MOTT MACDONALD

Shannon Technology and Energy Park (STEP) 220kV Grid Connection

Planning Report

July 2024

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Issue and Revision Record

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1 Introduction

1.1 Project Overview

Mott MacDonald Ireland Limited (Mott MacDonald) has been appointed by Shannon LNG Limited ('the Applicant') to prepare and lodge a planning application for the development of a grid connection to include two 220kV underground cable circuits and two proposed 220kV Gas Insulated Switchgear (GIS) substations (hereafter referred to as the 'proposed development'), between a proposed connection at an existing 220kV Line Cable Interface Mast (LCIM), near the existing Kilpaddoge substation and a proposed 600 MW power plant, Battery Energy Storage System (BESS) and Above Ground Installation (AGI) development site, referred to as the Shannon Technology and Energy Park (STEP) Power Plant (ABP case reference: 319566).

The proposed development will be located within the townlands of Carhoona, Carhoonakilla, Carhoonakineely, Cockhill, Coolnanoonagh, Farranawana, Kilcolgan Lower, Kilcolgan Upper, Kilpaddoge and Ralappane, County Kerry.

This planning report provides an outline of the planning considerations relating to the proposed development and forms part of the planning application documentation being submitted as part of the Strategic Infrastructure Development (SID) application to An Bord Pleanála (ABP).

1.2 The Applicant

Shannon LNG Limited is a subsidiary of New Fortress Energy ("NFE"). NFE is a global energy transition company with operations in ten countries and is now at the forefront of green Hydrogen developments. NFE looks forward to playing a leading role in Ireland's energy security and transition to net zero.

NFE was founded with the mission to help accelerate the clean energy transition and reduce energy poverty around the world. NFE builds, owns and operates critical energy infrastructure to rapidly provide more reliable, affordable, and cleaner fuels in many markets around the world. NFE are investing in Ireland because they believe they can play a meaningful role in supporting Ireland's energy security and transition to net zero.

Globally, NFE operates numerous Power Plants. For example, it operates a 485 MW Power Plant at Long Ridge, Ohio, which is the first purpose-built hydrogen-burning power plant in the United States[1]. It also operates a 150 MW gas-fired CHP unit in Jamaica and is building a 630 MW combined cycle gas turbine (CCGT) in Barcarena, Brazil.

Additionally, in January 2022, NFE's independently managed subsidiary, Genera was selected by the Puerto Rico Public-Private Partnerships Authority for a 10-year Operation and Maintenance Agreement with the Puerto Rico Electric Power Authority ("PREPA"). Under the agreement, Genera will operate, maintain, decommission and modernise the PREPA-owned thermal power generation system of approximately 3,600MW. Genera was selected after a competitive process. The selection was made based on extensive grading criteria, which included operational experience, technical expertise, approach and methodology and estimated cost savings. The contract has received all necessary regulatory approvals from the government of Puerto Rico, the Fiscal Oversight Management Board and Puerto Rico's Electricity Bureau.

[1] The plant is burning between 15-20% hydrogen initially, with the capability to transition to 100% hydrogen over time. The intention, over time, is for the proposed CCGT power plant in Kerry to match this development.

The development of the subject proposed 220kV substations and underground transmission cables connecting to the existing overhead 220kV Kilpaddoge circuits, will be a “contestable development”. This means that the ‘developer’ (in this case, the Applicant) will be responsible for the design, construction, fit-out and pre-commissioning of both the proposed 220kV GIS substations (1No onsite EirGrid GIS substation and 1No customer GIS substation) and the underground 220kV transmission line circuit and connections to the existing overhead 220kV transmission circuit.

Upon completion of the works, the proposed onsite EirGrid 220kV GIS Substation and the underground transmission cable will be handed over to EirGrid, who in conjunction with ESB Networks (ESBN), will carry out the final commissioning and energisation of the proposed substation and transmission line connections. Once energised, the proposed EirGrid GIS substation and cable grid connection will form part of ESBN infrastructure (in their role as Transmission Asset Owner (TAO), and EirGrid will be responsible for operating the system (in their role as Transmission System Operator (TSO)). The customer GIS substation will not be transferred to EirGrid or ESBN and will continue to be owned and operated by Shannon LNG Limited.

The proposed subject development is an expansion of the 220kV high voltage transmission system. While initially the grid connection will be solely utilised to connect the Applicant’s 600MW natural gas fired power plant, this does not in any way exclude, or deny access to, any future renewable project that wishes to utilise the grid connection.

Once constructed, EirGrid will be able, and indeed obligated as TSO, to offer connection to renewable projects. Indeed, once built, the proposed subject development will become the closest transmission connection point for west coast offshore renewable projects that are currently under development. The proposed EirGrid 220kV GIS substation, and the Applicant’s nearshore area, represent an ideal location for these projects. The Applicant welcomes and supports the use of the connection for any future renewable connection.

The proposed subject development facilities the future connection of renewable generation, and any such future renewable connection(s) will be subject to a separate environmental impact assessment.

1.3 Project Need

In the context of the energy insecurity profile in Ireland, Shannon LNG Limited was awarded an electrical generation capacity contract from EirGrid on 28 March 2023, to deliver a 400MW Power Plant, with this being required to be operational by the beginning of Q4 2026, or any later date approved by the Commission for Regulation of Utilities (CRU). Shannon LNG Limited subsequently successfully applied to EirGrid for the connection of its proposed power plant to the EirGrid network and executed a Connection Agreement for a 600MW Maximum Export Connection in April 2023.

On 15 November 2023, under pre-application case reference number ABP-316518-23, An Bord Pleanála issued a Strategic Infrastructure Development Determination for the proposed 600MW Power Plant, 120 MW -1hr Battery Energy Storage System (BESS) and Above Ground Installation (AGI), confirming that the proposed 600MW Power Plant proposal was considered to comprise Strategic Infrastructure Development. The proposed power plant would provide highly flexible and efficient power generation to back up intermittent renewable generation. This application was subsequently lodged with An Bord Pleanála, on the 19 April 2024 (ABP case reference: 319566).

The subject Shannon Technology and Energy Park (STEP) **220KV Grid Connection** project, consisting of the subject proposed two GIS substations and the underground cable grid

connection to the electricity network, will provide a stable, sustainable connection from the proposed Shannon Technology and Energy Park (STEP) Power Plant to the grid. The purpose of the two projects (i.e. STEP and the subject proposed development), is to provide a range of electricity capacity, reinforcement, flexibility and ancillary services to the grid and assist with the transition to a low carbon economy.

1.4 Legal Context

The proposed development does not belong to a class of development listed within the Seventh Schedule of the Planning and Development Act, 2000 (as amended). Notwithstanding, having regard to nature of the proposed development, the provisions of Section 182 and to the definition of transmission in section 2(1) of the Electricity Regulation Act, 1999, as set out further hereunder, it is considered that the proposed development would be considered to comprise strategic infrastructure development.

Section 182A(1) of the Planning and Development Act, 2000 (as amended) requires, '*where a person (hereafter referred to as the 'undertaker') intends to carry out development comprising or for the purposes of electricity transmission, the undertaker shall prepare, or cause to be prepared, an application for approval of the development under section 182B and shall apply to the Board for such approval accordingly."*

Section 182A(9) of the Act states that *'the term 'transmission' shall be construed in accordance with section 2(1) of the Electricity Regulation Act 1999*, which defines *'transmission'* as:

'…the transport of electricity by means of a transmission system, … a system which consists, wholly or mainly, of high voltage lines and electric plant and which is used for conveying of electricity from a generating station to a sub-station, from one generating station to another, from one substation to another or to or from any interconnector or to final customers but shall not include any such lines which the Board may, from time to time, …specify as being part of the distribution system …'.

It further defines 'electric plant' as follows: *"electric plant" means any plant, apparatus or appliance used for, or for purposes connected with, the generation, transmission, distribution or supply of electricity, other than…"*, with Section 182A of the Planning and Development Act, 2000 (as amended) further clarifying that 'for the purposes of section 182A, *(transmission) shall also be construed as meaning the transport of electricity by means of a high voltage line (equal to or greater than 110 kilovolts)…'*

The proposed STEP Power Plant development (ABP case reference: 319566) will create and provide electricity (as a new power generation node) to be transferred to the proposed new 220kV GIS substations and connecting into the existing network near Kilpaddoge, thus connecting the future proposed STEP Power Plant to the national grid. The subject proposed development will thus also create/establish a new transmission generation node onto the network via the proposed new transmission cables (these will 'break' into the Tarbert to Kilpaddoge circuit to the southeast of the existing Kilpaddoge substation – i.e. the Kilpaddoge to Glensillagh and Glensillagh to Tarbert circuits) and create a 'ring' around the Shannon Estuary, thus providing more electricity to the area. The proposed development, which includes approximately 5km of underground electricity transmission cable, will transport electricity between these points.

On the basis of the above, the proposed development is considered to fall within the definition of both electric plant (the proposed substations) and transmission (proposed underground grid cable and connection) set out in section 2(1) of the Electricity Regulation Act, 1999 and, therefore comprises strategic infrastructure development under Section 182A(1) of the Planning and Development Act, 2000 (as amended).

1.4.1 Pre-application Consultation with An Bord Pleanála

Section 182E of the Planning and Development Act 2000 (as amended) requires that a prospective applicant shall, prior to making an application for approval for electricity transmission development, enter into consultations with An Bord Pleanála in relation to the proposed development. During this process, the Board may give advice regarding the application, including the procedures involved and what considerations relate to proper planning and sustainable development and the environment, may, in its opinion, have a bearing on its decision. Shannon LNG Limited, with its consultants, has engaged in consultation with the Board prior to submitting this subject application.

A pre-application request was submitted to the Board on 28 September 2023. A pre-application consultation was held with the Board on 01 December 2023 (ABP case reference ABP-318119-23). The focus of this meeting was to introduce the Board to the proposed development. The applicant addressed queries from the Board, including the need for a second substation, clarifying that the need was due to all the bays within Kilpaddoge substation already being fully allocated. The Applicant also confirmed that the cable route was still at the design stage and would be finalised prior to the closure of the pre-application process.

The pre-application consultation process was closed by the Applicant via a letter dated 26 April 2024, which provided the Board with details of the proposed minor relocation of the GIS substations for the purpose of reducing visual impacts on the locality. The closure letter also provided confirmation of the finalised cable route, as requested by the Board in the initial pre-application consultation. The applicant received SID determination[2] from An Bord Pleanála on the 15 May 2024.

1.5 Report Structure

The structure of this report is as follows:

- **Chapter 1: Introduction** This chapter sets out the background of the proposed development.
- **Chapter 2: Description of the Development** This details all elements of the proposed development.
- **Chapter 3: Planning Context** This section provides an overview of planning policy throughout the planning hierarchy and provides an indication as to how the proposed development is consistent with the realisation of these planning policies and objectives. It also sets out the land use and zoning context of the proposed development site relative to the provisions of the Kerry County Development Plan.
- **Chapter 4: Planning History** This chapter details the planning history at the application site and details other consented projects or future projects within the surrounding environs which may overlap or interact with the proposed development.
- **Chapter 5 Planning Assessment** and **Chapter 6 Conclusion** These chapters summaries how the proposed development is in accordance with strategic planning and policy considerations throughout the planning hierarchy and the principles of proper planning and sustainable development.

