Proposed Derrygreenagh Power Project Environmental Impact Assessment Report

Chapter 2: Planning Policy

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2.0 PLANNING POLICY

2.1 Introduction

- 2.1.1 This chapter of the Environmental Impact Assessment Report (EIAR) provides an overview of national, regional and local planning policy that is relevant to the Proposed Development and Overall Project. Before addressing the relevant planning policy, it provides, by way of context, an overview of relevant European Union and national energy policy, guidance and legislation.
- 2.1.2 It is clear across all levels of planning policy that maintaining security of energy supply is a key priority for the coming decade and beyond. The Proposed Development will provide flexible generation capacity and significant grid infrastructure which will help to maintain security of supply while supporting Ireland in its transition to a low carbon economy. Furthermore, it will help to replace generation capacity that will be lost through the planned retirement of ageing, more carbon intensive power stations in the coming years.
- 2.1.3 The proposed development has been designed to facilitate a sustainable transition to operating off a blending of renewable fuels, such as Hydrogen, over the operational life of the project. In so doing, it addresses the ability of the proposed development to transition from natural gas to hydrogen in line with plans to be developed (2023-2026) for transitioning the gas network to hydrogen overtime.
- 2.1.4 For a detailed consideration of the proposal's compliance with applicable planning policy, please refer to the Planning Statement (PS, 2024) produced by Gravis Planning which accompanies the planning application.

2.2 European Energy Policy

Energy Roadmap 2050

- 2.2.1 The European Energy Roadmap 2050 (EC, 2011) was published in 2011 and explores the transition of Europe's energy systems so that they are compatible with the greenhouse gas (GHG) reduction targets set out in the Renewable Energy Directive (2009/28/EC), while also increasing competitiveness and security of supply.
- 2.2.2 The Energy Roadmap has informed national energy policy in the years since its publication, including Ireland's Climate Action Plan 2023, by providing a detailed analysis of the issues involved in transitioning to more sustainable, decarbonised energy systems and carrying out modelling of different approaches. This generated a series of policy options/ scenarios which assist political decision making by showing different decarbonisation pathways as well as their main economic, social and environmental impacts.

2030 Climate and Energy Framework

- 2.2.3 The EU's 2030 Climate and Energy Framework sets a legally binding target for EU member states of achieving at least 32% of electricity generation from renewable sources by 2030.
- 2.2.4 The Framework includes EU-wide targets and policy objectives for the period from 2021 to 2030.
- 2.2.5 Some of the key targets for 2030 under the existing Framework include:
 - At least 40% cut in greenhouse gas emissions (from 1990 levels)¹;
 - At least 32% share for renewable energy; and
 - At least 32.5% improvement in energy efficiency

¹ As part of the European Green Deal the Commission has aims to increase this to at least 55% compared to 1990 levels, with legislative proposals for same adopted in 2021.

2.3 National Energy Policy & Legislation

Climate Action and Low Carbon Development (Amendment) Act 2021

- 2.3.1 The Climate Action and Low Carbon Development Act 2015 (GOI, 2015) established the national goal to move to a low carbon, climate resilient and environmentally sustainable economy. Under this Act (2015) the National Mitigation Plan and the National Adaptation Framework were first established.
- 2.3.2 A more ambitious target has now been committed to in law through the Climate Action and Low Carbon Development (Amendment) Act 2021. This Act (2021) amends the 2015 Act in order to strengthen the governance framework on climate action by the State through the introduction of a legally binding interim target of a 51% reduction in greenhouse gas emissions by 2030 relative to a baseline of 2018. The Act establishes a 2050 net zero emissions target, compared to 1990 levels, and introduces a system of successive five-year carbon budgets starting in 2021.

