

Essentially, the rationale for the proposed development is founded on the following key objectives:

- to address security of energy supply risks for the country: it has been forecasted that natural gas demand will increase from current demand levels of 4.69 to 6.38 million tonnes of oil equivalent by 2040⁴. As production from the Corrib gas field declines year on year, Ireland will be reliant on a single supply point from the UK for 90% of its gas by 2030. Due to the decline in North Sea production, the UK itself is expected to import up to 75% of its gas supply by 2030 (from Norway, Russia, Qatar and various countries outside Europe)⁵. The impact of disruption to this single gas supply from the UK has been assessed⁶ by the Commission for Energy Regulation (CRU) as being a 'major' risk for electricity production in Ireland. In this context, the proposed development provides gas supply diversity. It would also allow Ireland to comply⁷ with the EU Security of Supply Regulations, as set out in the N-1 Infrastructure standard⁸.
- to address electricity capacity shortfalls: EirGrid has forecast⁹ a shortfall in generation capacity of up to 570MW by 2026 and advised that new additional gas fired conventional power plants are urgently required. The Shannon Technology and Energy Park 600 MW power plant can be delivered in a realistic timeframe to address the looming shortage. The power plant was successful in the recent ECP 2.1 process. As a stark demonstration of the issue of capacity shortfalls, the Minister for Environment, Climate and Communications, in response to an emergency situation identified by the CRU of a likely and substantial risk to the security of the supply of electricity in Winter 2021/2022, had given consent to the CRU to direct EirGrid to secure the delivery of c. 200MW of emergency additional generation at North Wall in Dublin City.¹⁰ While this particular response has been abandoned on foot of a legal challenge on procurement grounds, it nevertheless illustrates the significant concerns at national level over existing capacity.
- to support intermittent renewable generation: Ireland's Climate Action Plan¹¹ sets a target of 70% of electricity to be generated from renewable sources by 2030. It also commits to an early and complete phase-out of coal and peat-fired electricity generation. However, renewable generation is weather dependent, and its output fluctuates considerably. For this reason, conventional power plants, in particular gas-fired plants, are required to fill the fluctuating gap between electricity demand and renewable generation. The Climate Action Plan confirms that natural gas will play an important role in addressing intermittent wind generation¹² to assist Ireland during the transition period from carbon-intensive fossil fuel power plants to more sustainable lower carbon fuel sources, with modern, flexible and efficient plant designed to meet the needs of an electricity system that seeks to integrate 70% renewable generation. Natural gas will therefore contribute to maintaining a resilient electricity supply to the country while supporting the transition to 70% renewable generation by 2030.

In this context, the proposed development will provide Ireland with a direct access to global gas markets and, consequently, greater control over the source of the country's gas supplies.

Notwithstanding these very clear concerns regarding energy security and capacity shortfall, it is noted that the Government issued a Policy Statement on the Importation of Fracked Gas on 18th May, 2021. The Policy Statement includes the following:

'The placing of a legal prohibition on the importation of fracked gas in national legislation has been considered and legal advice has been provided by the Attorney General. In the context of European Union Treaties and the laws governing the internal energy market, it is considered that a legal ban on the importation of fracked gas could not be put in place at this time.'

⁴ The National Energy and Climate Change Plan 2021-2030

⁵ Irish Academy of Engineering, 2018

⁶ Identification of National Electricity Crisis Scenarios for Ireland. CRU/20/138. Commission for energy regulation. 20/11/2020

⁷ The National Preventative Action Plan 2018 to 2022 notes that Ireland fails to the N-1 Standard meaning that after losing the single largest gas infrastructure the technical capacity of the remaining infrastructure cannot meet demand

⁸ Regulation (EU) 2017 / 1938 concerning measures to safeguard the security of gas supply

⁹ All-Island Generation capacity Statement 2020-2029

¹⁰ the CRU in its letter of 16th June, 2021 to the Minister for Environment, Climate and Communications, and the Minister's response dated 23rd June, 2021

¹¹ Climate Action Plan 2019. Department of the Environment, Climate and Communications. 17th June 2019

¹² The Climate Action Plan forecast's gas demand as far as 2040

...

Ireland imports much of its natural gas via the two interconnector pipelines from Moffat in Scotland, which provide the majority of natural gas currently used in Ireland. Given the level of fracked gas in the imports from Scotland is considered very low, the highest risk of fracked gas being imported into Ireland on a large-scale would be via liquefied natural gas (LNG) terminals, if any were to be constructed.

The Minister for the Environment, Climate and Communications is currently carrying out a review of the security of energy supply of Ireland's electricity and natural gas systems which is focussing on the period to 2030 in the context of ensuring a sustainable pathway to net zero emissions by 2050'.

The policy statement concludes with the following policy decisions:

'In order to implement the Programme for Government commitment that it does not support the importation of fracked gas, the Government has approved that:

- Pending the outcome of the review of the security of energy supply of Ireland's electricity and natural gas systems, it would not be appropriate for the development of any LNG terminals in Ireland to be permitted or proceeded with;*
- The Government will work with like-minded European States to promote and support changes to European energy laws – in particular the upcoming revision of the European Union's Gas Directive and Gas Regulation – in order to allow the importation of fracked gas to be restricted; and*
- The Government will work with international partners to promote the phasing out of fracking at an international level within the wider context of the phasing out of fossil fuel extraction.'*

The Department of Communications, Climate Action and Environment awarded the contract for the security of supply review on 10th May 2021. The Minister has advised that he expects the review to be completed by the first half of 2022 (Houses of the Oireachtas, 2021).

However, and as indicated in section 4.1.3.5 of the EIAR, since October 2018, there have been seven separate security of supply reviews, and these reviews have consistently identified the risks associated with Ireland's dependence on a single gas supply point from the UK. These reviews are:

1. 20th July 2021, Government of Ireland, Draft National Risk Assessment Overview of Strategic Risks 2021/2022;
2. 26th March 2021, Government of Ireland, *National Risk Assessment for Ireland 2020*;
3. 11th November 2020, Commission for Regulation of Utilities (CRU), *Identification of National Electricity Crisis Scenarios for Ireland (CRU/20/138)*;
4. July 2019, Government of Ireland, *National Risk Assessment – Overview of Strategic Risk*;
5. 15th June 2020, Department of Communications, Climate Action and Environment, *the National Energy and Climate Change Plan 2021 to 2030*;
6. 2018, CRU, *National Preventative Action Plan Gas 2018 – 2022 Ireland*; and
7. October 2018, Department of Communications, Climate Action and Environment, CRU, GNI and EirGrid, *Long Term Resilience Study 2018*.

In relation to the Policy Statement on the Importation of Fracked Gas, it is noted that most of the LNG in the world is not sourced from fracked gas. For context, all of the LNG required for the proposed development represents only 1% of the globally traded non fracked LNG. LNG is a globally traded commodity and there are 37 operational LNG terminals in Europe at present. Accordingly, the proposed development does not depend on fracked gas and the applicant is confident that it can source gas from non-fracked sources to meet energy demand and ensure security of supply in Ireland.

Furthermore, on 6th July 2021, CRU Commissioner, Dr Paul McGowan, testified to the Oireachtas Joint Committee on Environment and Climate Action that (Houses of the Oireachtas, 2021);

'When we talk about this diversity of supply we are being quite open. We have obligations around security of supply and we must consider all options. A relationship has been drawn between LNG and certain types of gas and I am not sure that this helps the overall discussion. LNG can be and could be natural gas. Another point on diversity of supply is the type of gas that is entering the system. We should also be

considering what role indigenous biogas will have and what role blue hydrogen might have as we transition through a blended natural gas system to a system that might ultimately be decarbonised.

There are many aspects to diversity of supply. I would neither rule in nor rule out that we might be discussing the role of LNG, but I emphasise that we should take the idea of fracked gas and separate it completely from the idea of LNG, to just consider LNG, if we are looking at that as a route for natural gas to ensure diversity and therefore security of supply.'

It is considered that, in the context of the overriding concerns with respect to energy security and energy supply, and with intermittency in renewables generation, and having regard to the applicant's statement that the proposed development does not depend on fracked gas and that it can source gas from non-fracked sources, the broad thrust of the Policy Statement relates to LNG Terminals bringing in fracked gas, whereas, what is proposed does not depend on fracked gas. There is existing significant policy support for energy security and supply, as well as infrastructure that addresses intermittency in wind generation, which point to the continued need for a gas supply for the foreseeable future.

It is noted also that both the Power Plant and the Terminal are 'future-proofed' and have the ability to transition to hydrogen fuel once the technology and public policy are fully developed, thereby achieving a 'zero emission' facility. The location of the proposed development site will provide access to future offshore renewable projects, combined with facilities for the production and landing of hydrogen. This would contribute to the decarbonisation of Ireland's energy system by providing long term hydrogen energy storage (produced onsite or into the national gas transmission network), renewable energy storage (through the BESS) and direct electricity generation at the Power Plant. The modular Power Plant offers flexibility to incorporate alternative fuels, and the modern nature of the LNG Terminal will ensure it can easily be adapted in future. This capability is acknowledged by the CRU in their contributions to the Oireachtas Committee on Environment and Climate Action on 7th July 2021:

'Ms MacEvilly said there was not necessarily a contradiction between building new gas infrastructure and quitting fossil fuels as it was expected that biomethane and green hydrogen would eventually replace natural gas in the supply chain.

CRU chairperson, Aoife MacEvilly told the committee: Gas-fired generation will play a pivotal role in underpinning electricity security of supply and the secure electrification of heating and transport.

Commissioner Jim Gannon added: It's not beyond the bounds of commercial or technical possibility that gas terminals that will help us supply security and diversity of supply couldn't also be designed to be converted over time to using hydrogen.'

2.4 Alternatives Appraisal

Chapter 3 of the EIAR sets out in detail the alternatives considered for the proposed development. The alternatives considered are set out in Table 2-4 below.

Table 2-4 Alternatives Considered

Alternative	Comment
Alternative natural gas supply	Alternative natural gas supplies are either insufficient to satisfy demand (pipeline from France and biomethane), technically not mature (hydrogen), or contrary to Irish legislation (offshore exploration)
Alternative Import Routes for Pipeline Gas	A gas pipeline between Ireland and France was previously assessed by the Department of Communications, Climate Action and Environment, with support from the Commission for Regulation of Utilities (CRU) in the GNI/ EirGrid Long Term Resilience Study 2018, which concluded that: <ul style="list-style-type: none"> France is dependent upon LNG and inter-connecting pipelines for its domestic gas demand

	<ul style="list-style-type: none"> • Therefore a significant portion of the imported gas from a French pipeline will be sourced from LNG • The pipeline capacity represented only 39% of Irish peak day gas demand for 2020/21, and would not be sufficient to allow Ireland satisfy the EU N-1 requirement. <p>An interconnector to France would not support the future integration of hydrogen into the Irish energy system</p>
<p>Natural Gas Storage</p>	<p>There is only one location considered suitable in geological terms for large scale gas storage on the Island of Ireland (Irish Academy of Engineering, 2021), at Islandmagee in Co. Antrim. This is unlikely to materialise in the short-to-medium term.</p>
<p>Alternative Sites, based on the following criteria:</p> <p>Phase 1 Screening:</p> <ul style="list-style-type: none"> • A large landbank (up to 80ha) zoned for industrial purposes with access to or adjacent to the foreshore; • Access to deep water greater than 13 m. <p>Phase 2 Screening:</p> <ul style="list-style-type: none"> • Uniform cross sectional depth navigational channel with minimum width five times the beam of Qmax (260 m); • A turning circle twice the length of Qmax (690 m); • 150 m control zone surrounding the LNGC and FSRU. <p>Phase 3 Screening:</p> <ul style="list-style-type: none"> • Significant wave heights less than 1.5 metres; • Peak wave periods less than 9 seconds. 	<p>From the sixty-seven locations identified during Phase 1, eleven were deemed suitable under the Phase 1 screening criteria. These locations (listed below) were then brought forward to Phase 2 screening:</p> <ol style="list-style-type: none"> 1. Arklow (Co. Wicklow); 2. Aughinish (Co. Limerick); 3. Ballylongford/ Tarbert (Co. Kerry); 4. Castletownbere (Co. Cork); 5. Dunmore East (Co. Waterford); 6. Greenore (Co. Louth); 7. Killybegs (Co. Donegal); 8. Moneypoint (Co. Clare); 9. Ringaskiddy (Co. Cork); 10. Whiddy Island (Co. Cork); and 11. Whitegate (Co. Cork). <p>Five locations were deemed suitable under Phase 2 screening:</p> <ol style="list-style-type: none"> 1. Arklow (Co. Wicklow); 2. Ballylongford/ Tarbert (Co. Kerry); 3. Dunmore East (Co. Waterford); 4. Moneypoint (Co. Clare); and 5. Whiddy Island (Co. Cork) <p>Ballylongford/Tarbert and Moneypoint were deemed suitable under Phase 3 screening.</p> <p>In light of ESB's Green Atlantic plans, and the lack of a consented interconnecting gas pipeline, the Moneypoint site was ruled out.</p>
<p>Alternative Designs</p>	<p>An Onshore Terminal design was ruled out on the basis of its significant onshore footprint;</p>

	A Hybrid FSU Design would require more onshore facilities than an offshore FSRU
Alternative Layouts	The previously permitted, now expired, LNG Terminal and the currently permitted CHP were considered as an alternative but ruled out on the basis of the required landtake, greater visual impact, greater impact on cultural heritage and greater terrestrial impact.
Alternative Processed/Technologies	<p>CHP was ruled out on the basis that heat supply from the CHP plant to the LNG terminal would be unreliable and insecure, including as a consequence of the CRU's approval of a decision to eliminate priority of dispatch for new high efficiency CHP plants (SEM, 2020).</p> <p>An Open cycle gas turbine (OCGT) plant was ruled out on the basis of its low efficiency, resulting in electricity produced from OCGTs having a much higher CO₂ emission factor than electricity from CCGTs.</p> <p>A larger single-shaft CCGT was discounted because it was less flexible than a multi-shaft unit.</p> <p>Alternative cooling processes (indirect wet cooling; direct wet cooling; and heat extraction) were discounted for reasons of greater visual impact and greater impact on the cSAC.</p>
Alternative FSRU Regasification	A closed loop regasification process was ruled out due to its low energy efficiency and much higher emissions of greenhouse gases
Alternative Wastewater treatment	The proposed development site is considered unsuitable for indirect or direct wastewater effluent disposal to ground/ groundwater due to low subsoil and bedrock permeability, as well as the limited attenuation capacity of the proposed development site once constructed.

The conclusion of the alternatives assessment is that the Ballylongford/ Tarbert location is the most suitable location to accommodate the proposed development. The proposed development site:

- Is a large 52ha site principally located within a 182ha (approx.) landbank zoned for industrial and marine development in the Kerry County Development Plan 2015-2021, as also identified as such in the Regional Spatial and Economic Strategy for the Southern Region 2020, the Shannon Integrated Framework Plan 2013, and the Listowel Listowel Municipal District Local Area Plan 2020
- Is located in an area which has established energy infrastructure (power stations at Tarbert and Moneypoint, Kilpaddoge substation, the Kelvin 2 battery energy storage system, and Leanamore windfarm); permitted 400 kV electricity transmission cables between Kilpaddoge substation and Moneypoint substation and a permitted windfarm at Ballylongford; proposed energy infrastructure (solar farms, and grid stabilisation facility at Kilpaddoge substation) and established port infrastructure (pilots, navigation lights etc.)
- Has the benefit of Deep Water access (>13m depth) in a sheltered location (waves <1.5m), and safe navigational area (2km wide channel) of uniform cross-sectional depth, with a turning circle of up to approximately 690m that provides adequate turning space for LNG ships
- In addition, the proposed development site has the benefit of a successful high voltage grid application under Enduring Connection Policy (ECP2.1).

- The proposed development site also has the benefit of previous and current planning permissions for LNG and power plant infrastructure, as well as a current Foreshore Licence and Lease.

2.5 Consultation

Chapter 1 of the EIAR sets out in detail the extent of consultation undertaken in respect of the proposed development, including Kerry County Council, the NPWS, GNI, CRU, EPA, Shannon Foynes Port Company, the HSA, GSI, IFI, IAA, Foreshore Unit, Underwater Archaeology Unit, and Irish Water. Feedback from this consultation has informed the planning application, EIAR and NIS.

Pre-application consultation was undertaken with Kerry County Council Planning Department on 24th January 2020 and 19th January, 2021. Key matters discussed were as follows:

- The proposed site is referenced in the new Listowel MD LAP 2020-2026, and also advised that the existing policies of the Kerry County Development Plan remain in place
- Further consultation with Kerry County Council Fire, Roads, Water Services, and Archaeology Departments
- Address the construction phase of the proposed development in the application
- Address the potential for marine pollution and include details of a marine navigation risk assessment in the application
- Address the issue of fracked gas in the application
- From an ecology perspective, the principal issues were being addressed by the applicant; the potential impact on birds (SPA) would also need to be addressed in the NIS; and noted the loss of Annex I habitat
- The issues of discharges, emissions and waste, would need to be addressed in the EIAR and NIS, as well as cumulative impact

An online public consultation event was held with the Kilcolgan, Tarbert and Ballylongford Associations on 8th April, 2021. The Applicant also undertook a period of public engagement from 23rd June 2021 to 10th July 2021, to provide information to the public on the proposed development. A virtual public information room was established online (<http://step.consultation.ai/>). The virtual public information room received 1,112 visitors and 36 public comments during the engagement period. 97% (35) of the public comments were supportive of the development. Specifically, of the 35 supportive comments, 16 were supportive due to the local employment opportunities that the proposed development will create, 13 were expressions of general support and 6 supportive of the development to address national energy security concerns (Figure 1-3). Only 1 comment questioned the need for the development and was not supportive.

The applicant engaged in pre-application consultation with An Bord Pleanála on 21 May 2019, 22 January 2020, 22 May 2020, and 25 March 2021.

The Board advised, as per the Inspector's Report attached at Appendix B to this planning report, that, having regard to the Seventh Schedule of the Planning and Development Act, 2000, as amended, energy Infrastructure is included within Class 1 and includes the following:

"An onshore terminal, building or installation, whether above or below ground, associated with an LNG facility and, for the purpose of this provision, 'LNG facility' means a terminal which is used for the liquefaction of natural gas or the importation, offloading and re-gasification of liquefied natural gas, including ancillary services".

and

"A thermal power station or other combustion installation with a total energy output of 300 megawatts or more".

The Inspector concluded that the proposed development in its entirety is therefore a Seventh Schedule development.