[2] https://www.pleanala.ie/en-ie/case/318119

2 Description of Proposed Development

2.1 Site Location and Description

The 31.6 hectare application site is located in a rural area of north county Kerry, in the townlands of Ralappane, Kilcolgan Lower, Kilcolgan Upper, Carhoonakineely, Carhoonakilla, Cockhill, Coolnanoonagh, Carhoona, Farranawana and Kilpaddoge. The nearest settlement is Tarbert, located 0.8km to the southeast of the application boundary, and Ballylongford is located 3.8km to the southwest. The Shannon Estuary is located to the north of the application boundary (within circa 80m at its closest point).

The site of the proposed Gas Insulated Switchgear substations, in the townland of Ralappane, is currently agricultural land, with an agricultural farmyard and dwelling sited approximately 300m to the southeast. The Ralappane stream is noted to occur approximately 80m to the west of the application boundary. This stream flows into the Shannon Estuary to the north.

The proposed 5km of 220kV underground cables and fibre optic cable will originate from the proposed GIS substations and will extend southeast to join the L1010 public road, crossing the Ralappane stream. The cable route will extend eastwards within the L1010, with 2.2km of cabling being pulled through existing cable ducting within the L1010. The cable route will then extend north to connect to an existing Line Cable Interface Mast (LCIM).

Figure 2.1: Site Location

Source: Extract from Mott MacDonald drawing

Kerry County Council obtained Part 8 planning for the widening of the L1010. It is noted that a total of 1.3km of the overall 4.36km section of the L1010 has been widened to date. The road widening is required for the construction of the STEP Power Plant. Cable ducting provision for

the subject grid connection along and within the L1010, will be implemented as part of the Part 8 development works associated with the widening of the road. These Part 8 works will be fully funded by the Applicant by means of a special development contribution under section 48(2)(c) of the Planning and Development Act 2000 (as amended), to cover the full cost of the upgrade works including the ducting and joint bay installation. The grid connection works related to the subject application, where these occur within the public road, are thus limited to pulling the two 220kV cables through the cable ducting (provided within the L1010 road widening by Kerry County Council as part of the Part 8 development works). The planning application boundary for the subject development therefore extends along the Compulsory Purchase Order boundary for the road works.

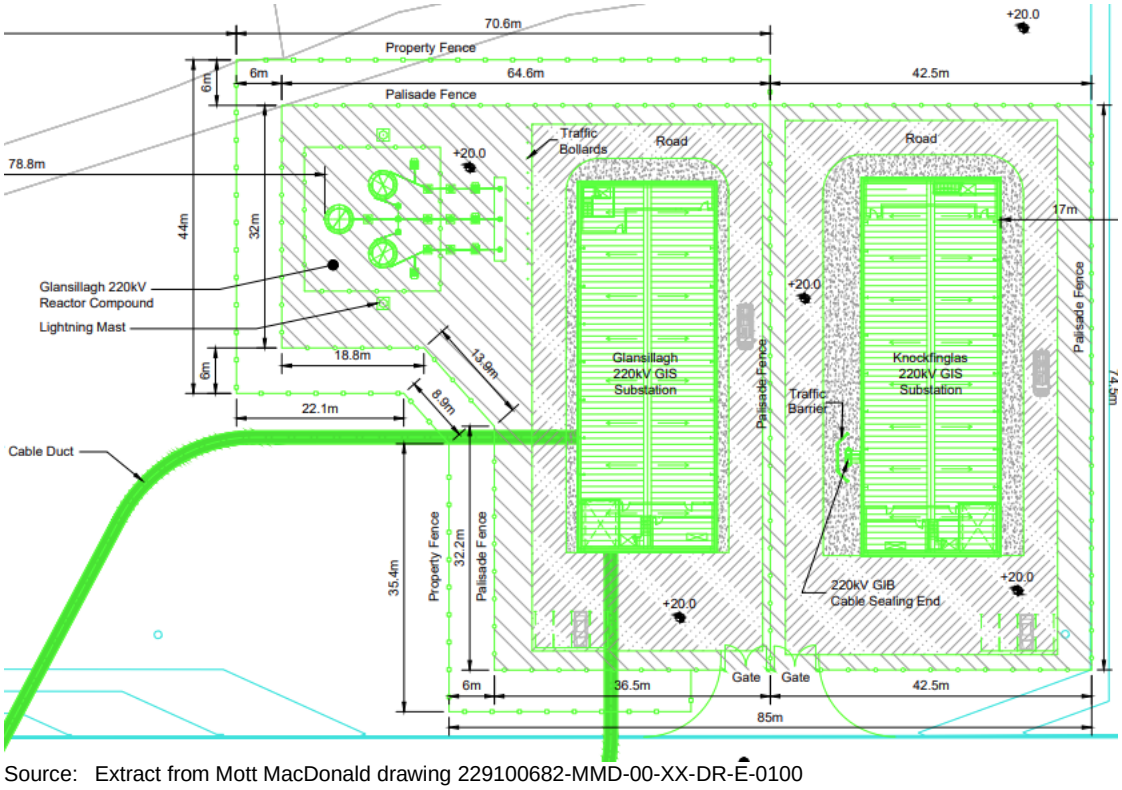
2.2 Proposed Development Description

The subject proposed development is for the approval of two 220 kV substations and two 220kV underground cable circuits between the Shannon Technology and Energy Park (STEP) and an existing 220kV Line Cable Interface Mast (LCIM), in the vicinity of Kilpaddoge substation, which in turn connects via an existing overhead cable to the existing substation. The proposed development as stated in the statutory notices is detailed below and a site layout the substation compounds is provided in Figure 2.2.

a. An EirGrid plc operated Gas Insulated Switchgear (GIS) substation compound (Glansillagh 220kV substation) measuring a total footprint of approximately 3,666.4 sqm, enclosed with a 2.6m high security fence and 1.4m high post and rail fence in the townland of Ralappane, and comprising of the following:
    - 1no. 906.5m sq. two storey GIS 220kV building measuring 17m in height,
    - 1no. Reactor compound (19m L x 18m W) enclosed with 2.6m high security fencing and containing 3no. shunt reactors (3.4m diameter x 10m H),
    - Associated Air Insulated Switchgear electrical equipment including cable sealing ends (6.2m H), surge arrestors and associated steelwork (6.2m H), post insulators (6.2m H) and 2no.lightning masts (18.5m high);
b. A Customer operated Gas Insulated Switchgear (GIS) substation compound (Knockfinglas 220kV substation) measuring a total footprint of approximately 3,166 sqm. enclosed with a 2.6m high security fence in the townland of Ralappane and including 1no. two storey 220kV GIS building measuring 925sqm and 17m in height; with associated 11.4m high Gas Insulated Busbar (GIB);
c. 5km 220kV underground cables and fibre optic cable, 2.8km for which cable ducting and cables will be provided off-road, and 2.2km of cable will be pulled through existing cable ducting within the L1010, and associated cable joint bays, communication chambers and link boxes along the cable route; and
d. All associated ancillary site development works to facilitate the proposed development including, surface water drainage, lighting arrangements, temporary construction compounds and laydown areas, hardstanding, access tracks, vegetation clearance and decommissioning of an existing 220kV underground cable.

As with the STEP Power Plant, a 10-year permission approval validity has been applied for.

Figure 2.2: Site Layout for Proposed Substations



Source: Extract from Mott MacDonald drawing 229100682-MMD-00-XX-DR-E-0100

The proposed EirGrid 220kV substation will be named Glansillagh 220kV substation, and the Customer 220kV GIS substation will be known as Knockfinglas 220kV substation. Both proposed substations are proposed to be located within the planning application boundary of the proposed STEP Power Plant project (ABP case reference: 319566), upon lands identified within that application as a temporary construction compound.

If planning permission/ approval is granted, the proposed construction schedule for the STEP Power Plant and Grid Connection projects will be undertaken simultaneously, due to the time constraints placed upon Shannon LNG Limited through the electrical generation capacity contract with EirGrid, which requires the STEP Power Plant to be operational by the end of 2026, or any subsequent date approved by the CRU. The 220kV grid connection will be installed prior to commencing operation of the proposed development with construction commencing in October 2026, following the enabling, earthworks and site preparation works for the STEP Power Plant which are anticipated to commence in January 2026. The overall duration of the construction phase is expected to be approximately 27 months for both the substations and underground cables.

As previously stated, the two 220kV cables forming the grid connection, will also be laid in both private lands and pulled through cable ducts already provided within the public road. The section of cable ducting within the public road will be laid by Kerry County Council as part of the completion of the Part 8 approved road widening works. The timing of the works to be undertaken by Kerry County Council will be cognisant of the need and objective of the road widening works to facilitate the STEP Power Plant project. Construction dates are dependent upon obtaining planning approval, condition compliance and the date(s) that these are achieved. These Part 8 works will be fully funded by the Applicant by means of a special development contribution under section 48(2)(c) of the Planning and Development Act 2000 (as

amended) to cover the full cost of the upgrade works including the ducting and joint bay installation.

3 Policy Context and Planning Appraisal

3.1 Introduction

The need for the proposed development is supported by European, national, regional, and local planning policies and objectives relating to energy development and energy security of supply. This section provides an overview of such policy and provides an indication of how the proposed development is aligned with and will be consistent with, the realisation of these commitments, policies and objectives. It also sets out the land use and zoning context of the proposed development site, relative to the provisions of the Kerry County Development Plan 2022-2028.

3.2 European Policy Context

3.2.1 Energy Roadmap 2050

The Energy Roadmap 2050 was published in 2011 by the European Commission. The Roadmap explores how the energy system can transition to a lower carbon system, in line with the targets for reducing greenhouse gasses – as outlined in the Renewable Energy Directive. In addition, the Roadmap also explores opportunities for increasing competitiveness and supply. Four main routes were identified in this roadmap for achieving a more sustainable, secure, and completive energy system by 2050:

- Energy Efficiency
- Renewable Energy
- Nuclear Energy
- Carbon Capture and Storage

The Energy Roadmap highlights that while the energy system in Europe needs to adapt to respond to the climate emergency and the wider global economy, security of supply in the transitional period, including the need for additional infrastructure, will be vital to ensure energy targets for 2050 can be achieved.

In this regard, the Roadmap outlines (in Part 3, section (c)), that "*Gas will be critical for the transformation of the energy system"* and the substitution of coal and oil with gas can assist in facilitating a reduction in emissions in the short to medium term.

The Roadmap also acknowledges that in order to achieve the envisioned energy system in 2025, "A new sense of urgency and collective responsibility must be brought to bear on the development of new energy infrastructure and storage capacities across Europe and with neighbours". The Roadmap recognises that energy cannot be supplied to homes and businesses without appropriate infrastructure, and ensuring there is adequate transmission capacity is vital to the continued security of supply across member states.

Project Response

The proposed development will provide for energy transmission infrastructure to supply energy generated from a proposed 600MW power plant to the existing electricity system via two 220kV GIS substations and an approximate 5km underground grid connection cable. The Energy Roadmap acknowledges that gas will play an important role in the transition to a low carbon future, and the proposed development will facilitate power generated by a gas power plant to be transferred onto and utilised by the existing transmission and distribution grid system. In addition, the proposed development consists mainly of transmission infrastructure and

associated substations, which is aligned with the requirement for additional such infrastructure as outlined within the Roadmap.

The proposed development is an expansion of the high voltage transmission system. While initially the grid connection will be solely utilised to connect the proposed STEP Power Plant, this does not exclude, or deny access to, any future renewable project that wishes to use the grid connection. Once constructed, EirGrid will be able, and indeed obliged under its role as Transmission System Operator, to offer connection to other renewable projects.

The proposed development allows for future renewable energy projects to connect to the transmission system and complements the move to a robust renewable energy-based transmission system.