Climate Action Plan 2024

- 2.3.3 The Climate Action Plan 2024 (Published on 20 December 2023) sets out a 'roadmap' to achieve a net zero carbon energy system by 2050. Climate Action Plan 2024 (CAP24) seeks to build on the progress made under Climate Action Plan 2023 by delivering policies, measures and actions that will support the achievement of our carbon budgets, sectoral emissions ceilings, and 2030 and 2050 climate targets.
- 2.3.4 To achieve Ireland's targets under the Plan, a detailed sectoral roadmap setting out a range of measures and actions for each sector of the economy is included. For the electricity sector, the need for additional gas-fired generation capacity is clear. The Plan states that 'rapid delivery of flexible gas generation is needed at scale and in a timeframe to replace emissions from coal and oil generation as soon as possible to reduce impacts on the carbon budgets.
- 2.3.5 Key measures identified for the energy sector under CAP24 include 'the delivery of at least 2 GWs of new flexible gas-fired generation'.

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

- 2.3.6 The Government White Paper entitled 'Ireland's Transition to a Low Carbon Energy Future 2015-2030' set out a framework to guide Ireland's energy policy development over the period 2015-2030. The framework takes account of European and international climate change objectives.
- 2.3.7 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 energy supply during the national transition to a renewable energy system will need to move away from carbon-intensive fuels such as peat and coal in favour of lower carbon fuels like natural gas. The White Paper notes that:

"Renewable energy will also play a central role in the transition to low carbon energy. No single renewable energy technology - existing or emerging - will alone enable Ireland to overcome the low carbon challenge. Rather, a diverse range of technologies will be required along the supply chains for electricity, heat and transport".

"Onshore wind continues to be the main contributor (18.2% of total generation and 81% of RES-E in 2014). It is a proven technology and Ireland's abundant wind resource means that a wind generator in Ireland generates more electricity than similar installations in other countries. This results in a lower cost of support." "Several forms of RES-E, such as wind, solar and ocean energy are reliant on weather conditions and have an inherent variability. They cannot be dispatched in the same way as traditional generators, and this presents challenges for the electricity system".

"Due to the variability of wind conditions, wind generation poses challenges to the operation of electricity grids. <u>In Ireland, these challenges are being addressed by</u> the electricity system operators under their DS3 programme".

2.3.8 The DS3 programme's stated aim is to "meet the challenges of operating the electricity system in a secure manner while achieving the 2020 renewable electricity targets". The Proposed Development will provide quick response capabilities to EirGrid as part of the DS3 Programme ('Delivering a Secure, Sustainable Electricity System'). It will help to ensure that the grid can continue to operate efficiently with the integration of variable renewable energy sources.

2.4 National Planning Policy

National Planning Framework 2018-2040 - Project Ireland 2040

- 2.4.1 'Project Ireland 2040 National Planning Framework', hereafter referred to as the NPF, 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.
- 2.4.2 The NPF notes that the population of Ireland is projected to increase by approximately 1 million people by 2040, which will result in a population of roughly 5.7million. This growth will place increased demands on both the built and natural environment as well as the social and economic fabric or the country, not least in terms of energy supply. In order to strengthen and facilitate more environmentally focused planning at the local level, the NPF states that future planning and development will need to:

"tackle Ireland's higher than average carbon-intensity per capita and enable a national transition to a competitive low carbon, climate resilient and environmentally sustainable economy by 2050, through harnessing our country's prodigious renewable energy potential."

- 2.4.3 The NPF notes that Ireland's National Energy Policy is focused on three pillars:
 - Sustainability;
 - Security of Supply; and
 - Competitiveness.
- 2.4.4 In line with these pillars, the NPF requires a secure and reliable electricity supply to be achieved, which is necessary for the realisation of almost all of its National Strategic Outcomes. Notably, National Strategic Outcome 8 (Transition to Sustainable Energy) states that, in creating Ireland's future energy landscape, new energy systems and transmission grids will be necessary to enable more distributed energy generation which connects established and emerging energy sources to the major sources of demand. To facilitate this, the NPF acknowledges 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."

- 2.4.5 Some other key National Policy Objectives aimed at achieving the transition to sustainable energy include:
 - National Policy Objective 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 emission reduction; and
 - National Policy Objective 55: Promote renewable energy use and generation at appropriate locations within the built and natural environment to meet national objectives towards achieving a low carbon economy by 2050.
- 2.4.6 The Proposed Development complements the national policy objectives around the creation of a lower carbon and more distributed energy generation system.