The Inspector also concluded that the proposed development falls within the scope of Section 37A(2)(a), (b) and (c) of the Planning and Development Act, 2000 (as amended), having regard to:

- National Strategic Outcome (NSO) 8 of the National Planning Framework, in relation to the ‘Transition to a Low Carbon and Climate Resilient Society’, which states that *our gas storage capacity is limited, which poses a security of supply risk and constrains smoothing of seasonal fluctuation in gas prices*
- the National Development Plan 2018-2027 which states that *a proportion of Ireland’s electricity needs will likely continue to be generated from gas over the medium to longer term*
- the National Energy and Climate Plan (NECP) 2021-2030 which seeks to *Ensure the resilience of the gas network to a long-duration supply disruption, in the context of EU and national climate objectives*
- the Climate Action Plan 2019 which acknowledges that *Intermittency... creates the need for a range of technology solutions which may include large-scale interconnection, storage, and dispatchable capacity (e.g., natural gas plants that can generate electricity at times where there is no wind). There is no one-size-fits-all answer to supporting 70% renewables*
- EirGrid’s All-Ireland Generation Statement 2020-2029 which states that new additional gas fired conventional power plants are urgently required on the grid
- The Shannon Integrated Framework Plan which designates the proposed development site as a strategic development location (H)
- Regional Policy Objective 79 of the Regional Spatial and Economic Plan for the Southern Region, which includes as an objective the support and promotion of the *delivery of the Strategic Development Locations as set out in the SIFP for the Shannon Estuary subject to the implementation of mitigation measures outlined in the SEA and AA undertaken on SIFP and zoned in the Local Authority Development Plans.* Regional Policy Objective 142 of the RSES also seeks to *support the sustainable development of the 9 strategic development locations adjoining sheltered deep-water in line with the recommendations of the SIFP for the Shannon Estuary and subject to the implementation of mitigation measures outlined in the SEA and AA undertaken on the SIFP* The RSES also includes objective RPO225(e) which seeks to *Strengthen the gas network sustainably to service settlements and employment areas in the Region, support progress in developing the infrastructures to enable strategic energy projects in the Region. An example is the Tarbert/Ballylongford landbank in Co Kerry which is a strategic development site under the Strategic Integrated Framework Plan.* It also specifically states that *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*
- In relation to a significant effect on one or more planning authority, the Inspector commented that *I would suggest that given the significant change to the visual context of the site that it could be reasonably considered that the proposal would have a significant visual effect when viewed from the County Clare side of the estuary.*

Accordingly, the Inspector concluded that proposed development would be strategic infrastructure within the meaning of the Act and any application for approval must therefore be made directly to the Board under Section 37E and should be accompanied by an Environmental Impact Assessment Report and Natura Impact Statement.

3. Planning Policy and History Appraisal

3.1 Planning Policy Appraisal

Chapter 4 of the EIAR sets out in detail the key provisions of national, regional and local planning policy which underpin the proposed development, the key considerations of which are as follows:

3.1.1 National Planning Framework 2018 (NPF)

- National Strategic Outcome (NSO) 8 – Transition to a Low Carbon and Climate Resilient Society, of the NPF states:
“Ireland benefits from interconnection with the UK gas pipeline network and while there are two gas pipelines with two separate entry points into the island of Ireland, both pipelines are connected through a single facility in Moffat, Scotland.”
- Critically, NSO 8 also notes that:
“In addition, our gas storage capacity is limited, which poses a security of supply risk and constrains smoothing of seasonal fluctuation in gas prices.”
- In this context, Ireland’s energy security regarding gas is precarious in terms of the current infrastructure connecting Ireland to the UK gas pipeline network but also geo-politically, as the UK is no longer a member of the EU. Therefore, ensuring autonomous gas supply and storage separate from being reliant on the UK is of paramount importance.
- Chapter 7 of the NPF specifically references the Shannon Estuary as a case study in the context of realising Ireland’s Island and Marine Potential.

The proposed development effectively responds to NSO 8 of the NPF – it will provide an alternative source of gas supply to address supply risk concerns.

3.1.2 National Development Plan 2018-2027 (NDP)

- The NDP states that NSO 8 is central to all other elements of spatial policy.
- Within the context of plans for Irish society to transition to a low-carbon future, the NDP is also pragmatic in acknowledging that our national gas supply network nevertheless requires development in the meantime.
- The NDP states that: *[G]iven the intermittent nature of this technology [i.e. wind energy], a proportion of Ireland’s electricity needs will likely continue to be generated from gas over the medium to longer term. It will therefore remain necessary for a certain level of gas fired generation to continue to be available to ensure continuity of supply and the integrity of the electricity grid during the transition towards a low-carbon energy system.”*
- The NDP therefore highlights that natural gas will be required into the future for electricity generation within Ireland. In addition to energy policy documents, the NDP also acknowledges that the national gas pipeline network will need investment and development as will the realm of gas supply, especially as the Corrib gas field is projected to decline and become exhausted by early next decade.
- The NDP explicitly places the delivery of new gas infrastructure projects in the domain of the commercial/private sector, as the State is not in a position to facilitate such projects itself.
- This implies that a degree of reliance on natural gas will continue for some time into the future, and that to ensure Ireland’s society and economy are supported in functioning well and fully throughout the country, gas infrastructure projects are required to support regional and rural development in particular.
- In relation to NSO 9 “Sustainable Management of Water and other Environmental Resources” of the NPF, the NDP notes that Ireland’s future energy security will be partly dependent on new infrastructure investment to potentially supply natural gas from a future gas field to the national gas network.

The proposed development is consistent with the NDP in respect of the need to provide for natural gas and for such provision to be delivered by the commercial/private sector.

3.1.3 National Marine Planning Framework 2020 (NMPF)

- Natural Gas Storage Policy 1 of the NMPF is as follows:

“Subject to assessments required for the protection of the environment, and only where in keeping with the outcome of the review of the security of energy supply of Ireland’s electricity and natural gas systems (which is being carried out by Department of the Environment, Climate and Communications), natural gas storage proposals should be supported.”

- The NMPF states that while security of supply is a key energy policy objective for Ireland and the European Union, the issue cannot be examined in isolation from sustainability, and that natural gas storage installation and activities can have potential adverse environmental impacts.

- In addition, Transmission Policy 4 of the NMPF states that:

“Where possible, opportunities for land-based, coastal infrastructure that is critical to and supports energy transmission should be prioritised in plans and policies. Designation of land-based zones for the purposes of co-ordination and integration with relevant Marine Plans must be considered, where appropriate.”

In the context of the NMPF, the proposed development site is located on lands zoned for marine-related industry which require deep water access, including energy infrastructure, in the Tralee-Ballylongford strategic landbank, and has been subject to EIA and AA.

3.1.4 Strategic Integrated Framework for the Shannon Estuary 2013-2020 (SIFP)

- As illustrated in Figure 3-1, the site of the proposed development is located in one of nine strategic development locations identified in the Shannon Integrated Framework Plan: “Strategic Development Location H: Tarbert-Ballylongford land bank, Ballylongford”. The SIFP references the previously permitted LNG scheme when it states that this location:

“[I]ncludes a significant portion of lands currently zoned for industrial use within the Kerry County Development Plan, including a portion that has extant planning permission for a major LNG Terminal.”

- The SIFP states:

“Ballylongford benefits from a significant deepwater asset and extant permission for a major LNG plant, the availability of natural gas, the proximity to the national grid and the potential for refrigeration from the regasification process, combined with the additional physical infrastructure in terms of roads and water. This makes the lands a very attractive location for other industries to locate in the future. There is also potential for gas fuelled electricity generation in the future. The SIFP proposes a Strategic Development Location around the Tarbert-Ballylongford complex to accommodate further development of the energy infrastructure and allow for economic development that will be attracted to such a significant site by virtue of its energy provision and deepwater facilities”.

- The SIFP also states that the Tarbert-Ballylongford land bank is zoned for industrial development in the Kerry County Development Plan and that:

“[T]he proposed LNG plant will be a significant regional project which will act as a catalyst for further industrial development at this location in the future. The extension of the natural gas market and the existing electricity network distribution infrastructure already in place is intended to develop the area in a sustainable manner as a power generation hub within the region.”

- In addition, the SIFP states that:

“With the extension of the natural gas network and the existing electricity distribution infrastructure in place the SDL [Strategic Development Location H: Tarbert-Ballylongford land bank, Ballylongford] lends itself to development in a sustainable manner as a power generation centre for the region.”

- The SIFP therefore highlights that the prosperity of the entire region is, to a large degree, contingent on a scheme of the nature of the proposed development.

Figure 3-1: Location of the proposed development site in the Tarbert-Ballylongford land bank (generally identified in red)



- In relation to the Tarbert-Ballylongford land bank Strategic Development Location, the SIFP highlights that the previously permitted (and since expired) LNG regasification terminal scheme and associated permitted Combined Heat and Power Plant scheme are key enablers for the region, as well as being of national importance:

“The significant storage of oil reserves at this location is a further strategic asset confirming the importance of the SDL in a national context. The level of connectivity with the existing grid network together with synergies with ESB Moneypoint, and the extension of the natural gas network from the Combined Gas Cycle Turbine proposal and the adjacent proposal for the LNG facility presents a real opportunity.”

- The SIFP also highlights that the previously permitted LNG regasification terminal scheme is seen as a key economic driver for the region:

“The Estuary is also likely to benefit from other significant foreign investment of around €500 million through implementation of planning approval for the first LNG terminal in Ireland at the Tarbert-Ballylongford Landbank near Tarbert. The scheme will contain four insulated storage tanks of 200,000 cubic metres capacity and a re-gasification facility linked to the existing gas transmission system. Such significant investments, particularly in energy infrastructure are likely to be a catalyst for other major foreign investment in the region.”

- Lastly, the SIFP envisages that a scheme such as that of the proposed development will play a significant role in establishing the Universities and Shannon Development-led “Shannon Energy Valley”, “which it is believed could provide a National hub for Energy Research & Development, Industry and Commerce to attract mobile international investment and generate high end employment.”
- The SIFP is explicit that a scheme of the nature of the proposed development is of regional and national economic and infrastructural importance.

The Shannon Integrated Framework Plan (SIFP) is unequivocal in its support for the proposed development, both in terms of the suitability of the site as a Strategic Development Location for the intended gas supply and power generation use, and the importance of the proposed development to the economic wellbeing of the region.

3.1.5 Southern Assembly Regional Spatial and Economic Strategy (RSES) January 2020

- The RSES emphasises the key significance of the previously permitted LNG regasification terminal scheme for the development and prosperity of this peripheral region. The RSES states the following:

“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.”

- The previously permitted LNG scheme, in combination with the associated permitted Combined Heat and Power Plant scheme, are also referenced as a nationally important project in the RSES with regard to energy hubs under the Gas Networks Ireland section of the “Water and Energy Utilities” chapter:

“The Tarbert-Ballylongford lands in Co Kerry comprise of 390 hectares of lands zoned for marine-related industry and compatible industries. Planning permission exists at the location to build a Liquefied Natural Gas (LNG) importation and storage terminal on a portion of the site. The proposal included a 500MW Combined Heat and Power (CHP) plant, a 26km pipeline and permitted connection to the natural gas grid. It is anticipated that the 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.”

- The RSES contains a number of Regional Planning Objectives (RPOs) of which Objective RPO 225 seeks to:

“e. Strengthen the gas network sustainably to service settlements and employment areas in the Region, support progress in developing the infrastructures to enable strategic energy projects in the Region. An example is the Tarbert/Ballylongford landbank in Co Kerry which is a strategic development site under the Strategic Integrated Framework Plan for the Shannon Estuary and support for the extension of the Gas Network from Listowel into the Kerry Hub and Knowledge Tri-Angle settlements of Tralee, Killarney and Killorglin.”

- In relation to the potential for energy and renewable energy production in the South West Strategic Planning Area, the RSES states:

“Example of an opportunity: Tarbert- Ballylongford Landbank LNG and CHP Project, a key site identified in the Strategic Integrated Framework Plan (SIFP) for the Shannon Estuary.”

The RSES for the Southern Region fully endorses the provisions of the SIFP with respect to the Tarbert/Ballylongford strategic landbank. The proposed development is specifically identified as a nationally important project as an energy hub for the region.

3.1.6 Kerry County Development Plan 2015-2021

- The SIFP is integrated into the CDP via 3 objectives: ES-22; ES-23, and; ES-24.

- Objective ES-22:

“Support the implementation of the Shannon Integrated Framework Plan (SIFP) to facilitate the sustainable economic development of the Shannon Estuary.”

- Objective ES-23:

“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 or complimentary with marine related industry and / or those creating a synergism with existing or permitted uses and / or those contributing to the sustainable development of a strategic energy hub at this location will also be encouraged. Development will be subject to compliance with the objectives of this Plan, particularly as they relate to the protection of the environment and will also be subject to compliance with the Environmental Reports prepared in support of the SIFP, where appropriate.”

- Objective ES-24:

“Ensure that development proposals for the Tarbert / Ballylongford landbank are supported with detailed site level flood risk assessments. As part of this, the probability of flooding within the site together with the vulnerability of proposed land uses shall be taken into consideration and appropriate mitigation measures incorporated, where necessary, so as to adequately manage flood risk.”

In addition, only water compatible industrial type land uses, including flood control infrastructure and compatible industrial activities requiring a waterside location will be permitted on lands which have an annual exceedance probability of coastal flooding of 0.1% AEP (Extreme Flood Extent)."

- The Tarbert-Ballylongford strategic land bank is mentioned in the Core Strategy of the CDP, with the realisation of the potential of this land bank hinging to a great extent on the previously permitted LNG regasification terminal scheme being developed. A key element of the CDP's Core Strategy is the:

"Promotion of the Tarbert / Ballylongford landbank as a strategic location for sustainable industrial / energy type development in the region."

- The Core Strategy of the CDP also contains Objective CS-7, where the land bank's sustainable development is prioritised and linked with the sustainable development of Tralee and Killarney.

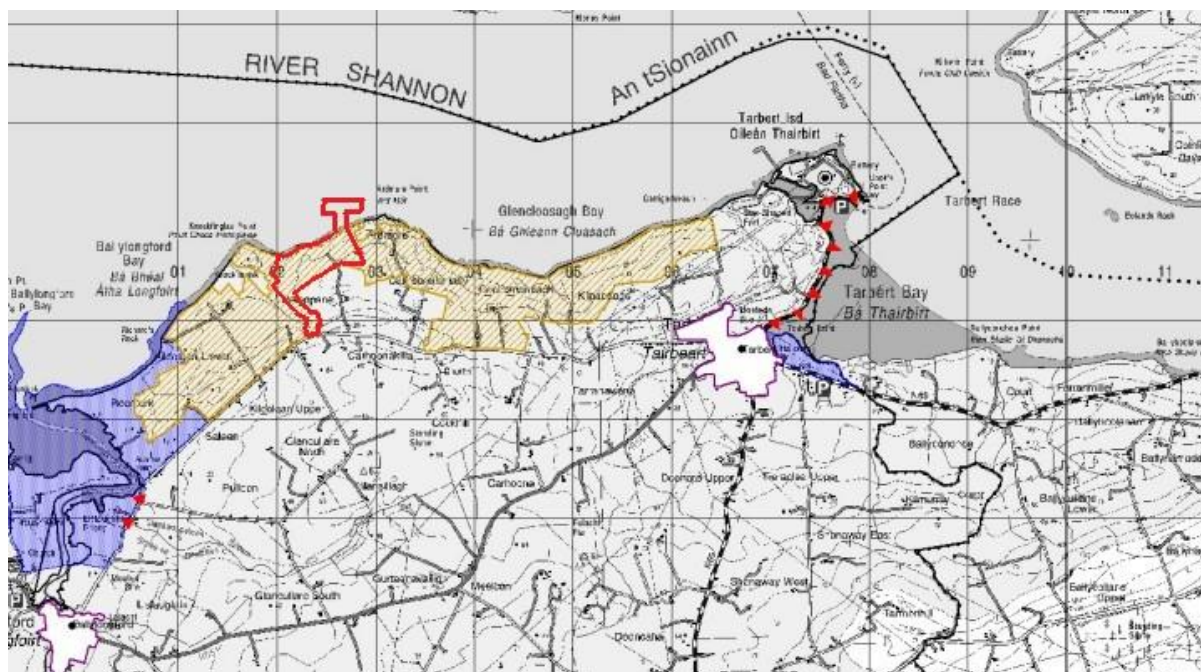
- Objective CS-7:

"Prioritise the sustainable development of the Linked Hub Towns of Tralee and Killarney and the Tarbert / Ballylongford landbank, in line with National and Regional policy."

- As illustrated in Figure 3-2, the Tarbert/Ballylongford land bank of 390 hectares is zoned in the CDP for:

"marine-related industry, compatible or complimentary industries and enterprises which require deep water access."

Figure 3-2: Zoning Objective pertaining to the proposed development site (generally identified in red)



- The CDP states that the previously permitted scheme has huge potential to support both the region's economic development as well as the region's energy security. The CDP states:

"Within the land bank planning permission has been secured for the construction of a Liquefied Natural Gas (LNG) regasification terminal. This site is 104 hectares in size. In addition, planning permission has also been granted within the LNG site for a Combined Heat & Power plant. These two developments were extensively environmentally assessed and have the potential to sustainably create substantial employment both at the construction and operation phases and can act as a catalyst for future industrial development and employment arising from the availability of secure gas and electricity supply in this region."

- The CDP also considers that County Kerry's potential for power generation is almost entirely contingent on a scheme such as that of the proposed development at its proposed location:

“In relation to power generation County Kerry is well placed to encourage and facilitate the sustainable development of power generation facilities in the county, for a variety of reasons, namely: the proximity to Cork and Limerick, the proposed LNG plant in Tarbert / Ballylongford which is a large industrial landbank and a deep sea estuary.”

- Finally, the CDP also contains an Energy and Power objective that relates to the proposed development implicitly as, aside from the previously permitted LNG regasification terminal within the Tarbert/Ballylongford land bank, no other LNG project has been proposed in County Kerry.
 - Objective EP-6:
“Promote sustainable LNG associated enterprises/ industries at appropriate locations and expand the gas distribution network.”
- Objective ZL-2 of the CDP states that Kerry County Council is to ‘Prepare a Landscape Character Assessment of the County following the publication of the proposed National Landscape Strategy. This assessment will include capacity studies for different forms of development and will involve consultation with adjoining local authorities’. Landscape Character Areas (LCA) were identified for the Renewable Energy Strategy by the Council in 2012. The proposed development site is located within the Tarbert Pastures LCA. The Development Capacity Assessment for this LCA notes that *There is a significant area of land zoned industrial along the estuary, known as the Ballylongford Landbank. There is landscape capacity in the landbank area given the industrial nature of the area.*
- The CDP also identifies a number of Views and Prospects. Relevant designations located in the area of the proposed development site to include:
 - Views north of the River Shannon estuary and Co. Clare shores from a section of the R551 between Ballylongford and Asdee. This section is also part of the Wild Atlantic Way driving route.
 - Estuarine views east and northeast along sections of the L6010 towards Carrigafoyle Castle north of Ballylongford. This section is also part of the Wild Atlantic Way driving route.
 - Views west of Lislaughtin Abbey from a short section of the L1010 northeast of Ballylongford.
 - Views east and southeast of Tarbert Bay along sections of the N69 including its section on Tarbert Island to the ferry terminal. This section is also part of the Wild Atlantic Way driving route

It is an objective of the CDP (ZL-5) to preserve the views and prospects as defined on Map No’s 12.1, 12.1a– 12.1u.

The Kerry County Development Plan is fully aligned with regional policy in respect of the strategic status of the proposed development site, and of the multiplier effect of the proposed development in terms of encouraging future industrial development and increased employment in the area. In fact, the Core Strategy of the Plan firmly promotes the principle of industrial and energy type developments in the Tarbert/Ballylongford strategic landbank, subject to detailed assessment.

3.1.7 Clare County Development Plan 2017-2023

- Consistent with the Shannon Integrated Framework Plan, the key provisions and policies of the Clare County Development Plan 2017-2023 endorse the strategic role and function of the Shannon Estuary in supporting marine industry, and specifically reference the cluster of industrial activity in the Tarbert/Ballylongford Strategic Development Location. The important role of the Shannon Estuary in the diversity and security of energy supply in the region is also acknowledged.

3.1.8 Listowel Municipal District Local Area Plan 2020-2026

- The LAP reiterates what other statutory policy documents state in terms of the importance for the local and regional economy and energy supply of a scheme such as the proposed development:

*“Within the [Tarbert/Ballylongford] land bank planning permission has been secured for the construction of a Liquefied Natural Gas (LNG) regasification terminal. The LNG site measures 104 hectares in size. In addition, planning permission has also been granted within the LNG site for a Combined Heat & Power plant. **These two developments have the potential to enable substantial employment both at the construction and operation phases and can act as a catalyst for future industrial development and***

employment arising from the availability of secure gas and electricity supply in this region [emphasis added].

- The overall Strategic Development Objective OS-08 of the LAP is to support the policies and objectives of the SIFP as follows:

“Support the sustainable development of the land zoned within the Tarbert/Ballylongford area in accordance with the policies and objectives of The Strategic Integrated Framework Plan for the Shannon Estuary (SIFP) and the Kerry County Development Plan.”