3.2.2 Grids, the missing link – An EU Action Plan for Grids COM (2023) 757

This communication was issued on 28 November 2023 from the Commission to the European Parliament and outlines an EU Action Plan for grid development and identifies *"seven horizontal challenges for accelerating the pace of grid development in Europe. These are 1) accelerating implementation of existing PCIs and developing new projects; 2) enhancing long-term network planning; 3) introducing a supportive, future-proof regulatory framework; 4) making better use of existing grids and smartening them; 5) improving access to financing; 6) ensuring faster and leaner permitting processes; and 7) strengthening supply chains."*

The Action Plan acknowledges that Europe's energy networks will be required to manage both increased load and demand, as electricity consumption is expected to increase by 60% in the lead up to 2030 and generation sources continue to diversify. The action plan notes that while cross boarder energy networks will have to continue to develop, the bulk of investment will be required within boarders.

Under the above-mentioned horizontal Challenge 2 [enhancing long-term network planning], the Action Plan notes that there is a rapidly changing energy landscape which will require comprehensive long-term planning to ensure that diverse forms of energy can be integrated into the wider transmission network. Furthermore, the Action Plan notes that *"the grids need to be ready for the new system needs, especially integrating renewables and flexible demand".*

Project Response

The proposed development will directly support the Grid Action Plan as it will provide additional grid infrastructure that will allow the connection of a proposed power plant and will remove the risk of the existing transmission network becoming overloaded. The proposed development will have an overall positive benefit to the area with regard to electricity transmission and supply and will therefore support the provisions of the Grid Action Plan.

3.3 National Policy Context

3.3.1 National Planning Framework

The National Planning Framework (NPF) was published in February 2018 as part of Project Ireland 2040. It is a 20-year planning framework designed to guide public and private investment, to create and promote opportunities for Irish citizens, and to protect and enhance Ireland's built and natural environment.

The NPF contains several National Strategic Outcomes (NSO) over various topics. NSOs 3, 6 and 8 support the strengthening of the economy, while NSOs 4,7 and 10 support providing quality access to public services. Achieving sustainable growth of settlements and management of environmental resources are supported by NSOs 1 and 9. None of the above mentioned

NSOs are achievable or sustainable without a secure and reliable electricity supply. Ireland's National Energy Policy is focussed on three pillars outlined in the NPF:

- Sustainability
- Security of Supply
- Competitiveness

Within these pillars, NSO 8 - Transition to a Low Carbon and Climate Resilient Society, outlines the necessity of new energy systems and energy grids in enabling a more distributed, renewable focused generation system, acknowledging the need to *"Reinforce the distribution and transmission network to facilitate planned growth and distribution of a more renewables focused source of energy across the major demand centres."*

To support the above outlined NSOs, the NPF also outlines a range National Planning Objectives (NPOs) to guide development and investment; of these NPOs, the following are of relevance of the proposed development:

NPO 52 The planning system will be responsive to our national environmental challenges and ensure that development occurs within environmental limits, having regard to the requirements of all relevant environmental legislation and the sustainable management of our natural capital.

NPO 54 Reduce our carbon footprint by integrating climate action into the planning system in support of national targets for climate policy mitigation and adaptation objectives, as well as targets for greenhouse gas emissions reductions.

NP 73c Planning authorities and infrastructure delivery agencies will focus on the timely delivery of enabling infrastructure to priority zoned lands in order to deliver planned growth and development.

Project Response

The proposed development will provide for the connection of a proposed powerplant to the wider energy transmission grid, which will support the NSOs outlined in the NPF. The proposed development will ensure energy will be supplied to the grid during the national shift toward increased reliance on renewable energy. The proposed development will ensure that energy supply remains secure and reliable, particularly in periods where energy generation from renewable sources is low. This will support NPO 73c as the proposed development is located within lands zoned for energy infrastructure and the expansion of the energy market.

In alignment with NPO 52, the proposed development has been subject to environmental assessments, and any potential impacts that the proposed development may have on the wider environment are detailed in the accompanying Environmental Impact Assessment Report and Natura Impact Statement. The proposed development has been designed to ensure it complies will relevant environmental legislation.

The proposed development is one which will support the uptake of low carbon and renewable technologies to the electricity grid. The reduction in greenhouse gases in the electricity sector between 2005 and 2020 as noted in the Climate Action Plan 2024, are attributed to increased deployment of renewables and use of higher efficiency gas turbines. Consequently, the proposed development will help to support the decarbonisation of the electricity sector and the national economy and is therefore aligned with NPO 54.

3.3.2 National Development Plan 2021-2030

The National Development Plan 2021-2030 (NDP) was published in October 2021 and sets out investment priorities that will underpin the implementation of the National Planning Framework, highlighting that "*Extensive efforts have been made to ensure that the NDP will support the*

Government's climate ambitions". In the context of the energy sector, the NDP also highlights that "*The long-term objective is to transition to a net-zero carbon, reliable, secure, flexible and resource-efficient energy services at the least possible cost for society by mid-century".*

The NDP acknowledges that ensuring energy supply is secure is vital for the proper functioning of society and is considered *"a priority at national level and within the overarching EU policy framework in which our energy markets operate"*. In this regard, the NPD highlights that the reliability of energy supply will be strengthened through investment into the electricity transmission and distribution grid. While there is a focus on decarbonising the energy system, the NDP acknowledges that to achieve this there will need to be coordinated investment in "*conventional electricity generation capacity to support the operation of the electricity system and provide security of supply for when variable generation (wind/solar) is not sufficient to meet demand;"* and *"an expanded and strengthened electricity transmission and distribution network;".* It also outlines that gas fired, conventional energy generation will be required in the short to medium term to ensure the energy system is in a position to respond to high levels of demand, or when renewable energy is not available.

Project Response

The NDP acknowledges that conventional electricity generation will be required to ensure that the electricity system can reliably respond to demand. The proposed development will facilitate this by providing transmission infrastructure that will connect and supply electricity generated from a proposed power plant facility to the existing electricity transmission grid. This will ensure that energy can be supplied to the grid in times when renewable generation is not sufficient to meet demand. In this regard the proposed development is aligned with the provisions of the NDP, and the Strategic Investment Priorities outlined above, as the proposed development will reinforce the transmission grid and transfer energy from a power generation facility to the national grid.

The proposed development is an expansion of the transmission electricity grid. While initially the grid connection will be solely utilised to connect the proposed STEP Power Plant, this does not in any way exclude, or deny access to, any future renewable project that wishes to utilise the grid connection. The proposed development thus facilities the future connection of renewables.

The proposed substations and grid connection development complement the move to a robust renewable energy-based transmission system.

3.3.3 National Adaption Framework

Ireland's first statutory National Adaptation Framework (NAF) was published in January 2018, and sets out the national strategy to reduce the vulnerability of the country to the negative effects of climate change and to avail of positive impacts. The NAF identifies 12 key sectors sectoral adaptation plans are to be prepared, including the Electricity and Gas Networks Sector which is discussed herein.

Adaptation Plan for Electricity and Gas Networks Sector (Energy)

The first Adaptation Plan (AP) for the energy networks (electricity and gas) sector, has been prepared under the National Adaptation Framework and was approved on 22 October 2019. The AP recognises *"that the energy sector is essential to the functioning of a modern economy and is a key enabler to all other economic activities",* and that significant negative impacts on the economy and citizens can come as a result of disruptions or reductions in the supply of energy.

It is acknowledged that while the energy sector is a large contributor to climate change, it is also at risk with potential consequences for both energy resources and the sustainability of the infrastructure. While it is reiterated that a transition to renewable energy will be vital to

responding to the climate crisis, it is also acknowledged that *"on-going development and renewal of the energy networks is essential to ensure Ireland's energy system is safe and secure and ready to meet demand."* In this regard, the AP notes that a diverse range of power generation assets contribute to the energy mix, which is important in delivering energy security, reducing dependence on any one source, and that the electricity network is reliant on gas fired generation when renewables are not available. This is likely to remain the reality for the medium term as the variability of wind generation will lead to increased requirements for backup generation and storage.

Project Response

The proposed development supports the ambitions of the National Adaption Framework and associated energy sector adaptation plan. The proposed development will provide a connection from the proposed STEP Power Plant to the national grid, thus ensuring the connection of an additional (and diverse) supply of energy to the grid. While initially the grid connection will be solely utilised to connect the proposed STEP Power Plant, this does not exclude, or deny access to, any future renewable project that wishes to use the connection. This will assist in ensuring there is a secure supply available to the transmission system when energy from renewables is not sufficient to meet demand. The proposed power plant to which the proposed development will connect, is gas fired, which is noted as being required to facilitate adequate electricity supply in the medium term.

3.3.4 Policy Statement on Security of Electricity Supply 2021

Security of electricity supply is essential for the continued functioning of society and the economy. Energy import dependency is a significant indicator of the country's energy security. The Sustainable Energy Authority of Ireland (SEAI, 2021) reports that in 2020, Ireland's energy import dependency had increased to 72%.

In November 2021, the Department of the Environment, Climate and Communications published the Policy Statement on Security of Electricity Supply. This statement sets out a number of updates to national policy in the context of the Programme for Government commitments relevant to the electricity sector, planning authorities and developers. The policy statement also lists various challenges to ensuring security of electricity supply. These include:

- Ensuring adequate electricity generation capacity, storage, grid infrastructure, interconnection and system services are put in place to meet demand – including at periods of peak demand; and
- Developing grid infrastructure and operating the electricity system in a safe and reliable manner.

The Statement also reiterates that "*ensuring continued security of electricity supply is considered a priority at national level within the overarching EU policy framework in which the electricity market operates*".

The policy statement includes explicit Government approval that (inter alia):

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

Project Response

The proposed development will connect a proposed gas-powered electricity generation facility to the wider transmission grid and represents the type of infrastructure necessary to meet demand and support the growth of renewable energy, as outlined within the policy statement. The subject proposed grid connection and associated infrastructure will thus assist in addressing and ensuring security of supply of electricity, as outlined as a priority in the coming years, as the energy system coverts to a more renewable focused landscape.

In addition, the proposed development will provide additional grid infrastructure, in the form of underground transmission cables and substations, with this infrastructure forming part of the new Kilpaddoge to Glensillagh and Glensillagh to Tarbert circuit and assisting to create an enhanced transmission circuit within the area. This will have an overall positive benefit to the area with regard to electricity transmission and supply.

3.3.5 National Energy Security Framework

The Government published the National Energy Security Framework in April 2022, responding to the State's energy security needs in the context of the war in Ukraine, which highlighted vulnerabilities in Ireland's energy security of supply policy. The Framework outlines the structures which are in place within Government to monitor and manage national energy supplies. It sets out the plans which are in place to deal with energy security emergencies should they arise.

The Government's response to the impacts on the security of supply as a result of the war in Ukraine are based upon that of the European Union - phasing out fossil fuels sourced from Russia, whilst seeking to ensure security of energy supply. The national response is set out under three themes;

- Managing the impact on consumers and businesses
- Ensuring security of energy supply in the near term
- Reducing our dependency on imported fossil fuel in the context of phasing out Russian energy impots across the EU

In relation to Theme 2, the National Energy Security Framework One-Year Report published in June 2023 highlights that "*there has been significant demand growth in the Irish electrical system in recent years brought about by greater electrification in the heat and transport sectors, demand from large energy users and from changes in demographics. There are also challenges on the supply side, as outlined in EirGrid's All-Island Generation Capacity Statement, concerning deteriorating availability of existing plant and of the failure of forecasted new generation to materialise. This has led to reduced margins between supply and demand which, in turn, has brought a greater risk of disruptions to the electricity system. This risk is being managed in Ireland through the CRU's Security of Supply programme*."