National Development Plan 2021-2030

- 2.4.7 The National Development Plan 2018 2027 (NDP) was introduced alongside the NPF and sets out the investment priorities that will underpin its implementation. It provides additional context for the assessment of projects such as that proposed. The NDP emphasises the need for investment in renewable energy sources, ongoing capacity renewal, and future technology that affords Ireland the opportunity to comprehensively decarbonise our energy generation.
- 2.4.8 The NDP was updated in October 2021 The National Development Plan 2021-2030. The updated NDP's focus for investment in the energy network is to:
 - "ensure that it meets the challenge of integrating world-leading levels of renewable wind and solar electricity whilst <u>ensuring security of supply</u>; and
 - ensure that it is <u>fit for purpose</u> in the medium- to longer-term in order to <u>meet</u> <u>projected demand levels</u>."
- 2.4.9 It emphasises that "ensuring continued security of energy supply is considered a priority at national level and within the overarching EU policy framework".
- 2.4.10 The NDP recognises that the target of delivering up to 80% of Ireland's electricity from renewable sources by 2030 will require investment in renewable electricity generation and storage **as well as** conventional electricity generation capacity to support the operation of variable renewable technologies and provide security of supply.
- 2.4.11 Strategic Investment Priority no. 4 aims to "deliver circa 2GW of new conventional (mainly gas-fired) electricity generation capacity to support the operation of a predominantly wind/solar electricity system and provide security of supply for when variable electricity generation (wind/solar) is not sufficient to meet demand".
- 2.4.12 The Plan clarifies that much of the 2GW of new conventional (mainly gas-fired) generation capacity needed over the next 10 years will need to be delivered within the next five years to meet demand.

Policy Statement on Security of Electricity Supply (2021)

- 2.4.13 The Government's Policy Statement on Security of Electricity Supply (November 2021) sets out a number of updates to national energy policy in the context of Programme for Government commitments relevant to the electricity sector, planning authorities and developers. It seeks to ensure that continued security of electricity supply is considered a priority at national level.
- 2.4.14 The policy statement includes explicit Government approval that:

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

National Energy Security Framework (2022)

2.4.15 The National Energy Security Framework, published by the Government in April 2022, provides a further policy response to the challenges of ensuring long-term and ongoing security of energy supply. It sets out a 'whole of Government' response to the challenges posed to the state's energy security and energy affordability in the context of recent events including the war in Ukraine. It recognises that the level of dispatchable electricity generation capacity needs to increase significantly over the coming years in order to reliably meet the expected demand for electricity, and notes that the CRU is managing a programme of actions to meet this challenge under its DS3 Programme (see below).

The Eirgrid/SONI Ten Year Generation Capacity Statement 2023-2032

- 2.4.16 The latest all-Ireland Generation Capacity Statement emphasises that the *"the current* outlook, based on the best information available, is serious. It is likely that in the coming years we will experience system alerts and will need to work proactively to mitigate the risk of more serious impacts".
- 2.4.17 It predicts capacity deficits during the 10 years to 2032 and states that *"further new electricity generation will be required to secure the transition to high levels of renewable electricity over the coming decades"*. It is clear that this must include new gas-fired generation capacity: *"A balanced portfolio of new capacity is required and this includes the need for new cleaner gas fired generation plant"*.
- 2.4.18 It also recognises that this is essential in order for Ireland to achieve its carbon budgets for the electricity sector up to 2030: *"This balanced portfolio is also crucial to ensuring Ireland meets its carbon budgets between now and 2030 for the electricity sector, which positions the electricity sector to achieve the zero net carbon target by 2050".*
- 2.4.19 The Statement notes that the availability of conventional generation remains a serious cause for concern and that most of the predictable capacity that was expected to come online over the coming years has now been withdrawn. It states that 'since 2018, less than 30 MW of new gas capacity has been delivered with 410 MW of new gas capacity terminating their contracts'.
- 2.4.20 It notes that the balanced portfolio of new capacity that must be delivered needs to include both OCGT and CCGT generation technology: *"It is crucial that a balanced portfolio of new capacity is delivered, such as long duration storage, interconnection, demand side and renewable-ready open cycle and combined cycle gas turbines"*.