- In addition, the previously permitted LNG regasification terminal and the permitted Combined Heat and Power Plant scheme are considered to be a solution to the established trend of rural decline in the locality of Ballylongford:

“The industrial land known as the Tarbert/Ballylongford Land Bank is approximately 2km to the north of [Ballylongford] village and comprises 398 hectares. On part of this site planning permission has been granted for a liquefied natural gas (LNG) import terminal. This development would, over a three year period, provide approximately 650 construction jobs and on completion 50 permanent jobs. Planning permission has also been granted for a Combined Heat & Power Plant which will, if developed result in the creation of additional employment. The Ballylongford Land Bank therefore represents enormous potential to create local employment for the village.”

- The LAP further states that the previously permitted LNG regasification terminal and the permitted Combined Heat and Power Plant within the Tarbert/Ballylongford land bank, *“if completed together with future supporting developments will have a significant positive impact on employment, demand for services, and residential development in Tarbert”*.
- Finally, the LAP also contains infrastructure objective LS-T-01 as follows:

“Sustainably harness the economic potential from the provision of a secure natural gas energy supply to the region.”

The Listowel LAP also endorses the strategic significance of the proposed development and the positive impact it could have on reversing rural decline in the Ballylongford area.

In summary, the proposed development is aligned with, and will assist in the delivery of key planning policy and land use objectives at national, regional and local level.

3.1.9 Planning History

Table 3-1 Planning Applications (excluding individual dwellings and other small scale developments) within c. 5km of the Proposed Development Site over a 10-year period

Planning Reference	Location	Received Date	Decision Date	Decision	Description
PL08B.PA0002	Ralappane and Kilcolgan Lower, Co. Kerry	24.9.2007	31.3.2008	Granted	Proposed LNG regasification terminal.
PL08.PM0002	Ralappane and Kilcolgan Lower, Co. Kerry	01.11.2012	4.3.2013	Granted	Amendment to the phasing of the construction of the permitted LNG Terminal (condition no. 3) and other minor modifications
PL08.PM0014	Ralappane and Kilcolgan Lower, Co. Kerry	22.9.2017	13.7.2018	Granted	Amendment to the length of the permission for the permitted LNG Terminal (condition no. 2) from 10 years to 15 years.

					This decision was quashed by the High Court in November, 2020
PL08.GA0003 ¹³	townlands of Ralappane, Carhoonakineely, Carhoonakilla, Cockhill,etc.	14.8.2008	17.2.2009	Granted	Permission approved for a gas pipeline to connect Shannon LNG Terminal to the existing natural gas network at Leahy's Co. Limerick.
PL08. DA0003	townlands of Ralappane, Carhoonakineely, Carhoonakilla, Cockhill,etc.	1.8.2008	17.2.2009	Make acquisition order without amendments	Application for an acquisition order for the Shannon LNG Terminal at Tarbert, Co. Kerry to the Bord Gáis Eireann Network at Foynes, County Limerick
PL08. PA0028	Ralappane and Kilcolgan Lower, Co. Kerry	21.12.2012	09.7.2013	Granted	10 year permission for a combined Heat and Power (CHP) Plant

¹³ The 26km gas pipeline that will connect the proposed development to the existing natural gas network is already permitted. By decision dated 17 February 2009, An Bord Pleanála granted approval for this gas pipeline under section 182D of the Planning and Development Act, 2000 (as amended) (Board ref. PL08.GA0003). It follows that the permitted pipeline is an "approved project", to which Annex IV(5)(e) of the EIA Directive applies. This means the EIA of the proposed development must include effects resulting from the cumulation of effects with the permitted pipeline. Similarly, the permitted pipeline is a project for the purposes of the "in combination" assessment under the Habitats Directive. A revised assessment of the permitted pipeline will be included within the required future application for consent under section 39A of the Gas Act 1976 (as amended). We are advised that no such revised assessment is necessary to complete necessary cumulative and in combination assessments. The necessary cumulative and in combination assessments have been completed, on the basis that the permitted pipeline is built in accordance with its existing approval.

Table 3-2 Planning Applications (excluding individual dwellings and other small scale developments) within c. 5km of the Proposed Development Site over a 10-year period

Planning Reference	Location	Received Date	Decision Date	Decision	Description
Co. Kerry					
13138	Kilpaddoge, Tarbert, Co. Kerry	13.03.2013	17.09.2013	Granted	Construct an electricity peaker power generating plant.
13477	Tarbert Island, Tarbert, Co. Kerry	31.07.2013	23.09.2013	Granted	Alter existing 220kv station consisting of new single storey control building, new diesel generator building, 3 no. single storey modular buildings, 6 no. gantry support structures, 8 no. control and protection kiosks, 6 no. surge arrestors, 6 no. cable sealing ends, existing compound chain link fence and gates to be replaced with new palisade fence and gates, new holding tank.
14816	Gurteenavallig, Tarbert, Co. Kerry	28.11.2014	28.04.2015	Granted	The extension of a portion of the permitted access road, the provision of a new substation compound with a single storey substation building and associated underground services.
155	Kilpaddoge, Tarbert, Co. Kerry	08.01.2015	03.03.2015	Granted	Alterations to the existing station consisting of 1 no. 110/20 kV transformer, 3 no. 110 kV surge arrestor, 3 no. 110 kV cable sealing ends, 1 no. neutral earth resistor, 1 no. lightning mast, new retaining wall with handrail, new single storey switchgear building and associated drainage and site works.
17466	Meelcon and Gurteenavallig, Ballylongford, Co. Kerry	22.05.2017	14.07.2017	Granted	The modification of the permitted northern access, junction to Leanamore wind farm.
18392	Tarbert Island, Tarbert, Co. Kerry	27.04.2018	15.01.2019	Granted	For a 10 year permission to construct a battery storage facility within a total site area of up to 2.278ha.
18878	Kilpaddoge, Tarbert, Co. Kerry	10.09.2018	23.09.2019	Granted	For a 10 year permission to construct a battery energy storage system (bess) facility on a total site area of up to 0.6ha that will provide grid balancing services to the Irish electrical grid. Third Party Appeal to Appeal to ABP (305739-19). ABP granted permission.
19115	Kilpaddoge, Tarbert, Co. Kerry	12.02.2019	07.02.2020	Granted	For a 10 year permission for a grid stabilisation facility comprising of: the construction up to 4 no. rotating stabilisers, 5 no. battery storage containers, 1 no. control room, 2

					transformers and ancillary equipment within a site area of approx. 1.46 hectares.
304807-19	Townlands of Aghanagran Middle, Aghanagran Lower, Ballyline West, Tullahennell South, Ballylongford, Co. Kerry	02.07.2019	06.01.2020	Granted	Construction of a Windfarm consisting of up to 6 Wind Turbines. Previously refused by Kerry County Council (19381)
VA03.307798	Townland of Carrowdotia South, Co. Clare and Kilpaddoge, Co. Kerry.	30.07.2020	04.06.2021	Granted	Installation of 400kV electricity transmission cables, extension to the existing Kilpaddoge Electrical Substation and associated works, between the existing Moneypoint 400kV Electrical Substation in the townland of Carrowdoita South County Clare and existing Kilpaddoge 220/110kV Electrical Substation in the townland of Kilpaddoge County Kerry. The development includes work in the foreshore.
20850	Kilpaddoge, Tarbert, Co. Kerry	18.09.2020	12.11.2020	Granted	For changes to the previously permitted peaker power plant development (planning ref. 13/138). It is proposed to change the energy source for the charging of the battery energy storage system (BESS) containers from diesel to charging off the national grid and to change the permitted layout for electrical equipment.
Co. Clare					
11457	Carrowdotia South, Co. Clare	24.06.2011	03.08.2011	Granted	Permission for the development of electrical transmission infrastructure and associated works at the existing Moneypoint Power Station complex.
PL 03.241624 (1274)	Carrowdotia North and, Carrowdotia South, Killimer, Co Clare	19.02.2013	12.12.2013	Granted	10-year planning permission for a Wind Farm Project (5 wind turbines) at Moneypoint Generating Station refused by Clare County Council but granted by An Bord Pleanála following a first party appeal.
14190	Moneypoint Power Station, Carrowdotia South, Co. Clare	10.04.2014	28.05.2014	Granted	A new indoor Gas Insulated Switchgear (GIS) 400 kV substation building (3463m ²), 17m high, two new 400/220 kV transformers with associated Switchgear, three new 30m high lightning masts, and associated drainage and site works. The application

					relates to previous grant of planning permission reg. ref. P11-457.
PL 03.243842 (14373)	Carrowdotia North, and South, Killimer, Co. Clare	15.09.2014	29.01.2015	Granted	20-year planning permission for works to the existing 32ha ash repository site located within the Moneypoint generating station complex granted by Clare County Council and granted by An Bord Pleanála following a first party appeal relating to a condition regarding a development contribution.
1581	Carrowdotia North & South, Killimer, Co. Clare	18.02.2015	10.04.2015	Granted	10-year permission primarily for an electrical transformer station. The proposed development is an amendment to the previously approved electrical transformer station at Moneypoint Wind Farm (CCC Ref: 12-74 APB Ref: PL03.241624)
161011	Moneypoint, Co.Clare	22.12.2016	24.08.2017	Granted	Refurbishment of the Moneypoint – Oldstreet 400kV overhead line.
19746	Moneypoint Generating Station, Carrowdotia North, Killimer, Co Clare	26.09.2019	20.11.2019	Granted	10-year planning permission for a synchronous condenser and supporting items of plant, with the largest building being c.962 sq.m. and standing c.15m high.
20318	Moneypoint Generating Station, Carrowdotia North and Carrowdotia South, Killimer, Co. Clare.	20.05.2020	16.07.2020	Granted	10-year planning permission for a synchronous condenser, supporting items of plant, with the largest building being c.420 sq.m. and standing c.15m high. Permission also sought to continue the use of the existing underground cable grid connection. This application represents a relocation within Moneypoint of a similar application permitted by Clare County Council under Reg. Ref. P19/746.

Table 3-3 Other Relevant Planning Applications (outside the 5km radius of the Proposed Development Site)

Planning Reference	Location	Received Date	Decision Date	Decision	Description
13138	Kilpaddoge, Tarbert, Co. Kerry	13.03.2013	17.09.2013	Granted	Construct an electricity peaker power generating plant, consisting of 52no. diesel reciprocating engines in acoustic containers, 26no. emission stacks to a maximum height of 15m, access road, approximately 60m of 110 kV underground transmission line, electrical compound of 4141sq.m containing a maximum of 2no. 110kV

					substations and associated plant, a maximum of 4no. diesel storage tanks 6.1m high, a firewater tank, and a control building of 51.25sq.m and 4m high.
139138	Kilpaddoge, Tarbert, Co. Kerry	06.03.2018	18.06.2018	Granted	Extension of duration of the above planning permission until 20.10.2023.
14816	Curteenavallig, Tarbert, Co. Kerry	28.11.2014	28.04.2015	Granted	Development of a secondary substation for the previously granted Leanamore Wind Farm (Ref. 11/299).
15772	Kilcolman and Glanwillin, Astee, Co Kerry	14.09.2015	28.07.2016	Granted	Installation and operation of a 5MW solar farm to include photovoltaic panels with mounting frames on screw pile foundations and ancillary development.
247653-16	Ballygrennane, Listowel, Co. Kerry	30.11.2016	26.04.2017	Granted	Solar PV Farm of up to 30,072 sq.m. of solar panels, 1 No. substation, 2 No. inverter cabins, fencing and ancillary facilities to be connected to the National Grid. Previously refused by Kerry County Council (16877)
1783	Nantinan, Killorglin, Co. Kerry	06.02.2017	02.11.2017	Granted	For a 10-year permission for the development of a solar PV farm consisting of up to 26,550 sq.m of solar panels on ground mounted steel frames.
300174-17	Trieneragh, Duagh, Listowel, Co. Kerry	13.11.2017	11.10.2018	Granted	10-year permission for solar farm, substation, inverter cabins, underground cable ducts and associated works. Prior to third party appeal, previously granted by Kerry County Council 17851.
171146	Tullahennell South, Ballylongford, Co Kerry	17.11.2017	19.01.2018	Granted	Extend the operational life of the existing wind farm from 20 to 25 years. The permission relates to the continuance of use of the existing wind farm granted under planning ref 09/1175 for a further period of five years.
171148	Tullahennell North, Astee, Co Kerry	17.11.2017	19.01.2018	Granted	Extend the operational life of the existing wind farm from 20 to 25 years. The permission relates to the continuance of use of the existing wind farm granted under planning ref 08/2086 and 15/701 for a further period of five years.
171147	Larha, Astee, Co Kerry	17.11.2017	19.01.2018	Granted	Extend the operational life of the existing wind farm from 20 to 25 years, and for the change of use of an existing forestry road to a wind farm road. The permission relates to the continuance of use of the existing wind farm granted

					under planning Ref. Nos. 08/2500 and 15/679 for a further period of five years.
171305	Knockreagh, Milltown, Killarney, Co. Kerry	22.12.2017	23.02.2018	Granted	For development consisting of a 10-year permission for a solar farm within a site area of 10.19 hectares.
302681-18	Tullamore, Drombeg, and Coolkeragh, Listowel, Co. Kerry	03.10.2018	22.05.2019	Granted	Planning permission with a duration of 10 years for a solar PV farm with an operational lifespan of 35 years to export up to 50MW of electricity to the national grid. Previously refused by Kerry County Council.
1825	Beal East, Ballybunion, Co. Kerry	18.01.2018	19.01.2019	Granted	Solar PV farm consisting of a solar pPVarray of approximately 12.5 ha of solar panels within a total red line boundary of 14.16 ha.
19115	Kilpaddoge, Tarbert, Co. Kerry	12.02.2019	07.02.2020	Granted	10-year permission for the development of a grid stabilisation facility.
304807-19 (19381)	Aghanagran Middle and Lower, Ballyline West and Tullahennel South, Ballylongford, Co Kerry	12.07.2019	06.01.2020	Granted	10-year planning permission for the construction of a wind farm consisting of up to 6 wind turbines. Previously refused by Kerry County Council.
305739-19 (18878)	Kilpaddoge, Tarbert, Co. Kerry	12.10.2019	10.02.2020	Granted	10-year permission to construct a battery energy storage system on a 0.6ha site.
306146-19	Shanagolden, Craggs, Askeaton West, Lismakeery, Nantian, Riddlestown, Rathkeale Rural, Rathkeale Urban, Dromard, Croagh, Adare North, Adare South, Clarina and Patrickswell, Co. Limerick	11.12.2019	04.10.2021	Awaiting	Foynes to Limerick Road (including the Adare Bypass) including all ancillary and consequential works.
306199-19	Shangolden, Craggs, Askeaton West, Lismakeery, Nantian, Riddlestown,	16.12.2019	04.10.2021	Awaiting	Foynes to Rathkeale Protected Road Scheme 2019, Rathkeale to Attyflin Motorway Scheme 2019 and Foynes Service Area Scheme 2019 (forming the Foynes to Limerick Road (including Adare Bypass))

	Rathkeale Rural, Rathkeale Urban, Dromard, Croagh, Adare North, Adare South, Clarina and Patrickswell, Co. Limerick				
308643-20 (20438)	Meelcon, Carhona, Farranawana, Tarbert, Doonard Upper and Lower, Kilpaddoge, Ballyline West, Ballymacasy, Lislaughtin, Glamcullare South, Gurteenavallig, Co Kerry	11.11.2020	21.06.2021	Granted	Amend a previously granted permission (Ref 19381, Ref: 304807-19) which relates to a change in the grid connection route for the permitted wind farm. The revised route will entail the construction of approximately 12.1km of 38kV underground electric cable connecting the existing permitted windfarm (19/381) to the 38kva/110kva substation at Kilpaddoge, Tarbert. Refused by Kerry County Council on the 28.10.2020.
308903-20	Aughinish Island, Askeaton, Co. Limerick	14.12.2020	30.03.2021	Is a Strategic Infrastructure Development	Extension of alumina extraction facility (increase in Height of Bauxite Residue Disposal Area, Vertical Extension of Salt Cake Disposal Cell, and Extension of Permitted Borrow Pit) at Aughinish Alumina, Co. Limerick.
309156-21	Townlands of Ballyline West, Coolkeragh, Dromalivaun and Tullamore, Co. Kerry	14.01.2021	15.07.2021	Awaiting	For a 10-year permission for 12 wind turbines, substation, grid connection and ancillary site works.

Table 3-4 Other Relevant Planning Proposals (outside the 5km radius of the Proposed Development Site)

Planning Reference	Location	Received Date	Decision Date	Decision	Description
N/A	Moneypoint Generating Station, Carrowdotia North and Carrowdotia South, Kilimer, Co. Clare.	N/A	N/A	N/A	On 9 th April, 2021, ESB announced Green Atlantic @ Moneypoint, which will see the Power Station site transformed into a green energy hub, including: Renewable enablement: ESB has already commenced work on transforming Moneypoint into a green energy hub, with the installation of a Synchronous Compensator (permitted under application register reference 20/318) to provide a range of electrical services to the electricity grid which would previously have been supplied by

					<p>thermal fired power stations. Its operation will enable higher volumes of renewables on the system.</p> <p>Moneypoint Floating Offshore wind farm: A floating offshore wind farm of 1,400MW will be developed off the coast of Counties Clare and Kerry in two phases by ESB and joint venture partners, Equinor. Once complete, the wind farm will be capable of powering more than 1.6m homes in Ireland. Subject to the appropriate consents being granted, the wind farm is expected to be in production within the next decade.</p> <p>A wind turbine construction hub: Moneypoint will become a centre for the construction and assembly of floating wind turbines. A deep-water port already exists at the site, making it an ideal staging ground for the construction of the wind farm.</p> <p>Hydrogen Energy: ESB's plans include investment in a green hydrogen production, storage and generation facility at Moneypoint towards the end of the decade. A clean, zero-carbon fuel, green hydrogen will be produced from renewable energy and used for power generation, heavy goods vehicles in the transport sector and to help decarbonise a wide range of industries such as pharmaceuticals, electronics and cement manufacturing.</p>
N/A	40km Limerick-Foynes rail line	N/A	N/A	N/A	<p>Preliminary works and consenting requirements regarding of re-opening the rail line were completed in 2019, funded by Shannon Foynes Port Company and co-funded by the EU's Connecting Europe facility, being undertaken by Irish Rail.</p> <p>Work could start in rebuilding the line once funding for the project is secured.</p>

Table 3-5 Foreshore Licence/Lease Applications relating to the Proposed Development site

File Reference	Location	Received Date	Decision Date	Decision	Description
FS006224	Shannon Estuary near Tarbert and Ballylongford in Co. Kerry	19.03.2008	20.04.2010	Granted	Drainage outfall.
FS006225	Shannon Estuary near Ballylongford and Tarbert, County Kerry	19.03.2008	20.04.2010	Granted	Construction of a liquified natural gas jetty.
FS006227	Shannon Estuary near Ballylongford and Tarbert, County Kerry	19.03.2008	20.04.2010	Granted	Construction of a materials jetty.
FS006228	Shannon Estuary near Ballylongford and Tarbert, County Kerry	19.03.2008	20.04.2010	Granted	Construction of a seawater intake and outfall.

An analysis of the planning history of the proposed development site and of the area in the vicinity clearly illustrates that the development of energy infrastructure such as that proposed in this instance, is generally considered to be consistent with, and envisaged by, national, regional and local planning policy.

The proposed development site itself was previously subject to a positive planning decision for an LNG Terminal, to include onshore and offshore infrastructure, and a CHP.