Associated with the above a number of responses are being progressed, including the implementation, as a priority, of a programme of work set out by the CRU to ensure security of electricity supply. This includes the need to increase the level of dispatchable generation, to ensure the expected demand for electricity can be consistently and reliably met. One of the means of ensuring this is via long term capacity procurement and provision, new generation capacity auctions and policy development and implementation, and accelerated investment in the electricity grid and the development of storage technologies.

Project Response

Shannon LNG Limited was awarded an electrical generation capacity contract from EirGrid to deliver a 400MW Power Plant. They also subsequently successfully applied to EirGrid for the

connection of its proposed power plant, to the EirGrid network, and executed a Connection Agreement for a 600MW Maximum Export Connection, in April 2023. The subject development, as a grid connection development which supports new generation (STEP Power Plant), is consistent with required responses under the programme of work to address security of supply to provide new generation capacity. The proposed development will allow the fulfilment of the connection agreement and provide additional electricity to the national grid when it is needed.

3.3.6 Energy Security in Ireland to 2030 – Energy Security Package November 2023

Published by the Government in November 2023, Energy Security in Ireland to 2030 outlines a new strategy to ensure energy security in Ireland for this decade, while ensuring a sustainable transition to a carbon neutral energy system by 2050. This report forms part of a wider Energy Security Package which aims to ensure energy is affordable, sustainable, and secure while also considering the risks to oil, natural gas, and electricity.

The report outlines that *"Ireland's current energy system presents several risks in ensuring uninterrupted availability of energy sources"*, and that these risks will evolve as the energy system transitions to a renewables-based system. These include risks to supply, sudden increase in demand, under delivery of targets, attack and cyber security risks, climate change and investment.

To support Irelands energy system against the above outlined risks, the Security Package outlines a number of actions. Those considered to be of relevance to the proposed development are provided below:

Action 8: To complete implementation of the CRU Security of Electricity Supply Programme

Action 8 focuses on a programme of works published by the CRU that aims to mitigate against the risks posed by shortfall of generation capacity in the electricity sector, particularly during winter periods. The actions proposed as a result of this programme of works include *"the procurement of at least 2GW of new, flexible, enduring, capacity through market mechanisms".*

Action 11: To ensure a fit-for-purpose electricity grid that supports Ireland's energy and climate ambition.

Action 11 acknowledges that the electricity grid and network is the most important component of the energy system, and that it is essential for ensuring that all new electricity generation, both renewable and conventional, is able to connect to the electricity grid as soon as the generation is available.

Project Response

The proposed development will support Actions 8 and 11 of the Security Package by facilitating the connection of a proposed power plant to the transmission network. This will ensure that, when the proposed power plant is in operation, it can supply electricity to the transmission and distribution network. In turn, this will allow for energy to be supped to the grid during times of high demand or when energy from renewables is insufficient.

3.3.7 Government White Paper – Irelands Transition to a Low Carbon Energy Future 2015-2030

The Government White Paper entitled Ireland's Transition to a Low Carbon Energy Future 2015-2030 sets out a framework to guide Ireland's energy policy development and actions that the Irish Government intends to take in the energy sector up to 2030 - also reaching out to 2050. The framework was developed in the context of the significant role played by European

institutions in determining energy policy, markets, and regulation. Similarly, it takes account of European and international climate change objectives.

The Energy Vision 2050 established in the White Paper describes a 'radical transformation' of Ireland's energy system which it is hoped will result in GHG emissions from the energy sector reducing by between 80% and 95%, compared to 1990 levels. This means that the diversification of energy supply during the national transition to a renewable energy system will need to shift away from carbon-intensive fuels such as peat and coal in favour of lower carbon fuels like natural gas. The White Paper acknowledges that *"Oil and gas will contribute to security of supply through the period of transition, on a declining basis over time"* and that *"adequate infrastructure"* is required to maintain energy security during the transition.

Project Response

The proposed development is aligned with the White Paper, as it will allow for energy generated from a proposed power plant to be connected to the electricity transmission and distribution grid at Kilpaddoge 220kV substation, via two new GIS substations and underground grid connection. The White Paper notes that gas will play a role in ensuring a security of supply during the transition away from carbon intensive energy generation. The proposed development will compromise almost exclusively of electricity transmission infrastructure, which the White Paper outlines is a requirement for maintaining a secure energy system during the transition to a low carbon system.

3.3.8 National Energy and Climate Action Plan

The National Energy and Climate Plan (NECP) is a mandated plan by the European Commission (EC) under the European Green Deal in order to meet European Union overall greenhouse gas emission targets. The NECP is a consolidated plan which brings together energy and climate planning into a single process for the first time. Each plan establishes key measures to address the five dimensions of the energy union: decarbonisation, energy efficiency, energy security, internal energy markets and research, innovation and competitiveness.

The first [Irish] NECP was submitted to the EC on 31 December 2018. The Draft NECP 2021-2023 was submitted to the EC in December 2023, and reflects increased ambition on energy and climate following the Fit for 55 legislative package, which set more ambitious targets at the European and national level in a range of areas such as renewable energy, energy efficiency and land-use, to enable the EU to meet its target of reducing greenhouse gas emissions by 55% by 2030. An update to the Draft NECP has been undertaken since December 2023, and was informed by feedback form the EC and the public. The Draft Updated NECP has been subject to a second round of public consultation (ending on 27 June 2024) and will then be submitted as a final update to the EC later in 2024.

As stated within the NECP, *"Ireland's objectives are to maintain and, where necessary, facilitate the enhancement of resilience of our electricity and gas networks."* p.22

Table 1 (Overview table with key objectives, policies and measures of plan), also highlights that in relation to 'Energy Security' a 'Key Policy and Measure' includes facilitating '*infrastructure projects, including private sector commercial projects (subject to the outcomes of applicable environmental assessments and the planning process), which enhance Ireland's security of supply and are in keeping with Ireland's overall climate and energy objectives*'. In this regard, and with relevance to the proposed development, the NECP outlines the following national objective;

"Support projects which are needed for energy security and consistent with national and EU climate policy objectives, including but not limited to the EU Projects of Common Interest

process and EU funding mechanisms and projects agreed by Government of strategic importance to provide greater resilience and security to Ireland's energy system." p.97

The NECP also reiterates the issues highlighted within the '*Energy Security in Ireland to 2030*' report, noting that Irelands energy supply will transition toward an electricity led system in order to increase the security of supply, and acknowledges that large amounts of new grid infrastructure will need to be developed. The NECP also notes that the report emphasised that *'Ireland's existing plans to grow renewable generation, demand-side flexibility, new gas-fired generation as back-up, interconnection and storage are the right ones to secure electricity supplies*.'

Project Response

The proposed development, while not a type of development that will contribute directly to the climate ambitions in and of itself, is nonetheless it is still a project considered to be aligned with the NECP. The proposed development will provide grid infrastructure that will facilitate the connection of a proposed power plant to the national energy grid, thus assisting to in providing security the electricity supply.

The proposed development is an expansion of the transmission electricity grid. While initially the grid connection will be solely utilised to connect the proposed STEP Power Plant, this does not in any way exclude, or deny access to, any future renewable project that wishes to utilise the grid connection. The proposed development thus facilities the future connection of renewables.

The proposed substations and grid connection development complement the move to a robust renewable energy-based transmission system.

3.3.9 Climate Action Plan

The initial Climate Action Plan was published in 2019, building on the policy framework of National Mitigation Plan and Project Ireland 2040. The Climate Action Plan is integral to the National Development Plan and illustrates how climate solutions are central to the country's social and economic development. Following the enactment of the Climate Action and Low Carbon Development (Amendment) Act 2021 (Climate Act 2021) each CAP sets out a roadmap of actions on how it will achieve the commitment to 2030 emission reduction targets, increasing the proportion of electricity from renewable sources to 80% and reaching net zero by 2050. Updates to the initial CAP have been prepared in 2021, 2023 and 2024 (CAP24 was approved by Government on 21 May 2024).

To support the above ambitions, the plan outlines a number of actions that are relevant to the proposed development, as set out in each CAP post enactment of the Climate Act 2021; these are discussed below.

CAP21

It is acknowledged in CAP21 that *"additional electricity generation and transmission infrastructure will be a critical enabler to achieve our renewable energy and emissions targets"* and is subsequently listed as a target for the electricity sector *"Expand and reinforce the grid – through the addition of lines, substations, and new technologies" (p. 96).*

The following is listed under Supporting measures for the electricity sector;

"The electricity system will be strengthened through advanced building/upgrading of the grid and supporting infrastructure at key strategic locations, addressing regions that are likely to see an increased requirement based on projected increases in renewable generation connecting to the system. The building of new substations, associated infrastructure and new technologies will

also be incorporated, along with strategic upgrading of existing substations, to ensure efficient long-term and timely development of the system" (p.99).

CAP23

CAP23 was launched on 21 December 2022 with the supplementary Annex of Actions published in March 2023. The plan implements carbon budget and sectoral emissions ceilings that were introduced in 2022.

Under the measure - Accelerate Renewable Electricity Generation, the following is stated as a measure to meet the challenge of meeting sectoral emissions in the electricity sector, "*strengthen the electricity system by upgrading the network and building supporting infrastructure at key strategic locations*" (p.137).

The following action as listed in the Annex of Actions is relevant to the proposed development;

EL/23/14: CRU, EirGrid, and ESB Networks to ensure that hybrid technology grid connections are facilitated, and remaining barriers removed.

CAP24

CAP24 acknowledges that *"the deployment rates of renewable energy and grid infrastructure required to meet the carbon budget programme for electricity is unprecedented and requires urgent action across all actors to align with the national targets"* (p.154) and that the delivery of additional grid infrastructure will be needed in order to achieve the emission targets between now and 2030. It is noted that *"to achieve the necessary emissions abatement, an approximately eight-times increase of renewable energy deployment to 2.3 GW annually would be needed between 2024 and 2030".* Similar to CAP23, the following measure under Accelerate Renewable Electricity Generation is stated:

"Most fundamentally, significant investment is needed in the transmission and distribution systems to maximise the usage of renewable electricity and to reduce constraints and congestion on the system. System Operators and the CRU must ensure the timely investment in, and delivery of, the required electricity network infrastructure, including key priorities such as the North South Interconnector, to meet the targets set out in this, and subsequent, Climate Action Plans" (p.166).

Project Response

CAP23 outlines that gas fired generation will be required in the interim to meet the nation emission targets, and the proposed development will facilitate this by connecting a proposed 600MW power plant to the wider transmission and distribution grid by means of underground cabling and associated substations. CAP24 further emphasises that the development of grid infrastructure will be necessary, and the proposed development, which comprises mainly of substations and underground cables is in direct support of this. As the national energy system transitions to increased reliance on electricity, the proposed development will ensure that when the proposed power plant is in operation, it will not be placing additional load on existing infrastructure, making the overall network more secure and reliable.

3.4 Regional Policy Context

3.4.1 Regional Spatial and Economic Strategy for the Southern Region

The Regional Spatial and Economic Strategy (RSES) is a strategic plan and investment framework published to shape future growth and better manage regional planning and economic development throughout the Southern Region (which includes County Kerry) to the

year 2030. The RSES identifies regional assets, opportunities and pressures and outlines Regional Policy Objectives to manage the spatial planning in the region.