There are established power stations in the vicinity of the proposed development site. More recently, the planning history of the area in the vicinity of the proposed development site reveals multiple permissions for energy-related infrastructure to support the emerging renewable energy developments in the area, including an upgrade to the existing 220 kV substation at Kilpaddoge, a new battery energy storage facility at Kilpaddoge, and the installation of 400kV electricity transmission cables between Kilpaddoge substation and the Moneypoint substation.

Equally, a review of the Foreshore Licences and Leases confirms the existing Licence and Lease available at the proposed development site.

4. Environmental Appraisal

4.1 Need for EIA

The proposed development falls under the Seventh Schedule of the Planning and Development Act 2000 (as amended), as:

- *'-An onshore terminal, building or installation, whether above or below ground, associated with an LNG facility, and for the purpose of this provision, 'LNG facility' means a terminal which is used for the gas liquefaction of natural gas or the importation, offloading and re-gasification or liquified natural gas, including ancillary services'; and*
- *'A thermal power station or other combustion installation with a total energy output of 300 megawatts or more'.*

In accordance with sections 37A and 37B of the Act, the proposed development has been determined by An Bord Pleanála to fulfil the criteria requiring the application for permission to be made directly to the Board instead of the local planning authority. Section 37E of the Act provides that such an application shall be accompanied by an EIAR.

An EIAR has been prepared by AECOM and is included with the planning application.

The key conclusions of the EIAR, which has also considered the cumulative effects of the Data Centre Campus, and the 220 kV and the medium voltage (10 / 20 kV) cables, are set out below.

4.1.1 Land and Soils

- Soils and bedrock geology encountered at the proposed development site are considered favourable for the construction of the proposed development, with most plant to be founded on bedrock at the cut platform level of 18 m above Ordnance Datum (m OD).
- All excavated soil and rock material (of the order of 480,000 m³) are expected to be suitable for re-use on the proposed development site as general or structural fill, resulting in a net zero cut/ fill balance.
- The proposed development site has a low to very low sensitivity with respect to existing soils and geology.
- The construction phase of the proposed development will be carefully managed in accordance with a detailed Construction Environmental Management Plan (CEMP), an Outline of which is included with the planning application, to include the following commitments:
 - Construction Phase
 - Foundation solutions will be designed based on the properties of the underlying soils and bedrock;
 - Offshore piling and jetty and outfall construction will be managed to minimise sediment mobilisation and avoid use of wet concrete and other alkaline materials in the offshore environment;
 - Temporary storage of soil and crushed rock will be managed to prevent potential negative impact on the receiving environment;
 - Soils and crushed rock will be tested for their chemical and geotechnical suitability prior to reuse as fill;
 - Fill placement and compaction will be undertaken in line with defined procedures and will be inspected by a geotechnical engineer;
 - Where possible, earthworks will be undertaken during dry weather in view of the sensitivity of the overburden soils to moisture content;
 - Fuels, oils and other potentially hazardous chemicals will be stored in bunds in designated areas;
 - Use of precast concrete elements in the foreshore and offshore environments where possible;
 - Concrete use and wash-out areas will be in designated areas, with measures to prevent alkaline wastewaters or contaminated storm water runoff to the underlying subsoil or to the surface water or marine environment; and
 - Fill material from external sources, if required, will be vetted in order to ensure that it is of a reputable origin and that it is 'clean' (i.e. will not introduce contamination to the environment).
 - Operational Phase mitigations include:
 - Handling all hazardous or water-polluting materials in a manner to prevent/ minimise potential impact on soil;
 - Routing of road runoff from the approach road north to the power plant and terminal, rather than to natural drainage leading to the Ralappane Stream;
 - Fuels, oils, odorants and other potentially hazardous chemicals will be stored in bunds in designated areas;

- Secondary containment and spill kits will be provided for other hazardous materials to be stored on the proposed development site, such as maintenance oils and cleaning chemicals; and
- An environmental management plan will be prepared for the operational phase;
- In relation to cumulative impacts, no significant residual impacts were identified to groundwater and surface water and the cumulative operational impact is considered to be imperceptible.

The Residual Impact of the proposed development on the surrounding land and geological environment is considered to be slight or imperceptible at both the Construction and Operational phases.

4.1.2 Groundwater

- With the exception of crossings of the existing watercourses for the proposed access road, there is no development proposed within potentially flood-susceptible areas of the site, and therefore it will have negligible impact on the existing flood regime. These proposed crossings of watercourses will be adequately sized to have a minimal impact on the current hydraulic regime in the area. The negligible impact to a receptor of extremely high sensitivity will result in an imperceptible effect.
- The construction phase of the proposed development will be carefully managed in accordance with a detailed Construction Environmental Management Plan (CEMP), an Outline of which is included with the planning application.
- Operational phase risks to groundwater, surface water and marine waters will arise principally from discharges of seawater used for regasification from the FRSU and of stormwater, process effluent and sanitary water via a discharge outfall pipe to the estuary.
- As the seawater used for regasification in the FRSU will be treated with sodium hypochlorite to manage bacterial growth in onboard pipework, the regasification seawater discharge has been modelled in terms of both temperature and residual chlorine concentration and this indicates negligible impact to the marine environment of extremely high sensitivity, resulting in an imperceptible effect.
- The onshore effluent streams will be collected via separate constructed drainage networks and will be treated and monitored prior to discharge as required by the site's IE licence from the EPA, has been modelled in terms of E.coli bacteria dispersion in the estuary and will result in negligible adverse effect on an extremely high sensitivity environment and the significance of any residual effect is imperceptible.
- Other operational phase risks to groundwater and surface water may arise from accidental losses of diesel fuel, transformer oils, odorant chemical and other chemicals used onsite. These risks will be managed by siting sensitive chemical storage and equipment within bunded areas, resulting in a low adverse effect to an extremely high sensitivity environment and the residual significance will be imperceptible.
- Operational phase mitigations include:
 - Handling all hazardous or water-polluting materials in a manner to prevent/ minimise potential impact on groundwater and surface water;
 - Secondary containment (bundling) and spill kits will be provided for other hazardous materials to be stored onsite, such as fuels, maintenance/ lubricating oils, odorant and cleaning chemicals;
 - An Environmental Management Plan will be prepared for the operational phase;
 - Operation of the proposed development in compliance with the requirements of the IE licence, to be issued and enforced by the EPA;
 - In relation to cumulative impacts, no significant residual impacts were identified to groundwater and surface water and the cumulative operational impact is considered to be imperceptible;
 - The residual effect of the proposed development on the surrounding groundwater and surface water environments is considered to be imperceptible during both the Construction and Operational phases.

4.1.3 Biodiversity

4.1.3.1 Marine Biodiversity

The Lower River Shannon cSAC (Site code: 002165) and the River Shannon and River Fergus Estuaries SPA (Site code: 004077) overlap with the proposed development site. Protected marine habitats within the proposed development site include intertidal and subtidal areas, while protected species includes the Bottlenose Dolphin, a resident species of the Estuary. The estuary is also host to a wide range of fish species, many of which are protected species. The species include the migratory species salmon (*Salmo salar*), lamprey (*Petromyzon marinus* and *Lampetra fluviatilis*), eel (*Anguilla Anguilla*), twait shad (*Allosa fallax fallax*) and sea trout (*Salmo trutta*) while other fish species commonly found in the estuary include juvenile flatfish (*Pleuronectiformes* spp.), gobies (*Gobiiformes* spp.) and sticklebacks (*Gasterosteidae* spp.), and adult and juvenile bass (*Dicentrarchus labrax*), plaice (*Pleuronectes platessa*) and flounder (*Platichthys flesus*).

There will be no direct impacts on pNHAs or Natural Heritage Areas (NHAs).

Discharges from the proposed development, which includes wastewater effluents, biocide treated discharge waters and heated water discharge, would not result in significant environmental impacts.

Similarly, releases of sediment spoil to the water to the estuary during construction would not result in a significant risk of impact to the environment.

In contrast, there is potential that the accidental release of sediment and chemical pollutants during the construction of the infrastructure for the proposed development may impact habitats and species immediately adjacent to, and upstream and downstream of the proposed development site. To avoid negative environmental impacts a range of pollution prevention measures will be implemented.

The generation of underwater noise during the construction period has potential to result in negative impacts to marine mammals. To avoid potential impacts a range of mitigation and monitoring measures will be set in place.

The proposed development includes the installation of jetty piles and the installation of a trenched water outfall. While these works will result in the loss of habitat, the area lost is negligible and will not result in significant effects.

4.1.3.2 Terrestrial Biodiversity

Habitat surveys determined that the terrestrial habitats within the proposed development site were of local value. A small section of cliff habitat within the proposed site boundary has been classified as international value as this overlaps with the Lower River Shannon cSAC. However, this is not a qualifying habitat for the cSAC and does not correspond to Annex I habitats. No rare plant species were recorded within the proposed development site boundary during the survey.

General mammal surveys as well as Badger (*Meles meles*) bait marking surveys and trail camera surveys were conducted within and around the boundary of the proposed development site. Two outlier Badger setts were recorded within the proposed development site boundary, as well as two main setts outside the boundary. No signs of Otter (*Lutra lutra*) were recorded within the proposed development however signs of Otter were found in the vicinity. Small numbers of common bat species were recorded within the site i.e. Common Pipistrelle (*Pipistrellus pipistrellus*), Soprano Pipistrelle (*Pipistrellus pygmaeus*) and Leisler's Bat (*Nyctalus leisleri*). These were recorded foraging and commuting mainly along hedgerow/ treelines with the proposed development site boundary. However, no mature trees or buildings, with the potential to be used as significant bat roosting sites, were recorded within the proposed development site boundary. Irish Hare (*Lepus timidus*) and Common Frog (*Rana temporaria*) were also recorded at the site. No reptile species were recorded.

The proposed development site is not of significant value for birds.

Estuarine bird surveys were carried out along the coastal waters near to the north of the proposed development site as well as further east and west along the estuary coastline, mainly during the winter months. While moderate numbers of birds were recorded approximately 1 km west of the proposed development site, very small numbers of birds use the intertidal and subtidal habitats within the proposed development site, largely due to the lack of intertidal mudflat habitat here. No nationally or internationally important numbers of birds were recorded during the estuarine bird surveys.

A fish stock assessment confirmed that fish are present within the Ralappane Stream in small numbers i.e. Stone Loach (*Nemacheilus barbatus*), Stickleback (*Gasterosteus aculeatus*) and European Eel.

Overall, the majority of ecological impacts will arise during the construction phase as a result of disturbance to Badger, bats, Otter, birds, fish and common frog, damage to and loss of small areas of habitats (including 2 outlier Badger setts), hedgerows / treelines and wet grassland, and potential water pollution incidents and sediment mobilisation. In the absence of mitigation these impacts range from not significant to moderate.

A range of mitigation and monitoring measures have been proposed in the EIAR to offset potential negative impacts, e.g., noise mitigation, lighting mitigation, replacement planting and pollution prevention measures. All construction works and mitigation measures relating to ecology will be monitored by a suitably qualified ecologist.

Following the implementation of mitigation and monitoring measures a slight county impact on Annex I diving birds i.e. Red-throated Diver and Great Northern Diver is predicted to occur. However, all other impacts will not be significant above local geographic scale of significance.

4.1.4 Air Quality

In general, baseline air quality was found to be of a good standard and well below the health-based Air Quality Standards set by the Government for the protection of human health and the Environmental Assessment Levels used as the threshold for pollutants not covered by the Government standards.

Local air quality sensitive receptors include residential properties located closest to the proposed development in each direction, and properties located adjacent to the local road network on the approach to and from the proposed development. Receptors considered in the assessment also include air quality sensitive habitats within the Lower River Shannon cSAC and River Shannon and River Fergus Estuaries SPA.

Dust control measures are included in the CEMP to ensure that any effect will not be significant.

The operation of the proposed development will have the largest impact (i.e. increase in pollutant concentrations) on the limited number of residential dwellings close to the site, but that impact will reduce with increasing distance. The overall impact significance of the operation of the proposed development is considered to be slight, continuous, likely to occur and long-term, for the duration of the proposed development's operation.

4.1.5 Noise and Vibration

Baseline surveys identified that existing sound levels are variable, but at times very low due to the absence of sound generated by human activity. Sound sources identified included birdsong, farm animals and weather induced sound (e.g. the wind 'rustling' vegetation). Some intermittent road traffic sound was present, mainly from the L1010.

The potential for the proposed development to give rise to airborne noise and groundborne vibration impacts has been considered as follows:

- Noise and vibration impacts arising during the construction phase, including:
 - Potential noise impacts arising from construction site activities located within the construction site, covering all construction activities proposed (e.g. piling, earthworks);
 - Potential vibration impacts arising from construction site activities located within the construction site, covering all construction activities proposed (e.g. piling, earthworks); and
 - Potential noise impacts arising from changes in traffic flows on existing roads.
- Noise and vibration impacts arising during the operational phase, including:
 - Operation of plant and equipment; and
 - Increase in traffic flows associated with employees, deliveries etc.

Mitigation requirements for potential impacts are identified as follows:

- Careful programming of site works;
- The impact of blasting induced noise, vibration and overpressure will be mitigated via process management, community liaison and through the limiting of blasting charge quantities. To determine the maximum permissible blast charge, a number of trial blasts will be carried out such that a site-specific scaled distance graph can be developed. Using this graph, limits required to achieve the relevant criteria can be determined;
- Operational phase noise impacts can be mitigated via the inclusion of mitigation measures such as attenuators, silencers, careful plant item selection and, acoustic barriers and enclosures. A 2 dB exceedance

of the nominated criteria is predicted at one receptor location (R1); however it is concluded this is not significant.

- A commitment has been made to ensure the final design of the development complies with the relevant operational phase noise limits. This will be confirmed via an appropriate noise monitoring regime.

Residual impacts are those arising from changes in traffic flows on existing roads during the construction phase. However, the spatial extent of this impact is small, being restricted to one road link; the L1010 between the site entrance and Tarbert. No impacts are predicted during the operational phase. Furthermore, although the change in noise from this road is sufficient to constitute an impact, absolute levels are not high therefore the impact may be less than indicated.

4.1.6 Landscape & Visual

The location of the site on the edge of the southern shore of the Shannon Estuary results in it being particularly visible in scenic views from the northern shore of the estuary; from the waters of the estuary and Scatterry Island and Hog Island; and from sections of the south shore extending west to beyond Ballylongford Bay and Carrig Island.

The Shannon Estuary within the study area is also the location for several large and visually prominent industrial developments such as Moneypoint Power Station at the shore in Co. Clare and Tarbert Power Station at the shore in north Co. Kerry.

Landscape and visual effects and their significance during construction works will be temporary.

The landscape character at the location of the proposed development will change from rural agricultural to a site with large industrial buildings and uses, which is considered adverse and significant. However, a number of existing hedgerows and tree lines are to be retained on site.

In the context of the wider area, the proposed development will industrialise the landscape character and further intensify the industrial components of the landscape character in the wider study area when seen in conjunction with the existing industrial landscape character around Moneypoint Power Station. The proposed development will be perceived in conjunction with other existing large-scale industrial developments along the Shannon Estuary, which define already the overall character of estuary and its shorelines within the study area. The proposed development will therefore not be seen as totally uncharacteristic and can integrate into the wider landscape character.

The main visual effects will relate to the introduction of a new large industrial facility onshore and the LNG terminal and ships within the River Shannon. The main visual receptor groups are residents, vehicle travellers including ferry passengers, workers and visitors/ tourists.

The principal mitigation for the proposed development is embedded in the design of its architecture, public realm, green infrastructure and open space, which has evolved through an iterative process of assessment and consultation. Mitigation and monitoring measures taken into account to minimise landscape and visual effects included:

- Minimise the visual impact of the built structures with the use of a colour scheme to allow the buildings to be as unobtrusive as feasible against their backdrop. The proposed colour scheme was drawn from colours found the surrounding local landscape;
- Avoidance of most elevated portion of land as a location for tallest elements of the proposed development;
- Lighting will be kept to essential locations only, with the position and direction of lighting being designed to minimise intrusion and disturbance to adjacent areas;
- Disturbance of existing vegetation will be minimised where possible. Proposed planting will help integrate the proposed development into the surrounding landscape, provide screening where needed, reflect vegetation patterns of local habitats, and minimise the effect on the landscape character of the area;
- Enhancement of site tree cover by introduction of additional tree and woodland planting; and
- Appropriate new native plant species to be used throughout the scheme.

4.1.7 Traffic and Transport

A section of the L1010 is currently subject to an improvement scheme by Kerry County Council which extends from Tarbert Town to the proposed development access, it is anticipated that these improvements (road widening) would be complete prior to the commencement of the proposed development main construction elements. To form the baseline for this assessment, the key junctions which would be subject to construction and operational traffic were identified and traffic surveys were undertaken at these key junctions.

A preliminary Construction Traffic Management Plan (CTMP) has been prepared which has been used to inform the traffic associated with the construction phase of the proposed development. For the operational phase the anticipated staffing schedule has been provided.

From the analysis for the construction phase, it was found that the proposed development will result in a slight effect on junction capacity, but this would be a temporary effect. Similarly, the increased construction traffic would lead to an increase in queuing at the junctions but the effect would be not significant and temporary in nature.

From the analysis for the operational phase, it was found that the proposed development would result in a not significant effect on junction capacity, but this would be a long term effect. Similarly, the increased operational traffic would lead to an increase in queuing at the junctions but the effect would be imperceptible and long term in nature.

For the construction phase a package of measures has been presented in the EIAR that could be adopted by the appointed contractor subject to agreement with Kerry County Council. For the operational phase no mitigation or monitoring measures are necessary to accommodate the proposed development but a framework for a Mobility Management Plan has been included with the planning application.

4.1.8 Cultural Heritage

There is one recorded archaeological site partially located within the boundaries of the proposed development. This is a ringfort (KE003-004) which is located on the east boundary. There were 6no. cultural Heritage sites previously identified in 2008– CHS4 Farm Complex, CHS5 Possible Archaeological Feature, CHS6 well, CHS7 gun emplacement, CHS14 Mass Rock and CHS15 a two-bay ruined structure.

The archaeological testing in 2008 also revealed 31 Areas of Archaeological Potential within the footprint of the current proposed development.

The Cultural Heritage assets and 31 Areas of Archaeological Potential are located within the footprint of the Proposed Development and will be impacted by groundworks associated with the construction of the proposed development.

There will be residual impacts on 26 assets of moderate effect and residual impacts on two assets of no effect.

The ringfort (KE003-004)/ CHS10 will remain *in situ* within the boundaries of the proposed development with a buffer zone created around it.

A seabed impact exclusion zone of 50 m was to be maintained around the seabed anomaly to ensure that it is not impacted.

A photographic survey and written description of CHS6 Well should be carried out in advance of groundworks within the vicinity of this asset. It is also recommended that the dismantling of the well be carried out in an orderly fashion under the supervision of a suitably qualified archaeologist.

CHS4 Farm Complex, CHS7 Gun Emplacement and CHS15 two-bay ruined structure were recorded as part of the upstanding building survey in 2008. No further mitigation is required in relation to these assets which will be demolished during the construction phase.

The CHS14 Mass Rock asset no longer exists and there will be no impact to it.

It is proposed that full resolution of all 31 Areas of Archaeological Potential (including CHS5 Possible Archaeological Feature) and areas identified during archaeological testing within the proposed development boundary will be carried out prior to commencing the-Construction Phase. It is proposed that all works for the outfall and jetty will be conducted under archaeological monitoring under licence by a suitably qualified and experienced marine archaeologist. All archaeological works (which will be agreed by the Archaeological Consultant and the National Monument Service (NMS)) will be carried out in compliance with the National Monuments Acts 1930 – 2004 (and

Policy and Guidelines on Archaeological Excavation (Department of Arts, Heritage Gaeltacht and the Islands, 1999).

4.1.9 Population and Human Health

The construction of the proposed development will lead to a slight negative effect on land use due to the loss of agricultural land currently used for grazing and impacts on views experienced by users of the Wild Atlantic Way. It will also lead to a slight positive effect on the local employment workforce due to the number of construction workers required. It will also lead to an imperceptible negative effect on severance between the local population and the services which they frequently use due to construction traffic travelling to and from the proposed development site.

The proposed development will also lead to the following impacts on human health during the construction phase:

- A negative human health impact due to the presence of construction traffic leading to nuisance and noise level increases at residential properties on the L1010 and Church Street in Tarbert.
- A positive human health impact due to the workforce required to construct the proposed development leading to increased accessibility to employment opportunities and training for the employment workforce in the local and wider community.

The operation of the proposed development will lead to a slight negative effect on land use due to the loss of agricultural land currently used for grazing and impacts on views experienced by users of the Wild Atlantic Way. It will also lead to a slight positive effect on the local employment workforce due to the number of operational workers required.

The proposed development will also lead to the following impacts on human health during the operation phase:

- A positive human health impact due to the workforce required to operate the proposed development leading to increased accessibility to employment opportunities and training for the employment workforce in the local and wider community.
- A negative human health impact due to the impact of the proposed development on GHG emissions and climate change.

4.1.10 Major Accidents and Disasters

The LNG, power generation and natural gas industries worldwide have an excellent safety record. Operators of these facilities incorporate the highest standards of safety and environmental protection measures throughout the design, construction and operation of their facilities. This industry is subject to stringent regulatory controls and there are a number of worldwide LNG, natural gas and maritime industry organisations which share guidance and best practice to drive continuous improvement in safety and environmental performance.

Safety and environmental protection measures are incorporated at all stages in the lifecycle of the proposed development. Detailed safety and environmental risk assessments will be carried out during design and on a regular basis during the operating phase of the proposed development to identify and analyse hazards. Prior to operation, detailed operating and emergency procedures will be developed and reviewed by the Regulatory Authorities, alongside the comprehensive safety documentation which is required for compliance with national regulations including the Chemicals Act (Control of Major Accident Hazards Involving Dangerous Substances) Regulations, 2015 (the COMAH Regulations).

The proposed development will be regulated by the EPA, the CRU, the HSA and Kerry County Council. The Shannon Foynes Port Company also has statutory jurisdiction over marine activities.

The installed protective measures will reduce the potential risks to people and the environment from the proposed development to a level 'As Low as Reasonably Practicable' (ALARP). Demonstration of ALARP is a requirement for COMAH Installations.

The assessment of major accidents and disasters carried out for the EIAR has concluded that the risk of a fire from a release of LNG or natural gas is the most significant potential major accident hazard at the proposed development. Therefore, LNG will be stored within the LNGCs and FSRU only, and there will be no gas storage onshore other than natural gas within pipework. Gas pipework systems will be designed and installed to international engineering standards and will incorporate safety measures such as using welded connections and where practical, routing pipework below ground.

The power plant will contain process equipment such as natural gas compressors, turbine generators and electrical transformers, containing flammable and combustible substances.

A number of fire prevention and protection measures are included in the design of the proposed development. The design of fire protection systems and the development of emergency procedures has taken into consideration an ongoing process of consultation with the local Fire Officer.

The location of the proposed development is within the Lower River Shannon cSAC, the River Shannon and River Fergus Estuaries SPA and the Ballylongford Bay pNHA. Therefore, the highest standards of environmental protection will be incorporated into the design. International maritime law applies to the ships which will be moored at the jetty, and the use of fuels and disposal of waste from toilets and washing facilities are strictly controlled. These wastes are collected and transferred onshore for treatment and safe disposal by a licensed contractor. The risk of an accident occurring, such as a release of fuel oil from a ship is very low, however a detailed pollution response plan, emergency equipment and procedures will be in place prior to construction and throughout the lifetime of the proposed development.

There is a very low risk of a major accident or disaster occurring at the proposed development. The LNG facility will be regulated as an Upper Tier COMAH Installation and the highest levels of safety and environmental protection will be in place for the lifecycle of the facility, from prior to construction and throughout the operational lifetime.

4.1.11 Climate

The Climate Action and Low Carbon Development (Amendment) Bill 2021, read in the Oireachtas in April 2021, will commit Ireland to becoming a carbon-neutral economy by no later than 2050. Ireland's carbon-neutral commitment for 2050 is binding on the entire state. In order to achieve carbon neutrality, all residual emissions in Ireland by the target date must be offset or sequestered according to a recognised and verified standard. 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. The first two budgets must demonstrate a 51% reduction against a 2018 baseline by 2030.

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 70% 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 sources of energy generation that can be efficiently dispatched to cover any imbalances in supply and demand. As the use of coal and peat for electricity generation will cease by 2025 under the Climate Action Plan 2019, natural gas has been identified in the Climate Action Plan, and the National Energy and Climate Plan, as the only remaining dispatchable power source capable of providing significant security of electricity supply when wind sources are insufficient.

A total of 86kt CO₂e is estimated to be emitted during construction. When considered in the context of Ireland's GHG inventory and carbon reduction targets, construction emissions are considered to have a minor adverse impact. No further mitigation measures beyond those already embedded in the design are currently being recommended.

Direct emissions from the operation of the proposed development will equate to approximately 963kt CO₂e in 2030, around 2.1% of Ireland's carbon allowance if Ireland's carbon reduction targets are met. As a standalone development, this represents a major adverse impact, however the impact of this development needs to be considered in the context of the key role the proposed development will play in assisting Ireland to transition to a low carbon economy, including:

- Addressing security of energy supply risks;
- Addressing electricity capacity shortfalls;
- Supporting intermittent renewable generation: Ireland's Climate Action Plan¹⁴ sets a target of 70% of electricity to be generated from renewable sources by 2030. It also commits to an early and complete phase-out of coal and peat-fired electricity generation. However, renewable generation is weather dependent, and its output fluctuates considerably. For this reason, conventional power plants, in particular gas-fired plants, are required to fill the fluctuating gap between electricity demand and renewable generation. The Climate Action Plan confirms that natural gas will play an important role in addressing intermittent wind generation¹⁵ to assist Ireland during the transition period from carbon-intensive fossil fuel

¹⁴ Climate Action Plan 2019. Department of the Environment, Climate and Communications. 17th June 2019

¹⁵ The Climate Action Plan forecast's gas demand as far as 2040

power plants to more sustainable lower carbon fuel sources, with modern, flexible and efficient plant designed to meet the needs of an electricity system that seeks to integrate 70% renewable generation. Natural gas will therefore contribute to maintaining a resilient electricity supply to the country while supporting the transition to 70% renewable generation by 2030.

The Climate Action Plan confirms that natural gas will play an important role in addressing intermittent wind generation¹⁶ to assist Ireland during the transition period from carbon-intensive fossil fuel power plants to more sustainable lower carbon fuel sources, with modern, flexible and efficient plant designed to meet the needs of an electricity system that seeks to integrate 70% renewable generation. Natural gas will therefore contribute to maintaining a resilient electricity supply to the country while supporting the transition to 70% renewable generation by 2030.

The proposed development will require a GHG Permit, to submit independently verified annual emissions reports, and to surrender sufficient EU Allowances to cover its annual emissions under the terms of the EU Emissions Trading System.

4.1.12 Waste

Assuming all waste that cannot be reused is removed from site, the overall estimated Construction and Demolition (CDW) waste arisings would be 0.058% of total national CDW arisings. This is considered not significant.

By applying good industry practice to the management of non-hazardous waste generated by the proposed development's construction activities, it is anticipated that an overall recovery rate of 78% can be achieved onsite which exceeds the Government's 70% target for recovery of construction waste.

The estimated operational waste arisings have been compared to the quantity of hazardous and non-hazardous waste collected in Ireland in 2018. Operational waste arisings would be 0.04% of total national waste arisings. This is considered not significant.

4.1.13 Material Assets

The residual effects from connection works during the construction phase on the existing utilities networks will likely reduce to slight with the implementation of embedded mitigation measures. The effects from additional demands on existing water supply will remain moderate during the construction and slight during the operational phase.

No utilities mitigation or monitoring measures have been proposed during the operational phase of the proposed development, which will be designed in accordance with best available techniques for energy efficiency.

The effects on the existing gas and electricity supply network will remain long-term, positive, high and very significant, if the 220 kV grid connection is consented and becomes operational.

The effects on existing buildings within the proposed development site boundary will remain permanent, neutral and imperceptible as no mitigation is possible to avoid or reduce the effect.

4.2 Appropriate Assessment

Part XAB of the Planning and Development Act 2000, as amended, requires that for onshore developments requiring development consent AA are carried out, while under the 2011 Birds and Natural Habitats Regulations all competent authorities are required to conduct a screening for AA and, if necessary, an AA on any plan or project for which it receives an application for consent including those projects on the foreshore.

The obligation to undertake AA under the Part XAB of the Planning and Development Act 2000 as amended and the 2011 Birds and Natural Habitats Regulations derives from Article 6(3) and 6(4) of the Habitats Directive.

The proposed project is located within the Lower River Shannon cSAC (Site code: 002165). The development area also overlaps the River Shannon and River Fergus Estuaries SPA (Site code: 004077).

The Screening Report for Appropriate Assessment has determined, in light of best available scientific data, that there is potential for significant effects on the conservation features of the Lower Shannon River cSAC and, the River Shannon and River Fergus Estuaries SPA from the proposed project. The likelihood of significant effects on all other European sites has been ruled out. The assessment also determined that there is the potential likelihood for significant effects from the proposed project in combination with other plans or projects.

¹⁶ The Climate Action Plan forecast's gas demand as far as 2040

A Natura Impact Statement (NIS) has been produced in support of the Appropriate Assessment of the proposed project to be undertaken by the competent authority. The NIS considers in greater detail the aspects of the proposed project with potential for significant effects and further examines the impacts of the proposed project on the integrity of the Lower River Shannon cSAC and the River Shannon and River Fergus Estuaries SPA with respect to the Conservation Objectives established for the sites. Where potential significant adverse effects are identified, mitigation measures are identified to prevent adverse effects on the integrity of the sites.

The NIS has determined that:

- There are two distinct sources of habitat loss as a consequence of the proposed project, one being the installation of construction piles for the jetty structures foundations and, the other being the installation of a trenched water outfall across the shoreline into the Shannon estuary.
- The construction of the jetty requires the installation of approximately 203 piles. The proposed jetty overlaps the Annex I habitats 1130 Estuaries and 1170 Reefs of the Lower River Shannon cSAC. The majority of the piles supporting the jetty would be driven, with some piles drilled and socketed into the underlying rock to ensure stability of the jetty.
- The width of the water outfall trench will be approximately 2 m while its total length through Annex I habitats is approximately 50 m. Once the outflow pipe is set in position the trench will be infilled using concrete to approximately 30mm below the surface of the level of the adjoining substrate. In areas of reef substrate, the surface concrete of the trench will be embedded with reef cobbles and stone excavated from the trench, while in areas of soft sediment the void will be left to infill naturally by sedimentation and sediment movement processes.
- As a result of the 203 piles, approximately 163m² of benthic habitat within Annex I habitats will be lost pending decommissioning of the development and the removal of jetty and piles. Of the 203 piles, approximately 10 piles will be installed in the Annex I habitat Reefs [1170] while approximately 193 will be located within the Annex I habitat Estuaries [1130].
- The spatial extent of Annex I habitat 1130 Estuaries and 1170 Reefs within the cSAC is estimated to be 24,273 ha and 21,421 ha respectively (NPWS, 2012).
- Installation of the jetty piles will result in the loss of 155m² (0.000064%) and 8m² (0.000004%) of the Annex I habitats 1130 Estuaries and 1170 Reefs respectively.
- The installation of the outfall pipe will result in the temporary loss of approximately 90m² of Annex I habitat above the low water mark and 10m² below the low water. Loss of Annex I habitat Estuaries [1130] habitat is estimated to be approximately 100m², or 0.000041%, while the loss of Reef [1170] habitat is approximately 65m², or 0.000030%

Having regard 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 following a comprehensive evaluation of the potential direct, indirect and cumulative impacts on the conservation features in light of their Conservation Objectives, it has been concluded that with the construction and operation of the proposed project will have no adverse effect on the River Shannon and River Fergus Estuaries SPA.

In addition, following a comprehensive evaluation of the potential direct, indirect and cumulative impacts on the conservation features in light of their Conservation Objectives, it has been concluded that with the construction and operation of the proposed project will have no adverse effect on the Lower River Shannon cSAC.

In the event that An Bord Pleanála determines that the proposed development will adversely affect the integrity of a European site, it is respectfully submitted that this planning application contains sufficient evidence to justify a conclusion in accordance with sections 177AA and 177AB of the Planning and Development Act, 2000 (as amended) and Article 6(4) of the Habitats Directive that alternative solutions are absent and that consent should nevertheless be given for the proposed development for imperative reasons of overriding public interest.

The applicant has refrained from including within this application a standalone draft statement of case, for the purposes of section 177AA(1), on the basis that the preparation of same is a function of An Bord Pleanála and on the basis that the only express power for the applicant for permission to provide such information is contained in section 177G(1)(d)(i), which is limited to remedial Natura impact statements only.

There is contained within the application detailed examination, analysis and evaluation of the alternatives considered and dismissed, which demonstrates that alternative solutions are absent. The application also contains detailed examination, analysis and evaluation of the need for the proposed development and the applicable public policies, which we believe to demonstrate that consent should be given for the proposed development for

imperative reasons of overriding public interest. This evidence is principally contained at Chapter 3 of the EIAR and in this Planning Report.

Where An Bord Pleanála is satisfied that consent should nevertheless be given for the proposed development, section 177AA(1)(b) requires An Bord Pleanála to "propose the compensatory measures that are necessary to ensure that the overall coherence of the Natura 2000 network is protected". Again, the applicant has refrained from including within this application any proposed compensatory measures, on the basis that proposal of same is a function of An Bord Pleanála and on the basis that the only express power for the applicant for permission to provide such information is contained in section 177G(1)(d)(ii), which is limited to remedial Natura impact statements only.

The applicant can furnish An Bord Pleanála with any further information required to inform the exercise of its discretion under sections 177AA and 177AB, whether in relation to alternative solutions, imperative reasons or compensatory measures.

5. Conclusions

In conclusion, and having regard to:

- National Strategic Outcome (NSO) 8 – Transition to a Low Carbon and Climate Resilient Society of the National Planning Framework (NPF), 2018, which states that *our gas storage capacity is limited, which poses a security of supply risk and constrains smoothing of seasonal fluctuation in gas prices.*
- The provisions of the National Development Plan (NDP) 2018 in respect of the need to provide for natural gas and for such provision to be delivered by the commercial/private sector.
- Transmission Policy 4 of the National Marine Planning Framework (NMPF) 2021 which states *“Where possible, opportunities for land-based, coastal infrastructure that is critical to and supports energy transmission should be prioritised in plans and policies.”*
- The provisions of the National Energy and Climate Change Plan 2021 which forecasts that natural gas demand will increase from current demand levels of 4.69 to 6.38 million tonnes of oil equivalent by 2040.
- The Climate Action Plan 2019, which sets a target of 70% of electricity to be generated from renewable sources by 2030, and also confirms that natural gas will play an important role in addressing intermittent wind generation to assist Ireland during the transition period from carbon-intensive fossil fuel power plants to more sustainable lower carbon fuel source.
- EirGrid’s All-Island Generation Capacity Statement 2020 which has forecast a shortfall in generation capacity of up to 570MW by 2026 and advised that new additional gas fired conventional power plants are urgently required.
- The provisions of the Shannon Integrated Framework Plan (SIFP) 2013 in terms of the suitability of the site as the Tarbert/Ballylongford Strategic Development Location for the intended gas supply and power generation use, and the importance of the proposed development to the economic wellbeing of the region.
- The Regional Spatial and Economic Strategy for the Southern Region which fully endorses the provisions of the SIFP with respect to the Tarbert/Ballylongford strategic landbank. The proposed development is specifically identified as a nationally important project as an energy hub for the region.
- The provisions of the Kerry County Development Plan 2015, specifically objectives ES-22, ES-23, ES-24 which seek to promote and facilitate the sustainable development of the Tarbert-Ballylongford landbank 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.
- The provisions of the Listowel Municipal District Local Area Plan 2020, which is aligned with the provisions of the Kerry County Development Plan, and also includes infrastructure objective LS-T-01 which seeks to *“Sustainably harness the economic potential from the provision of a secure natural gas energy supply to the region.”*
- The overriding need, in energy policy terms, for the proposed development in terms of energy security, addressing electricity capacity shortfalls and supporting intermittent renewable generation.
- The conclusions of the alternatives assessment, principally, the alternative sites assessment, which identifies the Ballylongford/Tarbert area as the most suitable location to accommodate the proposed development for the following reasons:
 - It is a large 52ha site principally located within a 182ha (approx.) landbank zoned for industrial and marine development in the Kerry County Development Plan 2015-2021, as also identified as such in the Regional Spatial and Economic Strategy for the Southern Region 2020, the Shannon Integrated Framework Plan 2013, and the Listowel Listowel Municipal District Local Area Plan 2020.
 - It is located in an area which has established energy infrastructure (power stations at Tarbert and Moneypoint, Kilpaddoge substation, the Kelwin-2 battery energy storage system, and Leanamore windfarm); permitted 400 kV electricity transmission cables between Kilpaddoge substation and Moneypoint substation and a permitted windfarm at Ballylongford; proposed

- energy infrastructure (solar farms, and grid stabilisation facility at Kilpaddoge substation) and established port infrastructure (pilots, navigation lights etc.)
- It has the benefit of Deep Water access (>13m depth) in a sheltered location (waves <1.5m), and safe navigational area (2km wide channel) of uniform cross-sectional depth, with a width that provides adequate turning space of up to approximately 690m for LNG ships.
- In addition, the proposed development site has the benefit of a successful high voltage grid application under Enduring Connection Policy (ECP2.1).
- The planning history of the site, including previous and current permission for an LNG Terminal and CHP of a greater scale than that proposed, and the planning history of the area in the vicinity, which confirms the suitability of this location for energy-related infrastructural development.
- The nature and extent of the proposed development, which:
 - is characteristic of an industrial development of the nature and form proposed;
 - has a relatively concentrated footprint within the overall landholding close to the shore;
 - is logically configured, with the onshore receiving facilities located in close proximity to the jetty, and the power station and battery storage adjacent, and the AGI located close by, but separated from the LNG Terminal and Plant to meet GNI operational requirements; and
 - can be successfully absorbed into the existing landscape, being a form of development that is contemplated by the industrial and marine development zoning objective of the Kerry County Development Plan 2015-2021 that applies to the site, as also envisaged in the Regional Spatial and Economic Strategy for the Southern Region 2020, the Shannon Integrated Framework Plan 2013, and the Listowel Municipal District Local Area Plan 2020.
- The nature of the receiving environment, about which the EIAR generally concludes that there are no significant effects. While noting that direct emissions from the operation of the proposed development will equate to approximately 963kt CO_{2e} in 2030, equating to around 2.1% of Ireland's carbon allowance if Ireland's carbon reduction targets are met, which represents a major adverse impact, this has to be considered against the strategic benefits that the proposed development will bring, in terms of energy security, and assistance with the transition to a low carbon society at a national level, and regionally and locally significant employment potential as envisaged in adopted planning policy. It is also noted that the proposed development includes the installation of jetty piles and the installation of a trenched water outfall in the Shannon Estuary, and while these works will result in the loss of habitat, the area lost is negligible and will not result in significant effects.
- The flexibility of the proposed development, with an ability to transition to hydrogen when the required policies and supply chains are implemented.
- The conclusions of the NIS, which states that following a comprehensive evaluation of the potential direct, indirect and cumulative impacts on the conservation features in light of their Conservation Objectives, it has been concluded that with the construction and operation of the proposed project will have no adverse effect on the River Shannon and River Fergus Estuaries SPA. In addition, following a comprehensive evaluation of the potential direct, indirect and cumulative impacts on the conservation features in light of their Conservation Objectives, it has been concluded that with the construction and operation of the proposed project will have no adverse effect on the Lower River Shannon cSAC.