The RSES acknowledges that the provision of secure energy supply is vital to ensure the region can maintain sustainable growth. Within Chapter 8 Water and Energy Utilities, the RSES outlines that a safe and secure transmission and distribution system is critical to the continued development of the region. In this regard, the RSES also notes that the use of gas presents an *"economically beneficial route to a decarbonised energy sector".*

In the context of the above, the RSES provides a number of Regional Policy Objectives (RPOs). Outlined below are those considered relevant to the proposed development:

RPO 219 New Energy Infrastructure It is an objective to support the sustainable reinforcement and provision of new energy infrastructure by infrastructure providers (subject to appropriate environmental assessment and the planning process) to ensure the energy needs of future population and economic expansion within designated growth areas and across the Region can be delivered in a sustainable and timely manner and that capacity is available at local and regional scale to meet future needs.

RPO 222 Electricity Infrastructure It is an objective to support the development of a safe, secure and reliable supply of electricity and to support and facilitate the development of enhanced electricity networks and facilitate new transmission infrastructure projects that might be brought forward in the lifetime of this plan under EirGrid's (2017) Grid Development Strategy (subject to appropriate environmental assessment and the planning process) to serve the existing and future needs of the Region and strengthen all-island energy infrastructure and interconnection capacity.

Project Response

The proposed development will support the aims of the RSES by connecting a proposed 600 MW power plant to the wider transition network, ensuring that there is a reliable supply during times of increased pressure on the system.

In support of RPO 219 and 222, the proposed development will provide new energy infrastructure such as underground cables and substations, which will allow for a reliable energy source to be connected to the grid. Additionally, the proposed development has been assessed against relevant environmental legislation and has been subject to modelling exercises to ensure it operates within environmental limits, as outlined in the accompanying EIAR and associated reports.

3.4.2 Strategic Integrated Framework for the Shannon Estuary 2013-2020

The Shannon Estuary Strategic Integrated Framework Plan (SIFP) is an inter-jurisdictional land and marine based framework plan to guide the future development and management of the Shannon Estuary. It has been included as Volume 9 of the extant Clare County Development Plan 2023-2029. The Shannon Estuary is recognised as one of the most essential natural resources in the country, and the SIFP provides a framework for the sustainable development of the estuary and the surrounding lands to ensure the development of the region does not come at the expense of the natural attributes of the estuary.

The SIFP recognises that the Shannon Estuary is a long established, major contributor to the national energy market and there is an extensive electrical transmission network within the area. In this regard, the SIFP acknowledges that the goal in relation to energy is "*To ensure that the Shannon Estuary fulfils its optimum role in contributing to the diversity and security of energy supply and to harness the potential of the Estuary for the appropriate development of renewable energy sources to assist in meeting renewable energy targets, ensuring that all developments*

shall comply with the requirements of the Habitats Directive, Water Framework Directive and all other relevant EC Directives." To support this goal, the SIFP outlines the following general energy objectives:

SIFP ERG 1.2: Safeguarding the role & function of energy sites To safeguard the role and function of the strategic energy infrastructure existing within and adjacent to the Shannon Estuary, and encourage the further sustainable development of energy, enterprise and industry within these identified strategic energy locations, subject to the requirements of the Habitats & Birds Directive, Water Framework Directive, and all other relevant EU Directives.

SIFP ERG 1.3: Facilitating energy development To facilitate the further development of the energy infrastructure at identified strategic energy sites and encourage appropriate diversification projects subject to compliance with sustainable planning, and the requirements of the Habitats & Birds Directive, Water Framework Directive and all other relevant EC Directives.

SIFP ERG 1.4: Complimentary development To facilitate complementary industrial activities at existing strategic energy sites, ensuring that all such developments do not result in significant adverse effects on the strategic energy infrastructure, or species and habitats designated by the Habitats & Birds Directives, the Water Framework Directive and all other relevant EC Directives

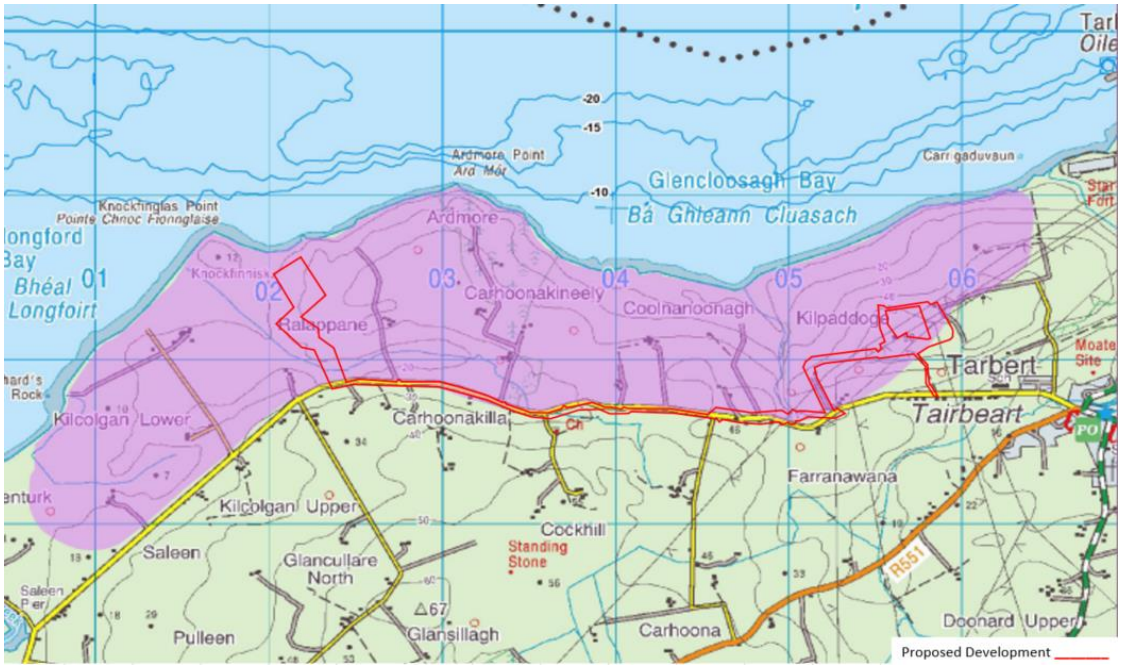
SIFP ERGI 1.5: Electricity Network To support and facilitate the sustainable development, upgrade and expansion of the electricity network, transmission, storage and distribution infrastructure ensuring that all such developments comply with the requirements of the Habitats & Birds Directives, Water Framework Directive, and all other EC Directives.

SIFP ERGI 1.6: Gas Network To support and facilitate the sustainable development, upgrade and expansion of the gas network, storage and distribution infrastructure ensuring that all such

developments comply with the requirements of the Habitats & Birds Directives, Water Framework Directive and all other relevant EC Directives

The proposed development is located within Strategic Development Location (SDL) H: Tarbert-Ballylongford Land Bank, Ballylongford (refer to Figure 3.1). This SDL is adjacent to Ballylongford Bay and is highlighted as an area of '*significant potential for future development and an asset for the region'* and notes that 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".* This area benefits from the availability of natural gas, proximity to the national grid and additional infrastructure in terms of roads and water, and the SIFP notes that this area has the potential for gas fuelled electricity generation in the future and is an attractive location for industry.

Figure 3.1: Strategic Development Location H: Tarbert – Ballylongford Land Bank



Source: Strategic Integrated Framework Plan for the Shannon Estuary, Written Statement, Page 73.

The SIFP notes that all development proposals located within SDLs will be subject to development objectives SIFP MRI 1.1, SIFP MRI 1.2, SIFP MRI 1.3, SIFP INF 1.4 and SIFP TPT 1.5, which, along with specific development objectives for SDL H, are outlined below:

SIFP MRI 1.2.13 Tarbert-Ballylongford Land Bank Marine Related Industry: To promote and facilitate the sustainable development of these lands for marine related industry, utilising the presence of deep water, existing infrastructure, natural resources, and waterside location to harness the potential for general industrial development, compatible or complimentary with marine related industry, with the level of flood risk, and those creating 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.

SIFP MRI 1.1 Safeguarding the Role & Function of Strategic Development Locations To safeguard the role and function of the Strategic Development Locations identified for marine related industry as outlined on Figure 5.2A and 5.2B in Volume III of the Plan, located within and adjacent to the Shannon Estuary, and encourage their sustainable growth, development and appropriate diversification for economic development in accordance with regional and national priorities and subject to the requirements of environmental objectives ENV 1.1 to 1.12, where relevant.

- **SIFP MRI 1.2 General Considerations** To permit sustainable proposals for marine related industry within the Strategic Development Locations identified in Figures 5.2A and 5.2B Volume III, subject to compliance with:
- The individual development objectives outlined in this Plan for the Strategic Development Locations:
- The objectives and requirements of the Habitats Directive specifically Article 6(3) and where necessary 6(4), Birds, Water Framework, and all other relevant EU Directives;

- All relevant principles of proper planning, flood risk, sustainability and environmental considerations, including the mitigation measures referenced in this Plan (Volume II Appendices)

SIFP MRI 1.3 Flood risk All proposals for development within the Strategic Development Locations identified above, should examine in detail the potential risks from fluvial and coastal flooding, as well as sea level rise, to ensure the location and design of future development uses within these Locations:

- Pay due regard to available information on flooding and the outcome of the Shannon CFRAM study;
- Is appropriate for the level of flood risk identified at detailed planning and design stage;
- Does not increase flood risk elsewhere;
- Provides the appropriate level of flood protection where development in flood prone areas is deemed appropriate or justifiable;
- Proposals should pay due regard to the Guidelines produced by the DOECLG and OPW for Planning Authorities 'The Planning System and Flood Risk Management - Guidelines for Planning Authorities'.

SIFP INF 1.4: Services & Infrastructure To ensure that all development at Strategic Development Locations / Areas of Opportunity adequately assess and address the need for appropriate infrastructure required to support of the proposals. In the case of road infrastructure, this should incorporate the principles of promoting sustainable modes of transport, improved linkages and enhanced connectivity in all associated transport solutions, as well as the objectives set out in the SIFP TPT 1.5

SIFP TPT 1.5: Transport To support and facilitate, where necessary, a robust transport infrastructure network within the Shannon Estuary environs, providing a strong attractive base for supporting economic activity within the Strategic Development Locations to include:

- Safeguarding the National Road Network;
- Greater connectivity to the rail network, in particular the re-instatement of the Limerick / Foynes line connecting Foynes Port to Limerick City;
- Greater throughput/freight movement via maritime transport
- Improved linkages and connectivity to and within the National and Regional Transport Networks, in particular up-grades to the N69, R473, N67, and N68;
- Appropriate consultation with the National Roads Authority when identifying specific land use zonings, to confirm the wider road network/ access requirements, in the context of the Spatial planning and National Roads Guidelines for Planning Authorities (DoECLG, 2012).

In addition to providing objectives for energy development and SDLs, the SIFP outlies a number of objectives to ensure development within the Shannon Estuary and its surrounds does not negatively affect the valuable natural resources and unique biodiversity of the area. These are summarised below:

- To ensure that any development proposal in the vicinity of or affecting in any way a designated European Site or NHA provides sufficient information showing how its proposals will impact on the designated site and how any such impact will be appropriately mitigated.
- To ensure that development within the SIFP area does not conflict with the requirements and objectives of the Water Framework Directive.
- To promote biodiversity protection, management, monitoring, and awareness throughout the Shannon Estuary and to ensure proposals for development within the Shannon Estuary are designed to protect and enhance biodiversity, wherever possible.

- To ensure that all proposals for development pay due regard to the special quality of the landscape and seascape of Shannon Estuary.
- To ensure that all future planning proposals, including land use planning and zoning, and proposals for development, are subject to compliance with the objectives and principles of the Habitats Directive.