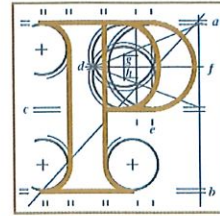
It is the conclusion of this report that the proposed development is consistent with national, regional and local planning policy, has a demonstrable need in assisting with the transition to a low carbon society, can generally be successfully absorbed into the receiving environment without significant effect, and is in the interests of the proper planning and sustainable development of the area.

Appendix A

- (a) Board Notice - case ref. ABP-304007-19
- (b) Inspector's Report - case ref. ABP-304007-19

Our Case Number: ABP-304007-19

Your Reference: Shannon LNG Limited T/A Shannon LNG



**An
Bord
Pleanála**

Aiden O'Neill
Coakley O'Neill Town Planning Ltd.
NSC Campus
Mahon
Cork

Date: 3rd June 2021

Re: Proposed development of a liquefied natural gas (LNG) regasification terminal together with already permitted CHP Plant (Ref. PA0028) including an LNG jetty to facilitate the berthing of a Floating Storage Unit, onshore vaporisation process equipment and administrative and associated buildings Ballylongford, Co. Kerry

Dear Sir,

Please be advised that following consultations under section 37B of the Planning and Development Act, 2000 as amended, the Board hereby serves notice under section 37B(4)(a) that it is of the opinion that the proposed development falls within the scope of paragraphs 37A(2)(a), (b) and (c) of the Act. Accordingly, the Board has decided that the proposed development would be strategic infrastructure within the meaning of section 37A of the Planning and Development Act, 2000, as amended. Any application for permission for the proposed development must therefore be made directly to An Bord Pleanála under section 37E of the Act.

Please also be informed that the Board considers that the pre-application consultation process in respect of this proposed development is now closed.

Attached is a list of prescribed bodies to be notified of the application for the proposed development.

In accordance with section 146(5) of the Planning and Development Act, 2000 as amended, the Board will make available for inspection and purchase at its offices the documents relating to the decision within 3 working days following its decision. This information is normally made available on the list of decided cases on the website on the Wednesday following the week in which the decision is made.

The attachment contains information in relation to challenges to the validity of a decision of An Bord Pleanála under the provisions of the Planning and Development Act, 2000, as amended.

If you have any queries in relation to the matter please contact the undersigned officer of the Board.

Teil	Tel	(01) 858 8100
Glaó Áitiúil	LoCall	1890 275 175
Facs	Fax	(01) 872 2684
Láithreán Gréasáin	Website	www.pleanala.ie
Ríomhphost	Email	bord@pleanala.ie

64 Sráid Maoilbhríde	64 Marlborough Street
Baile Átha Cliath 1	Dublin 1
D01 V902	D01 V902

Please quote the above mentioned An Bord Pleanála reference number in any correspondence or telephone contact with the Board.

Yours faithfully,



Kieran Somers
Executive Officer
Direct Line: 01-8737250

PC09

Teil	Tel	(01) 858 8100
Glaio Áitiúil	LoCall	1890 275 175
Facs	Fax	(01) 872 2684
Láithreán Gréasáin	Website	www.pleanala.ie
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D01 V902	D01 V902

Judicial Review Notice

Judicial review of An Bord Pleanála decisions under the provisions of the Planning and Development Acts (as amended).

A person wishing to challenge the validity of a Board decision may do so by way of judicial review only. Sections 50, 50A and 50B of the Planning and Development Act 2000 (as substituted by section 13 of the Planning and Development (Strategic Infrastructure) Act 2006, as amended/substituted by sections 32 and 33 of the Planning and Development (Amendment) Act 2010 and as amended by sections 20 and 21 of the Environment (Miscellaneous Provisions) Act 2011) contain provisions in relation to challenges to the validity of a decision of the Board.

The validity of a decision taken by the Board may only be questioned by making an application for judicial review under Order 84 of The Rules of the Superior Courts (S.I. No. 15 of 1986). Sub-section 50(6) of the Planning and Development Act 2000 requires that subject to any extension to the time period which may be allowed by the High Court in accordance with subsection 50(8), any application for judicial review must be made within 8 weeks of the decision of the Board. It should be noted that any challenge taken under section 50 may question only the validity of the decision and the Courts do not adjudicate on the merits of the development from the perspectives of the proper planning and sustainable development of the area and/or effects on the environment. Section 50A states that leave for judicial review shall not be granted unless the Court is satisfied that there are substantial grounds for contending that the decision is invalid or ought to be quashed and that the applicant has a sufficient interest in the matter which is the subject of the application or in cases involving environmental impact assessment is a body complying with specified criteria.

Section 50B contains provisions in relation to the cost of judicial review proceedings in the High Court relating to specified types of development (including proceedings relating to decisions or actions pursuant to a law of the state that gives effect to the public participation and access to justice provisions of Council Directive 85/337/EEC i.e. the EIA Directive and to the provisions of Directive 2001/12/EC i.e. Directive on the assessment of the effects on the environment of certain plans and programmes). The

general provision contained in section 50B is that in such cases each party shall bear its own costs. The Court however may award costs against any party in specified circumstances. There is also provision for the Court to award the costs of proceedings or a portion of such costs to an applicant against a respondent or notice party where relief is obtained to the extent that the action or omission of the respondent or notice party contributed to the relief being obtained.

General information on judicial review procedures is contained on the following website, www.citizensinformation.ie.

Disclaimer: The above is intended for information purposes. It does not purport to be a legally binding interpretation of the relevant provisions and it would be advisable for persons contemplating legal action to seek legal advice.

ABP-304007-19

The following is a schedule of prescribed bodies considered relevant by the Board:

- Kerry County Council
- Clare County Council
- Minister for Housing, Local Government and Heritage
- Minister for Environment, Climate and Communications
- Minister for Tourism, Culture, Arts, Gaeltacht, Sport and Media
- Minister for Agriculture, Food and the Marine
- The Southern Regional Assembly
- Environmental Protection Agency
- Commission for Regulation of Utilities
- Transport Infrastructure Ireland
- Fáilte Ireland
- An Taisce
- The Heritage Council
- Inland Fisheries Ireland
- Irish Water
- Health and Safety Authority



An
Bord
Pleanála

Inspector's Report

ABP-304007-19

Development

**Proposed alteration to Shannon LNG regasification terminal to provide for a reduced footprint, less onshore facilities and equipment and the omission of four onshore storage tanks and associated pond for hydrotesting.

Location

Ballylongford, Co. Kerry

Planning Authority

Kerry County Council

Prospective Applicant

Shannon LNG Limited T/A Shannon LNG

Type of Application

SID Pre-application – whether project is or is not strategic infrastructure development.

Dates of Pre-Application Meetings

21 May 2019, 22 January 2020, 22 May 2020 & 25 March 2021

Date of Site Inspection

9 April 2021

Inspector

Una Crosse

**see Sections 1 and 9.1 of report in respect of description of development.

1.0 Introduction

- 1.1. This report relates to pre-application discussions held with Shannon LNG Limited to determine whether their proposed development of an LNG terminal and CCGT power plant constitutes strategic infrastructure, as defined by the Planning and Development Act, 2000 (as amended).
- 1.2. This report describes the location and nature of the proposed development, the applicant's submission, the consultations held and the legal provisions which are relevant to the proposed development. It recommends that the proposed development constitutes strategic infrastructure and it sets out reasons and considerations to support this conclusion.
- 1.3. The proposed development has been altered during the course of the pre-application consultation process. This is detailed in Section 3 as it relates to the proposed development and Section 6 as it relates to the applicant's submission.
- 1.4. I would also note that the description given to the proposal upon receipt of the pre-application consultation request refers, in error, to the proposed development being an alteration. This matter has been addressed in Section 9.1 of my assessment below.
- 1.5. The prospective applicant noted during the course of the consultations that Foreshore Licences and Leases had been obtained.
- 1.6. The prospective applicant sought closure of the pre-application process by way of correspondence dated 30 March 2021.

2.0 Site Location and Description

The proposal is located on a site, which has a stated area of c.110 hectares (as per original submission). It lies between the coast road (L1010) from Tarbert to Ballylongford, to the south, and the estuary to the north and is surrounded to the east and west by agricultural lands. Access to the site is from the L1010 Coast Road to the southwest of the main development site. The site comprises a number of fields currently in grassland bounded by hedgerows with the lands rising from c.3 mOD at the shoreline, to over 25 mOD at its south western extremity. There is a farmhouse to the south of the terminal site accessed via a laneway from the L1010. The wider

area includes farmland with a number of houses and some forestry to the west. There are a number of small stone structures/outbuildings on and within the immediate vicinity of the site. It is outlined that the estuary provides a safe and deep-water access at this location (14m+ in depth and 2km wide) within a sheltered location (waves <1.5m). Other industrial activities in the wider area include the currently coal-fired power station at Moneypoint on the opposite side of the estuary at a distance of c.3km; the oil-fired power station at Tarbert c.5km to the east; and the Russal Aughinish facility c.26km to the west at Foynes and Foynes Port itself. It is stated that the lands are owned by Shannon Commercial Enterprises DAC with Shannon LNG having entered into an agreement to purchase the lands.

3.0 The Proposed Development

The proposal now before the Board for determination, which was outlined in detail at the fourth and final pre-application consultation meeting, comprises an LNG regasification terminal and CCGT power plant located on the shore of the Estuary as follows:

3.1. LNG Terminal

Onshore

- Onshore Above Ground Installation (AGI) which includes an odourisation facility, gas heater building, gas metering and pressure control equipment.
- Onshore adjustment facility, control room, guard house, workshop and maintenance buildings, instrument air generator and fire water system.
- Final send-out capacity of up to 22.6 MMscm/d.

(The AGI facilitates the connection of the LNG Terminal to the consented Shannon pipeline).

Offshore (connecting to onshore)

- Jetty and access trestle capable of receiving and providing secure berthing for LNG ships with piping infrastructure to safely deliver LNG from the LNG ship to the onshore terminal infrastructure.

- The jetty comprises an unloading platform with cryogenic arms, six mooring dolphins and four breasting dolphins, level set at +9m OD with overall length between outer mooring dolphins 400m with a trestle length of c.345m.
- Mooring location on the jetty proposed for up to four tugboats.
- A Floating Storage Regasification Unit (FSRU) berthed at the LNG jetty with a storage capacity of c.180,000m³.
- LNG vapourisation process equipment to regasify the LNG to natural gas is located on board the FSRU.
- Heat for the LNG regasification to be taken from seawater via a heat exchanger supplemented by heat from gas fired heaters when water temperature inadequate.
- Loading of LNG onto the FSU will be via a ship-to-ship transfer from another LNG Ship berthed alongside.

Other Elements

- Power supply (likely c.20kV) required to meet power demand of proposal which will likely connect to the existing 220kV substation at Kilpaddoge (subject to separate consent).
- It is stated that the proposed development would operate outside of the main navigational channel.

3.2. **Power Plant (CCGT)**

- 600 MW flexible multi-shaft power plant with three blocks of CCGT (combined cycle gas turbine) with each block up to 200MW.
- Each block contains two gas turbine generators (six in total), two heat recovery steam generators (six in total) and a steam turbine generator (three in total).
- Cooling proposed by means of air-cooled steam condensers.
- Battery storage facility of 120MW for 1 hour (120MWh).

The following is of note:

- Power plant will generate power for its own needs and for LNG terminal and for sale to the market via proposed 220Kv connection. Power plant was successful in recent ECP 2.1 process.

- CRU confirmed that diesel not required as a secondary fuel for the power plant although small amounts may be on site for emergency generators.
- 220kV offer not yet received but expected that the 220kV cable will run for c. 5km to the east along the L1010 to the Kilpaddock 220kV substation.
- 220kV connection would be subject to separate consent.

Power plants similar to the proposed are located Tynagh Energy in Galway and BGE at Whitegate in Cork.

3.3. Other Matters of Note

It should be noted that as will be evident from the presentations provided by the applicant and the record of the meetings held that elements of the proposed development evolved during the course of the application.

The following matters are also noted:

- Proposal would likely be classified as an Upper Tier COMAH establishment with a detailed quantitative risk Assessment (QRA) to be carried out of the terminal for submission to the Health and Safety Authority (HSA).
- A Marine Safety Assessment is proposed to be undertaken (this was also undertaken of the shipping activities associated with the terminal permitted in 2008).

Already permitted infrastructure related to the proposal was outlined as follows:

- CHP Plant granted by the Board (Ref. 08.PA0028) adjacent to the LNG Terminal.
- Gas Pipeline connecting the terminal to the gas network permitted by the Board (Ref. 08.GA0003).

Previously Permitted LNG Terminal

The prospective applicant was requested to provide a comparison between the previously permitted (now expired) and proposed development during the pre-application process. In summary the proposed development differs most significantly in relation to the reduced footprint and less onshore facilities and equipment in the current proposed. Specifically, there is no requirement for the four 200,000m³ onshore storage tanks and associated pond for hydrotesting previously permitted in the now expired permission.

4.0 Policy Context

4.1. National Planning Framework

- 4.1.1. National Strategic Outcome (NSO) 8 addresses the ‘Transition to a Low Carbon and Climate Resilient Society’ stating that: *“Ireland benefits from interconnection with the UK gas pipeline network and while there are two gas pipelines with two separate entry points into the island of Ireland, both pipelines are connected through a single facility in Moffat, Scotland. In addition, our gas storage capacity is limited, which poses a security of supply risk and constrains smoothing of seasonal fluctuation in gas prices”*.
- 4.1.2. Chapter 7 of the Framework is entitled “Realising our Island and Marine Potential”. Within this Chapter the Shannon Estuary and in particular the Strategic Integrated Framework Plan is included as a case Study. This Plan is specifically addressed in Section 4.3.1 below.

4.2. National Development Plan 2018-2027

- 4.2.1. The National Development Plan 2018 - 2027 (NDP) sets out the investment priorities that will underpin the implementation of the National Planning Framework, through a total investment of approximately €116 billion. In relation to commercial and private sector investments within NSO8 reference is made to the development of gas infrastructure projects to support regional and rural development and the low-carbon transition. It is stated that *“a high proportion of Ireland’s electricity needs have historically been met through gas-fired power generation. However, the growth in renewable power generation as part of the overall decarbonisation agenda along with increased interconnection has meant a reduction in the volume of gas-fired power generation and, in turn, a lower volume of gas being transported through Ireland’s gas infrastructure. A significant proportion of this renewable power generation is being delivered from wind energy but given the intermittent nature of this technology, a proportion of Ireland’s electricity needs will likely continue to be generated from gas over the medium to longer term. It will therefore remain necessary for a certain level of gas fired generation to continue to be available to*

ensure continuity of supply and the integrity of the electricity grid during the transition towards a low-carbon energy system”.

- 4.2.2. It is also stated that *“from a gas-supply perspective, the delivery of indigenous gas from the Corrib gas field has enhanced the security of supply but Ireland will still need to import gas via the UK on a long-term basis as Corrib production is projected to decline over the medium term. An important project in this regard that is now nearing completion is the c. €100 million gas pipeline twinning project (South-West Scotland On-shore System project), which involves the construction of 50 km of gas transmission pipeline from Cluden to Brighthouse Bay, Scotland”.*

4.3. **National Energy & Climate Action Plan 2021-2030**

- 4.3.1. This 2019 National Energy and Climate Plan (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 that were 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). It is stated that Ireland is submitting the 2021-2030 NECP to facilitate the ongoing analysis at EU level and it will be revised to bring it in line with the 7% trajectory and to include policies and measures currently being developed to achieve the 7% trajectory. It is outlined that Ireland is currently developing those policies and measures and intends to integrate the revision of the NECP into the process which will be required for increasing the overall EU contribution under the Paris Agreement.
- 4.3.2. In terms of energy security, it states that *“a review of the security of energy supply of Ireland’s natural gas and electricity systems is being carried out. The focus of the review is the period to 2030 in the context of ensuring a sustainable pathway to 2050. Given the increasing dependence of electricity production on natural gas and the increasing dependence on imports from the UK, it is important that close co-operation on security of supply continues with EU Member States and the UK”.*
- 4.3.3. Section 2.3 addresses ‘Dimension Energy Security’ and at subsection (iii) which, where applicable refers to national objectives with regard to reducing energy import dependency from third countries it states that:

“Given Ireland’s high and increasing reliance on gas for electricity, our low import route diversity, Ireland’s relatively high dependence on imported gas, which is likely to increase as the Corrib gas field progressively depletes, and the potential increasing role of gas in the energy mix for heat, transport and power generation including as a back-up for intermittent power generation, our objectives are to:

- Ensure the resilience of the gas network to a long-duration supply disruption, in the context of EU and national climate objectives;*
- Actively participate in EU and regional initiatives to maintain and enhance security of supply including national, regional and EU co-operation on emergency planning and response for gas and electricity networks, including risk assessments, preventative plans and emergency plans;*
- Following the withdrawal of the United Kingdom from the EU, engage with our EU partners to put in place an EU/UK framework for continued necessary regional co-operation between Ireland and the UK on matters related to gas and electricity security of supply, including emergency preparedness and response and solidarity in an emergency situation”.*

4.3.4. Table 12 of this document refers to Shannon LNG (PCI number 5.3) as being on the fourth PCI list.

4.3.5. Section 4.5.2 addresses Energy Transmission Infrastructure and states that *“Ireland has no LNG terminal, although there are a number of commercial proposals, one of which was included in the EU’s fourth list of PCIs. Future applications by LNG or other infrastructure projects for EU Connecting Europe Facility (CEF) funding will be considered in context of national and EU climate policy objectives”.*

4.4. Climate Action Plan 2019

4.4.1. A case study included in the Plan (pg. 53) on the cost of renewable electricity notes that *“Renewable generation is intermittent and often unpredictable. This creates new challenges for utilities, market participants, and policy makers. Intermittency also creates the need for a range of technology solutions which may include large-scale interconnection, storage, and dispatchable capacity (e.g., natural gas plants that can generate electricity at times where there is no wind). There is no one-size-fits-all answer to supporting 70% renewables”.*

4.4.2. Section 7.2 of the Plan refers to targets in respect of meeting the required level of emissions reduction by 2020 and notes that “achieving 70% renewable electricity by 2030 will involve phasing out coal- and peat-fired electricity generation plants, increasing our renewable electricity, reinforcing our grid (including greater interconnection to allow electricity to flow between Ireland and other countries), and putting systems in place to manage intermittent sources of power, especially from wind”.

4.5. **Regional Spatial Economic Strategy for the Southern Region**

4.5.1. The RSES for the Southern Region came into effect in January 2020 and includes County Kerry. The RSES provides the implementation strategy for the NPF. Section 3.8 of the RSES addresses settlement networks one of which is defined as the North Kerry/ West Limerick/Shannon Estuary/Clare area. It is stated that *“the RSES recognises and supports the economic role and potential of settlements including Listowel, Abbeyfeale Newcastle West (Key Town), Kilrush 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. Reference to the SIFP network is also included as an example of our Region’s strategic marine and coastal assets in Chapter 4”*.

4.5.2. **Regional Policy Objective 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 significant work that has been undertaken to progress its promotion and development. It is an objective to support and promote the delivery of the Strategic Development Locations as set out in the SIFP for the Shannon Estuary subject to the implementation of mitigation measures outlined in the SEA and AA undertaken on SIFP and zoned in the Local Authority Development Plans.

(b) It is an objective to promote the SIFP initiative as a good practice model for the Southern Region and to seek the preparation of similar initiatives for Cork Harbour and Waterford Harbour between the relevant stakeholders.

(c) It is an objective to support the promotion, marketing and seeking of financial and expertise support for the Strategic Integrated Framework Plan (SIFP) for the Shannon Estuary and specific projects emerging there from.

(d) Such initiatives shall be subject to the relevant environmental assessment requirements including SEA, EIA SFRA and AA as appropriate.

4.5.3. The RSES includes the SIFP for the Shannon Estuary as a good practice example. It states that “it has identified an additional 1,200 hectares for marine related development (9 no. strategic development locations) by building on existing industry connectivity and synergy as well as the existing infrastructure to create a more sustainable and attractive network for further investment. Significant tracts of land have been zoned for marine related industry in Counties Clare, Limerick and Kerry because of the preparation of the SIFP and these sites present prime opportunities for employment generating development in the Region”.

4.5.4. It also states that “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”.

4.5.5. **Regional Policy Objective 142** refers to ports and the objective “to strengthen investment to deliver actions under National Ports Policy and investment in sustainable infrastructure projects that:

(e) Support the sustainable development of the 9 no. strategic development locations adjoining sheltered deep-water in line with the recommendations of the SIFP for the Shannon Estuary and subject to the implementation of mitigation measures outlined in the SEA and AA undertaken on the SIFP.

and

(f) Development proposals will be subject to environmental assessment, implementation of mitigation measures outlined in applicable SEAs and AAs and feasibility studies to establish that any expansions can be achieved without adverse

effects on any European sites and within the carrying capacity of the receiving environment of the ports”.

- 4.5.6. Section 8.3 of the Strategy deals specifically with Gas Networks where the Tarbert-Ballylongford lands are addressed as an ‘Energy Hub Case Study’, and following a description of the previously permitted developments on and in the vicinity of the site which are expired/extant, it is stated that *“it is anticipated that the 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”.*
- 4.5.7. RPO 225 deals with the Gas Network stating that *“subject to appropriate environmental assessment and the planning process where required, it is an objective to: (e) “Strengthen the gas network sustainably to service settlements and employment areas in the Region, support progress in developing the infrastructures to enable strategic energy projects in the Region. An example is the Tarbert/Ballylongford landbank in Co Kerry which is a strategic development site under the Strategic Integrated Framework Plan for the Shannon Estuary and support for the extension of the Gas Network from Listowel into the Kerry Hub and Knowledge Tri-Angle settlements of Tralee, Killarney and Killorglin”.*

4.6. Kerry County Development Plan 2015-2021

- 4.6.1. Chapter 4 of the plan addresses Economic Development and Employment with Section 4.7 dealing specifically with the Tarbert/Ballylongford Land Bank. It is stated that *“this Plan zones 390 hectares of land, known as the Tarbert/ Ballylongford Land Bank, for marine-related industry, compatible or complimentary industries and enterprises which require deep water access. The land bank is adjacent to the Lower Shannon cSAC 002165 and the River Shannon and River Fergus SPA 04077 as well as several pNHA designations. Within the land bank planning permission has been secured for the construction of a Liquefied Natural Gas (LNG) regasification terminal. This site is 104 hectares in size. In addition planning permission has also been granted within the LNG site for a Combined Heat & Power plant. These two developments were extensively environmentally assessed and have the potential to sustainably create substantial employment both at the construction and operation phases and can act as a catalyst for future industrial development and employment arising from the availability of secure gas and electricity supply in this region. For the*

most part the Tarbert / Ballylongford landbank is located outside of known flood risk areas and therefore is appropriately zoned. Notwithstanding this, development proposals will be required to be supported with detailed site level flood risk assessments, as appropriate in order to ensure that the overall landbank resource is protected and developed in a sustainable manner A small portion of the overall landbank is deemed to be located within Flood Zone B for which a Justification Test was carried out and passed as per Table 3.2 of the DEHLG guidelines on Flood Risk Management. Accordingly, this area is deemed to be a zoned area pending a Site Specific Flood Risk Assessment at development consent stage”.

4.6.2. The Plan then refers to the Shannon Integrated Framework Plan noting that it is an objective of the Council to:

ES-22 – *“Support the implementation of the Shannon Integrated Framework Plan (SIFP) to facilitate the sustainable economic development of the Shannon Estuary”.*

ES-23 – *“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 or complimentary with marine related industry and / or those creating a synergism with existing or permitted uses and / or those contributing to the sustainable development of a strategic energy hub at this location will also be encouraged. Development will be subject to compliance with the objectives of this Plan, particularly as they relate to the protection of the environment and will also be subject to compliance with the Environmental Reports prepared in support of the SIFP, where appropriate”.*

ES-24 – *“Ensure that development proposals for the Tarbert / Ballylongford landbank are supported with detailed site level flood risk assessments. As part of this, the probability of flooding within the site together with the vulnerability of proposed land uses shall be taken into consideration and appropriate mitigation measures incorporated, where necessary, so as to adequately manage flood risk. In addition, only water compatible industrial type land uses, including flood control infrastructure and compatible industrial activities requiring a waterside location will be permitted on lands which have an annual exceedance probability of coastal flooding of 0.1% AEP (Extreme Flood Extent)”*

Section 12.3.2 of the Plan deals with Zoning designations two of which are as follows:

- 4.6.3. **Tarbert/Ballylongford Landbank** - Land known as the Tarbert/Ballylongford Land Bank comprises 390 hectares of land and is zoned for development as set out in S4.7 of this Plan (see above).
- 4.6.4. **Shannon Estuary** - The Strategic Integrated Framework Plan (SIFP) for the sustainable development of the Shannon Estuary identifies land for a variety of land and marine based development. Developers should have regard to the provisions of this Plan in formulating proposals for development in this area.
- 4.6.5. **Strategic Integrated Framework Plan for the Shannon Estuary 2013-2020**
- 4.6.6. This Plan which, is referenced in both the NPF and RSES as outlined above, is referenced in Sections 4.7 and 12.3.1 of Kerry County Development Plan as detailed above. The Plan describes itself as *“an inter-jurisdictional land and marine based framework to guide the future development and management of the Shannon Estuary”*. By way of introduction it is stated that: *“The Estuary is the largest in Ireland, with a water body of some 31,500 ha, covering a distance of approximately 100km from Limerick City to Loop Head. It has a long established history of facilitating major industries, including Shannon Foynes Port at Foynes and Limerick Docks. The Port has grown to become Ireland second largest port operation, handling the largest vessels entering Irish waters, up to 200,000dwt. Shannon International Airport, ESB Moneypoint, Tarbert Power Station, NORA Fuel Storage, Aughinish Alumina have also grown and become major industrial and employment hubs within the Estuary, operating efficiently and sensitively within the estuarine environment”*.
- 4.6.7. In relation to ‘economy, Section 2.1.3 of the Plan states that *“the Estuary is also likely to benefit from other significant foreign investment of around €500 million through implementation of planning approval for the first LNG terminal in Ireland at the Tarbert- Ballylongford Landbank near Tarbert. The scheme will contain four insulated storage tanks of 200,000 cubic metres capacity and a re-gasification facility linked to the existing gas transmission system. Such significant investments, particularly in energy infrastructure are likely to be a catalyst for other major foreign investment in the region”*.

4.6.8. The subject site is located within the landbank designated as 'Strategic Development Location H' - Tarbert-Ballylongford Land Bank, Ballylongford within the Plan.

4.6.9. It is stated that "*the lands at this location, lie adjacent to a relatively well sheltered significant deepwater resource on the Shannon Estuary close to the N69. The lands comprise a considerable development hinterland adjacent to the deepwater resource close to a ready, reliable natural gas and electric power supply*".

4.6.10. It further states that "*this SDL is identified and prioritised for marine related industry. The location offers significant potential for future development, with the LNG acting as a catalyst for additional industrial development at this location in the future. With the extension of the natural gas network and the existing electricity distribution infrastructure in place the SDL lends itself to development in a sustainable manner as a power generation centre for the region*".

4.6.11. The strategic development location of Tarbert-Ballylongford has the following development objectives of specific note:

SIFP MRI 1.2.13 – "*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 or complementary with marine related industry, with 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. Development will be subject to compliance with the criteria set out in Objective SIFP MRI 1.2*".

4.6.12. In relation to the 'Shipping and Navigation Strategy in the Plan (Section 5.5.3) it is noted that "the capacity to accommodate bigger ships (Photo 40) in the Estuary is intricately related to growing economic activity. It will also improve the current marketing, attractiveness and investment potential within the Estuary and increase future growth potential in new maritime industries, including oil and gas exploration, offshore renewable energy, the Cruise Industry and Liquefied Natural Gas (LNG) within the Estuary. The Shannon Estuary is considered an ideal location for these activities due to its naturally occurring deepwater and its relatively uncongested waters from a maritime navigational perspective".

4.7. European Sites

The site is within and adjoins the Shannon Estuary which is part of the Lower River Shannon SAC – site code 002165 and River Shannon and River Fergus Estuaries SPA – site code 004077. The sites are outlined as follows:

4.7.1. Lower River Shannon SAC – site code 002165

The qualifying interests for this site are as follows:

Priority habitats denoted by *

- Freshwater Pearl Mussel *Margaritifera margaritifera* - 1029
- Sea Lamprey *Petromyzon marinus* - 1095
- Brook Lamprey *Lampetra planeri* - 1096
- River Lamprey *Lampetra fluviatilis* - 1099
- Atlantic Salmon *Salmo salar* (only in fresh water) - 1106
- Sandbanks which are slightly covered by sea water all the time - 1110
- Estuaries - 1130
- Mudflats and sandflats not covered by seawater at low tide - 1140
- *Coastal lagoons - 1150
- Large shallow inlets and bays - 1160
- Reefs - 1170
- Perennial vegetation of stony banks - 1220
- Vegetated sea cliffs of the Atlantic and Baltic coasts - 1230
- *Salicornia* and other annuals colonizing mud and sand - 1310
- Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*) - 1330
- Bottlenose Dolphin *Tursiops truncatus* - 1349
- Otter *Lutra lutra* - 1355
- Mediterranean salt meadows (*Juncetalia maritimi*) - 1410
- Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitriche-Batrachion* vegetation - 3260

- *Molinia* meadows on calcareous, peaty or clayey-silt-laden soils (*Molinion caeruleae*) - 6410
- *Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion*, *Alnion incanae*, *Salicion albae*) -91E0 -

Conservation Objectives for the site are dated August 2012.

4.7.2. River Shannon and River Fergus Estuaries SPA – site code 004077

The special conservation interests for this site are as follows:

- Cormorant (*Phalacrocorax carbo*) [A017]
- Whooper Swan (*Cygnus cygnus*) [A038]
- Light-bellied Brent Goose (*Branta bernicla hrota*) [A046]
- Shelduck (*Tadorna tadorna*) [A048]
- Wigeon (*Anas penelope*) [A050]
- Teal (*Anas crecca*) [A052]
- Pintail (*Anas acuta*) [A054]
- Shoveler (*Anas clypeata*) [A056]
- Scaup (*Aythya marila*) [A062]
- Ringed Plover (*Charadrius hiaticula*) [A137]
- Golden Plover (*Pluvialis apricaria*) [A140]
- Grey Plover (*Pluvialis squatarola*) [A141]
- Lapwing (*Vanellus vanellus*) [A142]
- Knot (*Calidris canutus*) [A143]
- Dunlin (*Calidris alpina*) [A149]
- Black-tailed Godwit (*Limosa limosa*) [A156]
- Bar-tailed Godwit (*Limosa lapponica*) [A157]
- Curlew (*Numenius arquata*) [A160]
- Redshank (*Tringa totanus*) [A162]
- Greenshank (*Tringa nebularia*) [A164]
- Black-headed Gull (*Chroicocephalus ridibundus*) [A179]
- Wetland and Waterbirds [A999]

Conservation Objectives for the site are dated September 2012.

5.0 Planning History

5.1. Subject Site

5.1.1. ABP Ref. PL08.PA0002

Permission was granted by the Board on 31 March 2008 for the development of a proposed Liquefied Natural Gas (LNG) regasification terminal located on the Southern shore of the Shannon Estuary in the townlands of Ralappane and Kilcolgan Lower, County Kerry.

Condition 2 of the permission stated:

This permission shall, in accordance with the application, be for a period of ten years from the date of this order.

Reason: *In order to allow a reasonable period for the completion of this extensive development.*

As per the legal proceedings referenced in section 5.1.3 below, this permission has expired.

5.1.2. ABP Ref. PL08.PM0002

An amendment was sought under section 146B of the Planning and Development Act, 2000 (as amended), to make modifications/alterations to approved development (outlined above) comprising the option to construct one storage tank in phase 1, rather than 2 storage tanks, slight alteration to jetty head, reduction in width of trestle decking, alterations to pipeline supports close to sea-water pump-house, running of pipes under rather than over a section of the outer perimeter road and other amendments including the relocation of minor elements and reduction in width of some service roads from 9.0m to 6.0m. The Board determined on 4 March 2013 that the proposed alteration would not constitute the making of a material alteration of the terms of the permission and amended the terms of Condition 3.

5.1.3. ABP Ref. PL08.PM0014

An amendment was sought under Section 146B of the Planning and Development Act 2000, as amended to alter the terms of the permission. The alteration sought related to Condition No. 2 of the permission in respect of the duration of permission seeking an extension of duration of the permission from 10 to 15 years. The Board determined on 13 July 2018 that the proposed alteration would not constitute the making of a material alteration of the terms of the permission. The validity of the amendment granted by the Board under PL08.PM0014 was challenged in September 2018 by way of *Friends of the Irish Environment CLG v An Bord Pleanala*, High Court 2018 No. 734JR. The matter was referred to the Court of Justice of the European Union ([2019] IHEC 8 and Case C-254/19) and following same, an order was made on 9 November 2020 quashing the amendment.

5.1.4. **ABP Ref. 08.PA0028**

Permission was granted on 9th July 2013 to construct a 500MW 'CHP' combined heat & power plant within the overall lands to the northwest of the subject site on Knockinglas Point. Condition no. 2 states that the permission is for a period of ten years.

5.2. **Other Related Developments**

5.2.1. **ABP Ref. 08.GA0003 & 08.DA0003**

Permission for the construction of a 26km underground pipeline to link the proposed LNG terminal at Ralappane, with the national gas transmission grid near Foynes, Co. Limerick was granted and compulsory acquisition of the necessary lands was consented by the Board on 17 February 2009.

6.0 **The Applicant's Submission**

- 6.1. In their correspondence to the Board seeking a determination as to whether the proposed development is strategic infrastructure development (received 20 March 2019) the applicant provided details of the proposed development, planning history, comparison to previously permitted LNG facility, stakeholder consultations and planning policy context all of which is addressed elsewhere in this report.

6.2. In relation to their position in respect of the need for the proposed development and in particular its compliance with the requirements to be determined as strategic infrastructure development the following is summarised:

- Proposal complies with national, regional and EU energy policies and plans.
- National Strategic Outline 8 of NPF, Transition to a Low-Carbon and Climate Resilient Society, reference is made under Commercial and Private Sector Investments to the need for the development of gas infrastructure projects to support regional and rural development and the low carbon transition.
- Objective 217 of Southern RSES references proposal stating it is an objective to support progress in developing the infrastructures to enable permitted gas energy supply facilities such as the Tarbert/Ballylongford landbank in Co. Kerry to enhance the natural gas grid.
- Further reference in RSES to positioning the area as a major National centre for CHP and facilities requiring access to deep water with substantial requirements for electricity and natural gas.
- Proposal rooted in need to enhance energy security and to provide a reliable supply of gas to meet demand as part of a sustainable energy transition to a low carbon future. Ireland's Transition to a Low Carbon Future 2015-2030 under Section 3.4 states that in the short- to medium term the mix of non-renewables will shift from more carbon-intensive fuels like peat and coal to lower carbon fuels like gas. Reference to Section 6.2 in relation to projects which could enhance energy security/security of supply and reference (188) to successive IEA reviews of Ireland which note no strategic gas storage and limited operational gas storage capacity making Ireland vulnerable in the event of a prolonged gas supply disruption in Europe.
- Outlined that forehorse licences and leases have been obtained for the proposed development.
- Reference is made to the proposal complying with the classes within the Seventh Schedule which include within energy Infrastructure for – *'an onshore terminal, building or installation whether above or below ground associated with an LNG facility and for the purpose of this provision, 'LNG facility' means a terminal which*

is used for the liquefaction of natural gas or the importation, offloading and re-gasification of liquefied natural gas, including ancillary services’.

- In terms of the eligibility criteria in Section 37A(2) stated that the previously permitted LNG regasification terminal was determined to be strategic infrastructure development (PC.0002).
- Proposal is of a class in the Seventh Schedule and is strategic infrastructure given the need for the project as outlined, the nature and scale of the proposal and the fact that the previously permitted LNG project was determined to be strategic infrastructure.

Any further arguments to support the applicant’s submission put forward in the consultation meetings undertaken are summarised in the next section.

7.0 Consultations

7.1. Consultations with An Bord Pleanala

- 7.1.1. Four pre-application meetings were held with the prospective applicant (21 May 2019, 22 January 2020, 22 May 2020 & 25 March 2021). A record of all meetings held are attached to the file. The presentations made to the Board’s representatives at these meetings are also attached to the file (note there was no presentation at the first meeting).
- 7.1.2. The principal matters arising at these meetings related to:
- Nature of proposed development as it evolved during the meetings with proposal at outset including a data centre element which was subsequently excluded with the development now proposed including a CCGT power plant;
 - Masterplan proposed for overall landholding.
 - Provision of a comparison between the current proposal and previously permitted development. Noted that while proposed jetty infrastructure similar to previously permitted, configuration on site different given onshore storage tanks no longer required, significantly less earthworks required in proposed scenario with no pond and embankment or damming of river required.

- Need for proposed development related to enhancement of energy security given depletion of Corrib gas field and single supply point from UK; addressing electricity capacity shortfalls from generation capacity and urgent need for new gas fired power plants; and supporting the 70% (generation of electricity by renewables) target for 2030.
- Key policies and statements in National Energy & Climate Plan (2021-2030), Climate Action Plan (2019), EirGrid's Generation Capacity Statement (2020) and Gas Networks Ireland (GNI) Vision 2050 (2019) support proposal complying with test in Section 37A(2)(a) – strategic economic or social importance to the State or Region.
- Key policies and statements in NPF, National Development Plan 2018-2027 and RSES for Southern Region 2020 support proposal falling under Section 37A(2)(b) – contribute to fulfilment of any of the objectives in the NPF or in any RSES.
- Proposed development subject to navigational protocols of the Shannon Foynes Port Company in Co. Limerick and shipping route passes lands within jurisdiction of County Clare therefore considered proposal falls within Section 37A(2)(c) - would have a significant effect on the area of more than one planning authority.
- In relation to statements in Programme for Government on fracked gas noted that most of the LNG in the world is not sourced from fracked gas with proposal not dependent on fracked gas with applicant confident it can source gas from non-fracked sources to meet energy demand and security of supply.
- Both power plant and terminal are 'future-proofed' by having ability to transition to hydrogen fuel once technology and public policy developed, subject to future consent.
- EIAR to address all elements of project including direct and indirect effects including significant effects on the environment arising from major accidents/disasters and cumulative impacts/in-combination effects from other proposed elements such as the grid connection.
- Public Consultation advised particularly with key stakeholders and prescribed bodies;

- Requirement for robust NIS and early engagement/consultations with NPWS was advised with details of consultations undertaken with the NPWS and other relevant stakeholders, including the Irish Whale & Dolphin Group were provided during the course of the meetings (details of consultation with the NPWS separately in section 7.2 below, with consultations ongoing with the IWDG).
- Details of survey work including bottlenose dolphin monitoring and underwater noise modelling provided.
- Change in regulatory framework since previous application including EIA and Habitats Directives, legal judgements and Climate Action Plan.
- Sensitive location of site outlined, loss of habitat detailed and requirement to justify same required. In-depth/robust scientific analysis required in NIS in relation to habitats conservation objectives, targets and attributes which may be most greatly affected.
- Process by which proposal would be assessed for the purposes of the habitats Directive was discussed vis-à-vis, Article 6(3)/Article 6(4) of the Habitats Directive.
- List of all consents required was requested and provided with detailed list of all permits, licences/authorisations set out and the awarding body for same.
- Rationale for FSU outlined with Board's representatives outlined that the direct and indirect effects from the FSU require thorough consideration.
- Requirement for robust consultations with list of all consultations undertaken provided.
- Consideration of a community gain proposal were advised;
- Consultations with the HSA regarding the proposed Quantitative Risk Assessment (QRA) required which will consider the FSRU.
- Meeting with the Shannon Foynes Port Company wherein it was agreed that a new marine navigation risk assessment would be completed.
- Prospective applicant clarified that it is not a PCI project.
- SID application process was outlined;

7.2. Consultations with NPWS

- 7.2.1. The Board's representatives sought details from the prospective applicant at the second pre-application meeting (22 January 2020) on the extent of consultations undertaken with the NPWS, a prescribed body, and other relevant stakeholders such as the Irish Whale and Dolphin Group. At the third meeting (22 May 2020) the prospective applicant stated that they had consultation with the NPWS on 21 February 2020 and outlined the discussion which had taken place which is detailed in the presentation and record of the meeting (22 May 2020). Following same, the Board's representatives met with representatives of the NPWS on 23 June 2020 to discuss the matter. The NPWS representatives outlined that no formal request for consultations had been received. The prospective applicant was forwarded a copy of the record of this meeting which noted this fact. On the 19th January 2021, formal consultations were undertaken by the prospective applicant with the NPWS and the record of that meeting is on the file.