Project Response

The proposed development is in support of the SIFP, as it will build upon the already established electricity transmission network in the area by enhancing the current transmission 'ring' around the Shannon Estuary. This will have an overall positive benefit to the area with regard to electricity transmission and supply. The subject grid connection will contribute to the development of a strategic energy hub, which is encouraged under Objective MRI 1.2.13. The proposed development, in addition, is considered to be similar in nature and location to energy infrastructure currently operating in the surrounding area.

The proposed development is in alignment with general energy objectives ERG 1.2, 1.3, 1.4 and 1.5 as it will increase capacity of the existing network by providing a connection for a proposed generator via underground cables. This proposed development has been designed to comply will all relevant legislation, and the accompanying EIAR and NIS outline how the proposed development will interact with the wider natural environment, in accordance with MRI 1.2.

In support of ERGI 1.6, the proposed development will connect a proposed gas fired generator to the wider transmission network, providing addition distribution infrastructure to allow for energy generated from gas to be fed to the wider electricity grid. This area is noted to be within proximity to the national grid, and the location of the proposed development in close proximity to the grid will ensure that land is used efficiently and in line with sustainable development.

In addition to the general energy objectives, the proposed development supports the objectives MRI 1.2.13 and MRI 1.1 provided for the Strategic Development Location H, which is noted to have potential to extend the electricity network system such as the proposed development. The proposed development is consistent with the wider electricity generation infrastructure within the area and will contribute to the further development of the Shannon Estuary strategic energy hub.

The proposed development is integral supporting infrastructure to the STEP Power Plant and has been designed with all the required infrastructure for its operation and maintenance, including water supply, storm water attenuation and wastewater services. The proposed development is thus aligned with INF 1.4. The proposed development will share site access with STEP Power Plant via a new entrance from the L1010 and a new access road. The proposed underground grid connection is to be located predominately within the L1010; however, there will be no impact on this public road as the road improvement works are a prerequisite development for the STEP Power Plant, as per its stipulated objectives/project need under its Part 8 planning approval. The proposed development is thus aligned with objective TPT 1.5 in safeguarding the national road network as cable ducting is to be provided within the public road as part of the Part 8 road improvement works. Additionally, successfully obtaining planning permission for the STEP Power Plant application and the subject 220kV grid connection application, will ensure the completion of the L1010 road improvement works.

In respect of MRI 1.3, a flood risk assessment has been undertaken for the proposed development and concluded that the proposed development is not a risk from any source of flooding, with embedded design provided at the substation compound while the 220kV cables are an undergrounded installation which are not vulnerable to flooding, at risk from flooding or resulting in flooding elsewhere.

3.5 Local Policy Context

3.5.1 Kerry County Development Plan 2022-2028

The proposed development is located within the functional area of the Kerry County Council and is therefore subject to the planning policies and objectives of the Kerry County Development Plan 2022-2028 (KCDP), which came into effect on the 15 August 2022. The KCDP was prepared to guide development across the county, and "*provides a blueprint for the economic, social, environmental, and cultural growth of Kerry in a progressive and sustainable way".*

The KCDP notes that the provision of energy supply is critical to continued development of county Kerry and recognises that there is an essential requirement for energy distribution. In the context of the transmission grid, the KCDP acknowledges that a secure and reliable transmission network is *"a key factor for supporting economic development and attracting investment to the County."*

In this regard, the KCDP outlines the following objectives:

KCDP 12-1 Support and facilitate the sustainable provision of a reliable energy supply in the County, with emphasis on increasing energy supplies derived from renewable resources whilst seeking to protect and maintain biodiversity, archaeological and built heritage, the landscape and residential amenity and integration of spatial planning and energy planning in the county.

KCDP 12-6 Facilitate sustainable energy infrastructure provision, so as to provide for the further physical and economic development of the County

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

KCDP 12-8 Ensure that the siting of electricity power lines is managed in terms of the physical and visual impact of these lines on both the natural and built environment, the conservation value of Natura 2000 sites and especially in sensitive landscape areas. When considering the siting of powerlines in these areas, consideration will be given to undergrounding or the selection of alternative routes.

KCDP 12-10 Grid connection routing options should be developed to safeguard the strategic function of the national road network in accordance with Government policy by utilising available alternatives.

KCDP 12-11 When considering the siting of powerlines all technological options including undergrounding shall be considered and it will be a priority to seek to avoid significant adverse effects on the environment including sensitive landscape areas and the ecological integrity of Natura 2000 sites and to avoid damage to Natural Heritage Areas.

In addition to the policies and objectives provided specially for energy and associated infrastructure, the KCDP acknowledges that environmental and biodiversity protection is a core component of planning at all regional and national levels. County Kerry has a wealth of natural features and resources, and the KCDP outlines a number of policies and objectives to protect the county's biodiversity, as provides below:

KCDP 11-21 Require, where necessary, proposals to be accompanied by a habitat map prepared in accordance with the Heritage Councils Best Practice Guidance for Habitat Survey and Mapping, 2011.

KCDP 11-22 Encourage and facilitate the retention and creation of features of local biodiversity value, ecological corridors and networks that connect areas of high conservation value such as watercourses, woodlands, hedgerows, earth banks and wetlands

KCDP 11-28 Encourage the provision of locally provenanced native tree species including those recommended by the All-Ireland Pollinator Plan as part of development landscaping schemes.

KCDP 11-36 Ensure that any application with the potential to create noise nuisance is appropriately assessed and that suitable measures to mitigate any nuisance are proposed and implemented.

KCDP 11-42 Require proposals for development that include the provision of external lighting, to clearly demonstrate that the lighting scheme is the minimum needed for security and working purposes and also to ensure that external lighting and lighting schemes are designed so that the incidence of light spillage is minimised ensuring that the amenities of adjoining properties, wildlife and the surrounding environment are protected.

KCDP 11-78 Protect the landscapes of the County by ensuring that any new developments do not detrimentally impact on the character, integrity, distinctiveness or scenic value of their area. Any development which could unduly impact upon such landscapes will not be permitted.

Additionally, the KCDP provides a number of principals for development management which apply to all development within the county. In the context of infrastructure, utilities and services, it specifies that *"Provision shall be made for the location of all services underground".*

Project Response

The proposed development will provide for electricity transmission infrastructure which is noted as being an essential requirement for the continued development of the county.

The proposed development support objectives 12-6, and 12-7 by providing essential electricity infrastructure that will allow for energy from a proposed power plant to be connected to the grid. This will increase transmission capacity and ensure adequate energy can be supplied to the grid to ensure the future growth of the region can be facilitated, without placing additional strain on the existing infrastructure.

In alignment with objectives 12-1,12-8, 12-11 and 11-78 (and associated development management standards), the proposed development will include for underground transmission cables in order to preserve and protect against unnecessary intrusion on the surrounding landscape.

In addition, and in support of objectives 11-22, 11-28 11-36, 11-42 and 11-78, an Environmental Impact Assessment Report (EIAR) and Natura Impact Statement (NIS) have been prepared to accompany this application and outline any potential impacts on the wider environment and any necessary mitigation measures. Habitat mapping is undertaken as part of ecological surveying to inform the EIAR and NIS and is provided in the NIS in accordance with objective 11-21.

In accordance with objective 12-10, the Part 8 approval for the L1010 road improvement works was prepared with the objective of providing facilitating road improvements for a proposed power plant development and therefore includes cable ducting which will be available to the subject development. This public road will benefit from road widening and will be required to be completed in advance of the STEP Power Plant and thus does not impact on the strategic safeguarding of this local road.

3.5.1.1 Listowel Municipal District Plan 2020-2026

The proposed development is also located within the Listowel Municipal District plan area. The Listowel Municipal District Plan has therefore also been taken into consideration.

The District Plan (DP) builds upon the KCDP and recognises that the availability of infrastructure is vital to ensuring sustainable growth across the area, and the natural gas network within the area should be maximised for the potential industrial and economic benefits. In the context of the Ballylongford Land Bank, the DP notes that one of the key strategic issues for the area is *"The development of the Tarbert/Ballylongford landbank in line with The Strategic Integrated Framework Plan for the Shannon Estuary (SIFP)".* In addition, the DP provides the following objectives:

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

OS-08 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

Project Response

The proposed development will provide additional electricity transmissions infrastructure that will connect a proposed power plant to the distribution grid, expanding on the infrastructure network in the area, supporting objective LS-T-01. In support of OS-08, the proposed development has been shown to align with the SIFP (see section 3.4.2). In addition, the proposed development is a type as described as having the potential to have significant positive economic impact on the local area.

3.5.2 Shannon Estuary Economic Taskforce Report July 2023

The Programme for Government 2020 committed to supporting the Shannon Estuary region through the establishment of an Economic Taskforce to evaluate the economic development potential of the Shannon Estuary area, and to determine how this potential can be realised in both an economically and environmentally sustainable way.

The Taskforce Report acknowledges that the development of a renewable energy hub within the Shannon Estuary area presents "*the single greatest opportunity for sustainable economic growth in Ireland's history".* In this regard, the Taskforce Report set out recommendations to deliver up to 30GW of Atlantic Offshore Wind through the Estuary by 2050, and measures to maximise the industrial development opportunities arising from this.

The Taskforce Report notes that `*natural gas has been considered a green transition fuel by the EU since 2021'*, highlighting that gas, as a fuel, will be used in the just transition to an increased reliance on renewable energy.

Project Response

The proposed development is aligned with the recommendations of the Taskforce Report as it will facilitate the connection of a proposed power plant to the wider electricity grid. The Taskforce Report that natural gas is considered to be a transitional fuel and investment in this area would be a significant in the North Kerry region, particularly on the Tarbert/ Ballylongford land bank, where the proposed development is located.

3.6 Land Use Zoning

The proposed development is within the Tarbert-Ballylongford Landbank as designated in the above mentioned SIFP and within the Kerry County Council Development Plan (Figure 3.2).

Figure 3.2: Tarbert-Ballylongford Landbank Zoning

Source: Kerry County Development Plan, Volume 4 - Maps, pg.33

The KCDP notes that these lands are zoned for industry and that *"Proposals for marine related industry, general industrial development, and particularly those industries creating a synergism with existing uses and contributing to the development of a strategic energy hub at this location will also be encouraged".*

Within the land use zoning objectives outlined in the KCDP, general industry (C2.2) is described as the following:

"Provide for specialised industrial development: Provide locations specifically for specialised industry associated with environmental emissions, including noise and odour (e.g., waste processing, aggregate processing, etc) and with intensive or hazardous processing (e.g., Seveso premises) which may give rise to land use conflict if located within other zonings. Such uses, activities and processes would be likely to produce adverse impacts, for example by way of noise, dust or odour".

Additionally, within the land use zoning matrix provided within Volume 6 of the KCDP, it is noted that '*Public facilities and Infrastructure'* is '*Open for Consideration'* within both General Industry and *'Industrial, Enterprise and Employment'* land use zonings.

Project Response

The proposed development, comprising electricity transmission infrastructure to convey power to the public electricity network, is considered to be in accordance with the land use zoning designation for the proposed site, as it will provide energy infrastructure that connects a proposed energy generator to the national electricity transmission grid and network.

3.7 Sectoral Policy Context

3.7.1 EirGrid Transmission Development Plan 2023-2032

The EirGrid Transmission Development Plan 2023-20232 (TDP), was prepared in accordance with EirGrid's statutory and licence obligations and is the plan for the development of the Irish transmission network and interconnection over a ten-year period, from 2023 to 2030. The TDP outlines committed projects and projects under development, for the enhancement of the Irish transmission network over the period of the plan. The plan outlines the following objectives that will be used to guide investment into the Irish Transmission network:

- Ensuring the security of electricity supply
- Ensuring the competitiveness of the national economy

- Ensuring the long-term sustainability of electricity supply in the country

The TDP acknowledges that in the context of security of supply, there are two separate issues: The availability of sufficient energy to meet demand and the ability of the transmission network to transport electrical energy from generation to demand centres.

In this regard, the TDP notes that as additional generating capacity is developed, development of the network will be required to ensure generators can be linked with the transmission network. In order to combat the overload problems that may come as a result of addition generation capacity, further reinforcements of the network will be required.

While the proposed development is not listed as a specific project within the TDP, it is noted that within the regional description for the south-west and mid-west that the area contains high levels of generation. It is outlined that these high levels of generation are set to increase over the coming years and that network reinforcement will be required to enable the efficient export of generation from the area.

Project Response

The proposed development, while not listed within the TDP as a specific project, is aligned with the overall objectives of the plan as it will facilitate a connection from a proposed power plant to the wider electricity network. This will assist in increasing the security of supply as it will prevent any potential overload on existing networks once the proposed power plant is in operation, ensuring that energy generated from the proposed power plant can assist in meeting the anticipated increase in demand as the electrification of other sectors increases.

3.7.2 Shaping our Electricity Future Roadmap (Version 1.1)

In response to the Climate Action Plan 2019, EirGrid initiated a programme of work called 'Shaping our Electricity Future' (SOEF) to establish a roadmap that will outline how the national grid can achieve the national energy targets. In November 2021, Version 1.1 of the roadmap was published, building upon the inaugural roadmap and provides a foundation to support the national net zero by 2050 objective.

While the delivery of renewable energy is a large element of the revised roadmap, the SOEF acknowledges that to facilitate this the electricity grid will need to be stronger and more flexible. While it is envisaged that the existing network will be utilised as much as feasible, this will require a *"great deal of new grid infrastructure – such as underground cables, pylons and substations".* This upgrade will be required as the gird will be expected to carry significantly more power as both generation and demand increase.

In this context, SOEF notes that public roads are a key enabler for the delivery of network infrastructure as it minimises the risks associated with engaging with private landowners.

SOEF also acknowledges that while EirGrid and SONI will play a key role in development the grid, action and input "*from electricity generators and developers, from regulators, from government, from ESB Networks, NIE Networks, and from large-scale energy users"* will be required.

Project Response

The proposed development will provide the requisite type of transmission infrastructure needed for the upgrade of the grid infrastructure as noted within the SOEF in order to facilitate increased generation and demand. In further alignment with the SOEF, the proposed underground cables will be primarily located within the public roadway, minimising the private land holdings effected. Following energisation, the operation and management of the proposed development will be spilt, the customer GIS substation will be owned and operated by the Applicant, while the grid connection and EirGrid GIS substation will become ESBN

infrastructure. This is representative of the co-ordination and collaboration between developers, ESBN and EirGrid which is noted in the SPEF as key to the development of the electricity grid.

3.7.3 EirGrid Generation Capacity Statement 2023-2032

The Generation Capacity Statement (GCS) is an annual report from EirGrid, that examines the balance between electricity demand and supply in Ireland for a period of 10 years but does not provide measures to resolve any anticipated deficits. The GCS notes that, since 2016, there has been an increasing tightness between supply and demand resulting in a high possibility in system alerts in the coming years.

The GCS acknowledges that in the lead up to 2030, electricity demand is set to increase and that *"The electricity industry will have to find new ways to meet the increasing need for energy without relying mainly on burning fossil fuels".* In order to ensure this increased demand can be managed, the GCS notes that "*there is a need to plan for a great deal of new grid infrastructure – such as underground cables, pylons and substations"* as the transmission grid will need to carry more power, and the existing grid will not be adequate to manage the scale of new energy connections – particularly as renewable energy connections increase.

Project Response

The proposed development, while not an energy generation in itself, will support the GCS as it will provide additional grid infrastructure in the form of underground cables and substations. This will allow the proposed 600MW STEP Power Plant to be connected to the wider transmission grid without putting additional pressure on the existing network.

3.7.4 EirGrid Draft Grid Implementation Plan 2023-2028

The Draft Grid Implementation Plan was prepared in the context of the Transmission Development Plan 2023-2032 and outlines how the grid will need to respond to support the national and European energy climate and energy ambitions. In this regard, the Implementation Plan provides the following policies to ensure appropriate protection of the environment during the development of the grid:

ENVP1: To uphold best environmental practice in the design and appraisal of onshore and offshore grid development, considering impacts onshore, offshore, cumulatively and across state boundaries where relevant.

ENVP4: To require the use of sustainable urban drainage systems in all new grid developments where appropriate.

ENVO5: That all grid development proposals, and in particular, transmission substation developments, shall carry out, to an appropriate level of detail, a site-specific Flood Risk Assessment that shall demonstrate compliance with all current Guidelines, standards and best practice. The Flood Risk Assessment shall pay particular emphasis to residual flood risks, site-specific mitigation measures, flood-resilient design and construction, and any necessary management measures.

BIODO1: That any grid development project, either individually or in combination with other projects, that has the potential to give rise to significant effect on the integrity of any European (Natura) site(s) shall be subject to Appropriate Assessment (AA) in accordance with Article 6 of the EU Habitats Directive.

TP1: To promote and facilitate the sustainable development of a high-quality transmission grid to serve the existing and future needs of the country, in accordance with EirGrid's strategy and the Shaping Our Electricity Future Transmission Network Analysis

TP6: To promote Security of Supply in order to maximise access to generation and promote future interconnections with neighbouring countries

Project Response

The proposed development will provide additional grid infrastructure which will reinforce the existing grid by ensuring additional loads will not compromise existing infrastructure. As one of the proposed GIS substations will be transferred to EirGrid, the applicant has ensured that they have been a key stakeholder in the design of the proposed development. The proposed development is thus in accordance with policy ENVP1 to ensure that the environmental requirements of EirGrid have been satisfied within the substation design. The proposed development does not employ sustainable urban drainage system as it will link into the storm water drainage for the proposed power plant although all storm water will pass through silt trap and Class 1 hydrocarbon interceptors prior to discharge to ensure the protection of water quality.

In response to ENVO5, the supporting Flood Risk Assessment prepared for the EIAR concluded that the proposed development is located outside the moderate (Flood Zone B) or high flood risk zone (Flood Zone A) for fluvial flooding for any highly vulnerable components and only water-compatible components i.e the 220kV cables which will be buried underground within cable ducting, is located with Flood Zone A or B, all other elements of the proposed development (i.e substations and cable link boxes) are located in Flood Zone C. Therefore, the proposed development is considered not at risk of flooding and will not increase flood risk elsewhere.

In response to BIODO1, a Natura Impact Statement has been prepared for the proposed development and concluded that the proposed development alone and in-combination with other projects and plans, including the implementation of mitigation measures, that no adverse effects on the integrity of any European sites will arise, in view of the site's conservation objectives.

In alignment with TP1 and TP6, the proposed development will provide for additional grid infrastructure, which will ensure the system is in a position to manage future generation connections and increased demand and provide security of supply.

4 Planning History

4.1 Introduction

In this chapter, a detailed planning history of the site is outlined, as well as other historically consented development within the surrounding environment in order to identify any developments that may either complement, or be incompatible with, the proposed development. The planning history also identifies other consented projects or future projects within the surrounding environs which may overlap, interact or result in potential cumulative impacts with the proposed development.

4.2 Planning History of Proposed Site

A complete planning history of granted applications within the proposed application site was conducted initially in January 2024 and reviewed and updated bi-monthly until submission of the planning application (July 2024) and is represented in Table 4.1. This planning history search comprised a review of various planning application types, namely Section 34 applications to Kerry County Council, strategic infrastructure development and local authority own development. The timeframe for the search has stretched over a 20-year period to include the original LNG terminal application in 2008 and therefore highlighting the strategic energy land uses which have been permitted in the locality of the subject development.

Table 4.1: Planning site history

Application reference	Development Description	Grant date
(ABP case ref) 319566	600MW STEP Powerplant, 120MW Battery Energy Storage System, Above Ground Installation and associated ancillary works	Not decided – Case is due to be decided by 21/10/2024
ABP-311233-21	Ten year permission for proposed Shannon Technology and Energy Park consisting of power plant, battery energy storage system, floating storage and regasification unit, jetty, onshore receiving facilities, above ground installation and all ancillary structures/works.	Refuse permission 13/09/2023 Subject to judicial review proceedings
20438 / ABP-308643-20	Revision of previously granted grid connection for a permitted wind farm via 12.1km underground cable connecting to 38KVA/110KVA substation at Kilpaddoge, Tarbert.	Grant permission with conditions 21/06/2021
ABP-307798-20	Proposed 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 Carrowdotia South County Clare and existing Kilpaddoge 220/110kV Electrical Substation in the townland of Kilpaddoge County Kerry.	Approve with conditions 04/06/2021
PL08.PM0014	Amendment to the duration of the permission for the permitted LNG Terminal (condition no. 2) from 10 years to 15 years – subsequently quashed by the High Court in 2020	Grant permission with conditions 13/07/2018
PL08. PA0028	Ten year permission for a combined Heat and Power (CHP) Plant	Grant permission with conditions 09/07/2013
PM08.PM0002	Alter condition 3 of 08.PA0002 - allow for the option of constructing one tank initially in lieu of the requirement to construct two.	Alter decision (Not a material alteration 04/03/2013

Application reference	Development Description	Grant date
GA08.GA0003	Gas pipeline to connect Shannon LNG Terminal at Ralappane, Co. Kerry to existing natural gas network at Leahys, Co. Limerick	Approve with conditions 17/02/2009
DA08.DA0003	Application for an acquisition order (associated with PL08.GA0003) for the Shannon LNG Terminal at Tarbert, Co. Kerry to the Bord Gáis Eireann Network at Foynes, County Limerick	Make Acquisition Order without Amendments 17/12/2009
PA08B.PA0002	Liquefied Natural Gas (LNG) Regasification Terminal	Grant consent with modification 31/03/2008
Part 8 application	L1010 road improvements (road widening)	2008

4.3 Planning History in Respect of Relevant Development

In addition to the planning history of the proposed site, a planning search has been conducted in respect of other relevant developments within a 10km radius of the proposed site location and over a ten-year period. This planning search has excluded smaller developments such as residential, small-scale farming and small commercial developments. Outlined below are electricity transmission infrastructure/electricity generation applications which may have direct relevance to the proposed development.

Table 4.2: Relevant development in the surrounding area

Planning Reference	Development Description	Decision Date
Located within the administrative boundary of Kerry County Council		
(ABP case ref) 319717	Pre-application (Marine Development): Proposed gas emergency reserve facility and associated site works	Pre-application consultation lodged 13/05/2024
23350	Removal of existing cable joint, bay within Tarbert Generating Station, 220kV switchgear within the existing Tarbert substation compound and associated 220kv cabling; 220kv underground cabling measuring approximately 340m each, running between two no. new underground cable joint base in Tarbert Generating Station and the connection point at Tarbert substation; the new 220kv switchgear bay within the existing Tarbert substation compound	Final grant dated 17/01/2024
ABP-315838-23	Designated development under the Development (Emergency Electricity Generation) Act 2022 located at Tarbert Power Station, Tarbert, Co, Kerry	Ministerial approval 14/03/2023
21549	Ten year planning permission for a high intertia synchronous compensator compound containing electrical equipment containers including a 220 kV high voltage gas insulated switchgear (GIS) substation compound, Kilpaddoge Tarbert, Co Kerry	Final grant dated 20/08/2021
20850	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.	Final grant dated 12/11/2020 This development has been constructed.