8.0 Legislative Provisions

8.1. Strategic Infrastructure Development

8.1.1. Section 37A

Section 37A(1) of the Planning and Development Act 2000, as amended states that:
"An application for permission for any development specified in the Seventh Schedule (inserted by the Planning and Development (Strategic Infrastructure) Act 2006) shall, if the following condition is satisfied, be made to the Board under section 37E and not to a planning authority.

(2) That condition is that, following consultations under section 37B, the Board serves on the prospective applicant a notice in writing under that section stating that, in the opinion of the Board, the proposed development would, if carried out, fall within one or more of the following paragraphs, namely—

(a) the development would be of strategic economic or social importance to the State or the region in which it would be situate,

(b) the development would contribute substantially to the fulfilment of any of the objectives in the National Planning Framework or in any regional spatial and economic strategy in force in respect of the area or areas in which it would be situate,

(c) the development would have a significant effect on the area of more than one planning authority”.

8.1.2. **Seventh Schedule**

The Seventh Schedule of the Planning and Development Act, 2000, as amended sets out the Infrastructure Developments for the purposes of Sections 37A and 37B. Energy Infrastructure is included within Class 1 of the Seventh Schedule and includes the following:

“An onshore terminal, building or installation, whether above or below ground, associated with an LNG facility and, for the purpose of this provision, ‘LNG facility’ means a terminal which is used for the liquefaction of natural gas or the importation, offloading and re-gasification of liquefied natural gas, including ancillary services”.

and

“A thermal power station or other combustion installation with a total energy output of 300 megawatts or more”.

8.2. **Environmental Impact Assessment**

8.2.1. Section 37E(1) of the Planning and Development Act, 2000 as amended states that *“an application for permission for development in respect of which a notice has been served under section 37B(4)(a) shall be made to the Board and shall be accompanied by an environmental impact assessment report in respect of the proposed development”.*

8.2.2. Part 1 of Schedule 5 sets out development for which EIA is mandatory. The following types of development are included:

2(a) A thermal power station or other combustion installation with a heat output of 300 megawatts

Part 2 of Schedule 5 sets out development for which certain types of development require EIA with the following developments included:

3(c) Installations for surface storage of natural gas, where the storage capacity would exceed 200 tonnes.

8.3. Appropriate Assessment

- 8.3.1. The site is within and adjoining the Shannon Estuary which is part of the Lower River Shannon SAC – site code 002165 and River Shannon and River Fergus Estuaries SPA – site code 004077.

9.0 Assessment

9.1. Procedural Matter

- 9.1.1. Following receipt of the request for a fourth pre-application consultation meeting by letter dated 22 January 2021, the prospective applicant was requested by the Board's representatives to consider whether it was appropriate to continue with the existing pre-application consultation process having regard to the description of the proposal as set out in the current pre-application and given that the previous permission on the site had expired; or whether a fresh pre-application process was required. I would note that, as stated in the prospective applicant's legal correspondence summarised below, it was clear to the Board's representatives during the first pre-application consultation meeting that the proposed development was not an alteration of the previous development. However, in the interest of clarity the request to the prospective applicant was sought.
- 9.1.2. The prospective applicant responded by way of a letter from their legal representatives, McCann Fitzgerald, dated 11 February 2021. The following is a summary of the arguments put forward to support the conclusion that the reference to 'alteration' in the brief summary used by the Board and the High Court Order of November 2020 do not provide any legal reason to withdraw the current pre-application consultation and commence a fresh process:

- Letter of 20 March 2019 to ABP, commencing the process, describes proposal in detail and did not describe proposal as a mere amendment or alteration to now expired 2008 permission;
- Only possible cause for confusion is brief summary of proposal used by the Board on its website and correspondence/records noting that the description used by the Board normally relates to the public notices which outline the development to the public and if public participation had been completed using this language there may be some risk of confusion but given no public notices provided and no public participation there is no risk of confusion on this basis. While Section 37C(4) does facilitate consultations with any person who may have information relevant, the only consultation undertaken by the Board was with the NPWS (23/06/2020) where no substantive discussion took place.
- Only risk of confusion is to the Board's understanding of the proposal and having reviewed records of the three meetings held, clear that proposal has never been described as dependent on now expired 2008 permission.
- Request for consultation was made under Section 37B and not Section 146B.
- While understandable interest in difference from what was previously permitted, the scope of the application is clearly recorded in minutes of first meeting as one that would 'include all constituent elements'. The proposal is different from before which is worth emphasis, but this does not make the proposal dependent or contingent on the now expired 2008 permission.
- Summary used by the Board does not delimit the nature and extent of the proposal and necessary analysis of Seventh Schedule and of eligibility criteria in Section 37A(2) does not and cannot rest on the summary particularly where the summary is not one produced by the prospective applicant.
- Any person reading beyond the brief summary should not be confused with the prospective applicants obligation under Section 37C(1) to provide sufficient information to enable the Board assess the development which is considered has been provided with the Board able to alert and invite any more information it may require.

- Any doubt in relation to the matter can easily be resolved by use of clear language in final written records setting out in more precise terms the nature and scale of what is proposed and what is being assessed;
- Note for sake of completeness that Board is not free to rely on merits or content of the quashed decision which is strictly an irrelevant consideration (*Balscadden Road SAA Residents Association Ltd v An Bord Pleanala* [2020] IHEC 586) but note that prospective applicant did not invite the Board to rely on quashed decision.
- Quashed decision remains a relevant consideration as part of the planning history of the site and clear Board does understand permission has expired and whatever weight might have been given before 9 November 2020 can be recalibrated accordingly.

9.1.3. Having regard to the arguments put forward by the prospective applicant, following receipt of the legal consideration above, it was considered by the Board's representatives, that the description set out in the Board's pre-application description was an administrative interpretation of the proposal when the pre-application request was received by the Board. I would note that there is no application form for the process which would require the prospective applicant to provide a description of the development it is proposing and therefore the summary description is an interpretation by the administrative officers who receive the documentation. It is clear from the documentation presented by the applicant that the proposed development does not comprise an alteration to a previously permitted development but rather the reference to the previously permitted development was provided for reference purposes. On this basis, it was considered acceptable to proceed with a fourth pre-consultation meeting within the current process.

9.1.4. I am satisfied that what has been presented to the Board in respect of the proposed development is clear and comprises a development distinct from and not related to anything previously permitted on the lands, which has now expired. The Board may wish to direct that the description provided for the pre-application consultation process is amended in the case management system to the following to appropriately describe the development sought in the initial correspondence of 20

March 2019, which as noted above has been subject to some amendment during the process:

The proposed development of a liquefied natural gas (LNG) regassification terminal together with already permitted CHP plant (Ref. 08.PA0028) including an LNG jetty to facilitate the berthing of a Floating Storage Unit, onshore vaporisation process equipment and administrative and associated buildings.

9.1.5. I will move forward in the next sections to the consideration of the matter before the Board – that being whether the proposed development is or is not strategic infrastructure.

9.2. **Strategic Infrastructure**

There are two matters which require consideration in respect of whether the proposed development comprises 'Strategic Infrastructure Development'. Firstly, whether the proposal comprises a development specified in the Seventh Schedule and secondly, if it does comprise a development specified in same, whether it falls within one or more of the criteria set out in Section 37A(2). I will address each in turn.

9.2.1. **Seventh Schedule**

Energy Infrastructure is included within Class 1 of the Seventh Schedule and includes "*an onshore terminal, building or installation, whether above or below ground, associated with an LNG facility and, for the purpose of this provision, 'LNG facility' means a terminal which is used for the liquefaction of natural gas or the importation, offloading and re-gasification of liquefied natural gas, including ancillary services*". Given that the development as set out by the prospective applicant in the presentation included in the final presentation comprises an onshore installation associated with an LNG facility the LNG terminal would comprise a Seventh Schedule development.

Class 1 also includes "*a thermal power station or other combustion installation with a total energy output of 300 megawatts or more*". Given that the CCGT has a total energy output of up to 600MW and therefore would exceed the 300MW threshold it

would also comprise a Seventh Schedule development. The development in its entirety is therefore a Seventh Schedule development.

9.2.2. **Tests in Section 37A(2)**

At the outset I would note that the previously permitted facility and the extant permission for the CHP power plant were both determined to comprise Strategic Infrastructure Development (References PC0002 & PC0137 apply). Other than stating that the CHP power plant would meet the tests in Section 37A(2)(a), there is little information for the Boards information in respect of the previous determinations/reports.

I would also note that the proposed development comprises the provision of both a gas supply and a power plant. The gas supply is proposed to (a) supply the national gas network via the permitted gas pipeline and (b) power the CCGT power plant proposed in this application which would generate power for the grid.

The applicant's case is set out in their presentations to the Board which are summarised in Section 6 above.

I will address each of the tests in Section 37A(2) in turn.

Section 37A(2)(a)

(a) the development would be of strategic economic or social importance to the State or the region in which it would be situate.

The prospective applicant's case in respect of this test is that the proposed development is required as it enhances energy security, it addresses electricity capacity shortfalls and it supports 70% renewables by 2030. This is outlined by reference to a number of National Plans/Statements. The prospective applicant refers to a number of plans and documents which they consider support the consideration of the proposal. I will address the matters firstly as it relates to gas supply (terminal) and secondly as it relates to generation (proposed CCGT).

Gas Supply

- 9.2.3. I would draw the Boards attention to the NPF which at National Strategic Outcome (NSO) 8 addresses the 'Transition to a Low Carbon and Climate Resilient Society' and states that: *"Ireland benefits from interconnection with the UK gas pipeline network and while there are two gas pipelines with two separate entry points into the*

island of Ireland, both pipelines are connected through a single facility in Moffat, Scotland. In addition, our gas storage capacity is limited, which poses a security of supply risk and constrains smoothing of seasonal fluctuation in gas prices". This is also repeated in the National Development Plan 2018-2027, where it is stated that "while a significant proportion of renewable power generation is being delivered from wind energy, given the intermittent nature of this technology, a proportion of Ireland's electricity needs will likely continue to be generated from gas over the medium to longer term. Reference is also made to supply and while the Corrib gas field has enhanced the security of supply, Ireland will still need to import gas via the UK on a long-term basis as Corrib production is projected to decline over the medium term. Reference is made to the gas pipeline twinning project (South-West Scotland On-shore System project), which involves the construction of 50 km of gas transmission pipeline from Cluden to Brighthouse Bay, Scotland".

I would also note the comments referenced by the prospective applicant from the National Energy and Climate Plan (NECP) 2021-2030 which states that *"given Ireland's high and increasing reliance on gas for electricity, our low import route diversity, Ireland's relatively high dependence on imported gas, which is likely to increase as the Corrib gas field progressively depletes, and the potential increasing role of gas in the energy mix for heat, transport and power generation including as a back-up for intermittent power generation, our objectives are to: Ensure the resilience of the gas network to a long-duration supply disruption, in the context of EU and national climate objectives".*

The prospective applicants argue that, given the rapidly depleting Corrib Gas supply and the reliance on a single point from the UK for 90% of gas by 2030, there is a security of supply issue with the potential for disruption to the single gas supply having potentially disastrous impacts on the Irish State. The proposed development is therefore seeking provide a new import route which they consider is necessary to protect Ireland from a potential disruption to the UK supply thereby limiting the exposure to distribution that reliance on one route provides.

Generation

In relation to potential shortfalls in generation, I would refer the Board to the Climate Action Plan 2019 which acknowledges that *"renewable generation is intermittent and often unpredictable. This creates new challenges for utilities, market participants,*

and policy makers. Intermittency also creates the need for a range of technology solutions which may include large-scale interconnection, storage, and dispatchable capacity (e.g., natural gas plants that can generate electricity at times where there is no wind). There is no one-size-fits-all answer to supporting 70% renewables". It is therefore apparent that an alternative to renewable energy is required when such shortfalls arise and I note reference by the prospective applicant to EirGrid's All-Ireland Generation Statement 2020-2029 that new additional gas fired conventional power plants are urgently required on the grid. It is the applicant's contention that the proposed CCGT would comprise such an additional plant and this appears reasonable.

In conclusion, on the basis of the aforementioned I consider that the proposal could be considered to be of strategic economic importance to the State and the region in which it would be situate. I therefore consider that the proposed development would meet the test in Section 37A(2)(a).

Section 37A(2)(b)

(b) the development would contribute substantially to the fulfilment of any of the objectives in the National Planning Framework or in any regional spatial and economic strategy in force in respect of the area or areas in which it would be situate.

Firstly, the Shannon Integrated Framework Plan is outlined as a case study/example in the National Planning Framework (NPF). Chapter 7 of the Framework is entitled "*Realising our Island and Marine Potential*". Within this Chapter the Shannon Estuary and in particular the Strategic Integrated Framework Plan is included as a case Study. The subject site is designated as a strategic development location (H) in the Shannon Integrated Framework Plan.

In relation to the RSES, Regional Policy Objective 79 includes as an objective the support and promotion of the "*delivery of the Strategic Development Locations as set out in the SIFP for the Shannon Estuary subject to the implementation of mitigation measures outlined in the SEA and AA undertaken on SIFP and zoned in the Local Authority Development Plans*".

In addition, Regional Policy Objective 142 refers to ports with the objective *to strengthen investment to deliver actions under National Ports Policy and investment in sustainable infrastructure projects that with Part (e) of same, seeking to support*

the sustainable development of the 9 strategic development locations adjoining sheltered deep-water in line with the recommendations of the SIFP for the Shannon Estuary and subject to the implementation of mitigation measures outlined in the SEA and AA undertaken on the SIFP. The RSES also specifically state that “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”.

I note the prospective applicant specifically references RPO225(e), which deals with the gas network and which seeks to “*Strengthen the gas network sustainably to service settlements and employment areas in the Region, support progress in developing the infrastructures to enable strategic energy projects in the Region. An example is the Tarbert/Ballylongford landbank in Co Kerry which is a strategic development site under the Strategic Integrated Framework Plan*”.

I consider that given that the subject site is a designated strategic development location within the SIFP that it would come within the criteria for contributing substantially to the fulfilment of objectives in the National Planning Framework and the regional spatial and economic strategy in force in respect of the area or areas in which it would be situate. I consider that the proposed development would meet the test in Section 37A(2)(b).

Section 37A(2)(c)

The third test is whether *(c) the development would have a significant effect on the area of more than one planning authority*

The applicant, in their presentation at the fourth pre-application meeting, consider that the proposal would meet this test for two reasons. The first is that the construction and operation of the proposal will be subject to the navigation protocols of the Shannon Foynes Port Company and secondly that the shipping route for the proposed development also passes lands in the jurisdiction of Clare County Council.

While I do not consider that either of these arguments would meet the test of significant effect for the purposes of land use planning or environmental effects, I would suggest that given the significant change to the visual context of the site that it could be reasonably considered that the proposal would have a significant visual effect when viewed from the County Clare side of the estuary. I would point out that a significant change to the visual context has previously been permitted by way of

the previous permission on the site and the extant CHP plant. Notwithstanding, for the purposes of Section 37A(2)(c) I consider that this test would be met on the basis of visual effect.

Conclusion

The proposed development, therefore, meets all of the three tests in Section 37A(2)(a), (b) & (c).

9.3. Environmental Impact Assessment

9.3.1. As I outlined in Section 8.2.1 above, Section 37E(1) of the Planning and Development Act, 2000 as amended states that “*an application for permission for development in respect of which a notice has been served under section 37B(4)(a) shall be made to the Board and shall be accompanied by an environmental impact assessment report in respect of the proposed development*”.

9.3.2. An EIAR is mandatory for the following classes of development as outlined in Part 1 and Part 2 of Schedule 5 of the Planning and Development Regulations 2001, as amended:

- *A thermal power station or other combustion installation with a heat output of 300 megawatts (Class 2(a) Part 1 of Schedule 5)*

The proposed CCGT power plant has a proposed output of up to 600 MW and therefore exceeds the threshold.

- *Installations for surface storage of natural gas, where the storage capacity would exceed 200 tonnes (Class 3(c) Part 2 of Schedule 5)*

It is stated that the Floating Storage Regasification Unit (FSRU) berthed at the LNG jetty would have a storage capacity of c.180,000m³. Converted to tonnes 180,000m³ would comprise 63,566 tonnes and therefore would exceed the threshold.

Therefore, an Environmental Impact Assessment Report is required to accompany any application for the proposed development which may be submitted to the Board.

9.4. Appropriate Assessment

- 9.4.1. The proposed development is located within and directly adjacent to two European sites, the Lower River Shannon SAC – site code 002165 and the River Shannon and River Fergus Estuaries SPA – site code 002165. The applicant has indicated that it is their intention to include an NIS with the application which is considered to be appropriate.

9.5. Prescribed Bodies

- 9.5.1. In view of the scale, nature and location of the proposed development, as described in this report, it is recommended that the prospective applicant should consult with the prescribed bodies listed in the attached Appendix in respect of any future application for approval.

9.6. Conclusion

- 9.6.1. Having regard to the above, I recommend that the Board serve a notice on the prospective applicant under section 37B(4)(a) of the Planning and Development Act, 2000, as amended, stating that it is of the opinion that the proposed development constitutes strategic infrastructure development.

10.0 Recommendation

Having regard to the provisions of the Planning and Development Act, 2000, as amended, and the nature of the development as set out in the documentation and particulars submitted, which comprises an LNG Terminal and a CCGT power plant at Ballylongford, Co. Kerry, it is considered that the proposed development comprises a Seventh Schedule development and falls within the scope of Section 37A(2)(a), (b) and (c) of the Planning and Development Act, 2000 (as amended). Accordingly, the proposed development would be strategic infrastructure within the meaning of the Act and any application for approval must therefore be made directly to the Board under Section 37E and should be accompanied by an Environmental Impact Assessment Report and Natura Impact Statement.

Una Crosse

Senior Planning Inspector

April 2021

Appendix

Prescribed Bodies

Minister for Housing, Local Government and Heritage
Minister for Environment, Climate and Communications
Minister for Tourism, Culture, Arts, Gaeltacht, Sport and Media
Minister for Agriculture, Food and the Marine
Kerry County Council
Clare County Council
The Southern Regional Assembly
Environmental Protection Agency
Commission for Regulation of Utilities
Transport Infrastructure Ireland
Fáilte Ireland
An Taisce
The Heritage Council
Inland Fisheries Ireland
Irish Water
Health and Safety Authority

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