Planning Reference	Development Description	Decision Date
18878 / ABP-305739-19	Ten year permission to construct a battery energy storage system, Kilpaddoge, Tarbert.	Granted permission with revised conditions 10/02/2020
19115	Ten year permission for a grid stabilisation facility comprising of: the construction up to 4 no. rotating stabilisers, 5 no. battery storage containers	Final grant dated 07/02/2020
18392	Construction of a battery storage facility within a total site area of up to 2.278ha, to include 50 no. self contained battery container units with associated HVAC cooling units, 13 converter and 13 step up transformer container units.	Final grant dated 18/02/2019
Located within the administrative boundary of Clare County Council		
(ABP case ref) 319080	Conversion of the primary fuel from coal to HFO at Moneypoint Generating Station	Not decided. Lodged 12/02/2024
23195	An extension of the existing Kilkerin Point 220 kV Line Cable Interface Mast (LCIM) compound/A new fibre optic cable measuring an approximate length of 8.9km routed between Kilkerin Point LCIM compound (townland of Lakyle North) and Prospect 220 kV substation (townland of Ballygeery West)	Final grant dated 29/01/2024
21497	Ten year planning permission for development of a 250 to 500 MVA (electrical rating) synchronous condenser. The development which will be located within a site compound of c. 1 hectare behind the existing ESB [Prospect] substation for the purpose of stabilising the electricity grid.	Final grant dated 03/11/2021

4.4 Conclusion

A review of the above-outlined planning history within the area, illustrates that the precedence for the siting of power generation and ancillary transmission and utility support/ network infrastructure in the vicinity of the proposed development, is well established.

In conclusion, neither the planning history of the proposed development itself, nor of the surrounding area, includes development or planning applications which would preclude the positive consideration of the subject lands for the proposed development.

5 Planning Assessment

5.1 Introduction

The following sections provide a high-level planning assessment and outline of the likely 'substantive' topics of consideration arising from a proper planning and sustainable development perspective of the proposed development.

5.2 Principle of Development

The Shannon Technology and Energy Park 220kV Grid Connection project is required to facilitate connection of the proposed STEP Power Plant, and the power generated by the plant, to the national grid. The overall project (power plant and subject proposed 220kV grid connection) is a development which will assist in providing increased resilience and security of electricity supply to the national system, during periods when electricity demand cannot be met by renewable energy sources. Ultimately, dispatchable electricity development, such as STEP Power Plant, and the associated grid infrastructure necessary to connect the power generated to the existing national grid, assists in ensuring that more electricity from renewable energy can be connected to the grid, whilst addressing any deficit in demand and supply from intermittent renewable electricity generation. The proposed development will assist in ensuring that the overall project will contribute towards achieving the Government's ambitions for carbon neutrality and particularly the decarbonisation of the electricity generation sector, and the mandated targets set by under European climate law to reduce greenhouse gas emissions by 55%, by 2030.

The 220kV Grid Connection project is an important component in the delivery of the project objectives of the STEP Power Plant, which seeks to address the issues of electricity security, supporting increasing renewable energy generation and decarbonising the electricity sector, as discussed above. Although not in and of itself an electricity generation project, the grid connection is critical supporting and connecting transmission infrastructure, which is both necessary and complementary to electricity generation.

The proposed development is located in the Tarbert-Ballylongford Landbank - a Strategic Development Location in the Shannon Integrated Framework Plan 2013-2020, the Regional Spatial and Economic Strategy for the Southern Region and Kerry County Development Plan 2022-2028. It will be located on land which is zoned for *"marine related industry, general industrial development, and particularly those industries creating a synergism with existing uses and contributing to the development of a strategic energy hub at this location will also be encouraged."* Already located and operational within this landbank are energy and transmission related development in the townland of Kilpaddoge, namely Kelwin battery storage facility (Phase 1 and 2), Coolnanoonagh 110kV substation and Kildpaddoge 220kV substation. The proposed development is another transmission development which will ultimately link into the existing Kildpadogge 220kV substation via an existing LCIM and as such the proposed development is consistent with the objective of this landbank through its synergism with existing uses such as the transmission circuit serving the area.

The proposed development is an expansion of the 220kV transmission grid. While initially, the grid connection will be solely utilised to connect the proposed STEP Power Plant, this does not exclude, or deny access to, any future renewable project that wishes to utilise the grid connection. Once constructed, EirGrid will be able to, and indeed obliged under its role as Transmission System Operator, to offer connection to other renewable projects. Any future renewable connection(s) will be subject to a separate EIAR.

In summary, the proposed substations and grid connection development complement the move to a robust renewable energy-based transmission system.

5.3 Policy Context

As outlined within the policy section (Chapter 3) of this Planning Report, through the separate policy 'Project Responses', the proposed development is supported by and aligned and in accordance with planning objectives and policies throughout the planning hierarchy.

The policy context in relation to energy security and climate change is ever evolving; in response to pressures on energy demand and changes occurring in real time to our climate and the necessary mitigating responses. In this regard, national policy is shaped by mandated targets and actions set out in European legislation, to achieve carbon neutrality by 2050.

In relation to national policy, Project Ireland 2024 - the National Planning Framework and the National Development Plan, promote increases in renewable energy generation as part of climate action mitigation and acknowledge the role of transmission development, such as the subject proposed development, to facilitate more renewables sources of energy and provide security of supply. The Strategic Investment Priorities of the National Development Plan support an "*expanded and strengthened electricity transmission and distribution network*".

The importance of providing and maintaining security of electricity supply is acknowledged in several policy documents - Policy Statement on Security of Electricity Supply 2021, National Energy Security Framework, Energy Security in Ireland to 2023. Within each of these policy documents there is clear and strong support for additional electricity transmission and distribution grid infrastructure in order to support the growth of renewable energy and to support security of electricity supply. Thus, the provision of supporting electricity transmission infrastructure to provide an electricity grid which can ensure climate action ambitions can be met is a vital component of energy generation projects.

Policy relating to climate action and progressing towards a carbon low and carbon neutral society is unequivocal in its support of increased electricity from renewable energy sources to achieve carbon emissions targets. Within the Climate Action Plan 2021 it was acknowledged that 2GW of additional flexible gas fired generation would be required to ensure security of supply and underpin our increased renewable targets. In regard to the subsequent Climate Action Plans, 2023 and 2024, both plans have acknowledged the role of supporting electricity transmission in order to facilitate accelerated renewable electricity generation. It was stated within the Climate Action Plan 2024 that significant investment is needed in the transmission and distribution systems is needed to reduce constraints and congestion on the system, thus ensuring security of supply.

Regional policy, having taken account of policies in the National Planning Framework, continues to highlight and promote the importance of enhancing and developing the transmission system in a timely manner to ensure security of supply, serving existing and future needs of the Region and strengthening energy infrastructure nationally.

The Shannon Estuary Strategic Integrated Framework Plan seeks the continued promotion of the vision for the Shannon Estuary as an area which can contribute to security of energy supply and assisting in meeting renewable energy targets. The Framework has several general energy objectives including 'facilitating energy development', 'complimentary development' and expansion of the electricity transmission infrastructure, all of which the proposed development will help to support and conversely is supported by these objectives. The proposed development will also assist in achieving the vision for the Shannon Estuary, in particular the Strategic Development Location of the Tarbert-Ballylongford landbank, in which the majority of the proposed development is located, which seeks 'to promote and facilitate the sustainable

development of this landbank for marine related industry and general industrial development compatible or complementary with marine related industry'. The proposed development is considered to be a type of development which is compatible with marine related industry as it will contribute to the sustainable development of a 'power generation centre for the region' within this strategic development location.

Local policy objectives of the extant Kerry County Development Plan acknowledge that a secure and reliable transmission network is *"a key factor for supporting economic development and attracting investment to the County"*. Several electricity transmission policies, as listed in Section 3.5.1 of this report, support and seek to facilitate the sustainable development of additional electricity generation and their associated networks 'whilst seeking to protect and maintain biodiversity, archaeological and built heritage, the landscape and residential amenity and integration of spatial planning and energy planning in the county'. The Council supports the economic role and potential of economic drivers connected with the Shannon Estuary, including the Shannon Estuary Strategic Integrated Framework Plan, and therefore the Tarbert-Ballylongford landbank.

Sustainable development is the cornerstone of the planning system in Ireland, much of which is not possible without a secure and reliable energy transmission network. The proposed development helps to achieve sustainable development in its support of a proposed electricity generation project. This planning report has demonstrated that the proposed development is aligned with national, regional and local policy objectives with regards electricity transmission associated with energy development which supports the wider transition to a renewable led generation system.

5.4 Environmental Impact Assessment Report

As stated in Section 5.2, an EIAR has been prepared for the proposed development. The EIAR has been prepared in accordance with the requirements of EU and Irish national law, policy and practice, including Annex IV of the EIA Directive, and Schedule 6 – Information to be contained in EIAR of the Planning and Development Regulations 2001 (as amended).

The EIAR identifies that any construction phase activities related to the proposed development will be managed through the implementation of a Construction Environmental Management Plan (which incorporates all mitigation measures from the EIAR and NIS), Construction Resource and Waste Management Plan and Construction Phase Traffic Management Plan.

The EIAR has considered the main significant direct and indirect effects of the proposed development on the environment. The implementation of mitigation measures as collated in Chapter 20 of the EIAR would mitigate any significant effects on the environment in either the construction, operational and maintenance or decommissioning phases.

An Bord Pleanála, as the competent authority, will be responsible for undertaking the required Environmental Impact Assessment of the proposed development.

5.5 Appropriate Assessment

As noted in section 5.3 of this Planning Report, this application for approval includes a Natura Impact Statement (NIS) which has been prepared in accordance with the requirements of EU and Irish national law, policy and best practice. A copy of the NIS is provided in the application documentation.

In summary, the mitigation measures detailed in Section 4.5 of the NIS will ensure that there will be no adverse effects on the integrity of any European sites in light of the site's conservation objectives. Based on the assessment of the proposed development alone and in combination

with other projects and plans, including the implementation of mitigation measures, the NIS has concluded that no adverse effects on the integrity of any European sites will arise, in view of the site's conservation objectives. Notwithstanding, it is noted that An Bord Pleanála, as the competent authority, will undertake the Appropriate Assessment for this application.

6 Conclusion

The proposed development will provide the necessary transmission infrastructure and connection from the proposed STEP Power Plant (ABP case reference: 319566) to the wider transmission and distribution network via the subject proposed substations and underground cables, which will connect to the existing Kilpaddoge - Tarbert 220kV Circuit.

This Planning Report details the key planning issues that have been considered by the project team in respect of the proposed development. In summary, the proposed development:

- Complies with and supports the provisions of EU, national, regional, local and sectoral policy and objectives.
- Is consistent and in accordance with the extant land use zoning provisions as reflected within the Kerry County Development Plan.
- Is an expansion of the high voltage transmission electricity grid and therefore facilities the future connection of renewables generation developments.
- The proposed substations and grid connection development complement the move to a robust renewable energy-based transmission system.
- Can not be precluded from a positive consideration on the basis of incompatibility with surrounding developments, as neither the planning history of the proposed development site itself, nor that of the surrounding area, includes development or planning applications which would have notable impact on the proposed development, nor conversely, that of the proposed development on other permitted development in the area.
- Has been subject to environmental assessments to ensure that environmental impacts are minimised as far as practicable.

Having regard to the above, it is concluded that the proposed development would therefore be in accordance with the proper planning and sustainable development of the area.