Eirgrid/SONI - Shaping our Electricity Future - A Roadmap to Achieve our Renewable Ambition

- 2.4.21 The 'Shaping our Electricity Future' document, published in November 2021, "*identifies the transmission network reinforcements needed to manage renewable generation and demand growth*". It provides an outline of the key developments needed to support a secure transition to at least 70% renewables on the electricity grid by 2030. Inherent to this is continuing to operate, develop and maintain a safe, secure, reliable, economical and efficient electricity transmission system with a view to ensuring that all reasonable demands for electricity are met.
- 2.4.22 The document is informed by extensive stakeholder and public engagement alongside comprehensive modelling and analysis of network reinforcements. It advises that "gasfired generation is expected to play on ongoing key role, replacing retiring conventional plant and providing multi-day capacity, during extended spells of low wind and solar output".

<u>Eirgrid Group – Strategy 2020-50: Transform the Power System for Future Generations</u>

- 2.4.23 Eirgrid Group's statement of purpose is to 'Transform the power system for future generations'. The 'Strategy 2020-50' document sets out their strategy for achieving this and the challenges that they are facing. "*The electricity system will carry more power than ever before and most of that power will be from renewable sources*". The necessary changes will be significant and will need to be managed in a co-ordinated and cost-effective way.
- 2.4.24 It recognises that, in order to increase the amount of renewable power on the grid, the system must be operated in a more dynamic and responsive way. "*This will require improvements to the infrastructure to make the grid stronger and more flexible*". This will

be achieved "by using innovative solutions as well as proven technologies" but Eirgrid will ensure the changes will not impact the reliability of the electricity system.

Eirgrid Group – Delivering a Secure Sustainable Electricity System (DS3 Programme)

- 2.4.25 In response to binding national and European targets, the EirGrid Group began a multiyear programme, "Delivering a Secure, Sustainable Electricity System" (DS3)², in 2011.
- 2.4.26 The aim of the DS3 Programme was to meet Ireland's 2020 electricity targets by increasing the amount of renewable energy on the Irish power system in a safe and secure manner.
- 2.4.27 The DS3 Programme is designed to ensure that Ireland can securely operate the power system with increasing amounts of variable non-synchronous renewable generation over the coming years.
- 2.4.28 The DS3 Programme is built around three main pillars: System Performance, System Policies and System Tools. Each pillar is vital to the success of the programme and the delivery of the renewable electricity targets.
- 2.4.29 The DS3 Programme remains ongoing, with new targets set for 2030, but is to be replaced by the operational roadmap set out in the 'Shaping Our Electricity Future' programme.

Hydrogen Strategy for Ireland

- 2.4.30 The Government of Ireland produced "Consultation on Developing a Hydrogen Strategy for Ireland" in July 2022. This follows the statement in the National Energy Security Framework (2022) that an integrated hydrogen strategy for Ireland was to be prioritised in line with the Climate Action Plan.
- 2.4.31 The consultation document notes "that hydrogen has many possible applications as a feedstock, a fuel for transport or an energy carrier. As it does not emit carbon dioxide when used, hydrogen could become a zero carbon substitute for fossil fuels in the coming years to decarbonise industrial processes and economic sectors where reducing carbon emissions is difficult to achieve".
- 2.4.32 It also notes that "Ireland's gas network is one of the most modern in Europe. The distribution network is comprised of polyethylene pipes and early indications are that it is already capable of transporting hydrogen or hydrogen/natural gas blends".

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² Eirgrid Group. DS3 Programme. Available at: <u>https://www.eirgridgroup.com/how-the-grid-works/ds3-programme/</u>

2.5 Regional Planning Policy

Eastern & Midland Regional Assembly: Regional Spatial and Economic Strategy 2019-2031

- 2.5.1 The Regional Spatial and Economic Strategy (RSES) for the Eastern and Midland region was adopted in 2019 and provides a high-level development framework for the region that supports the implementation of the NPF. It is underpinned by 3 key principles that reflect the three pillars of sustainability: Social, Environmental and Economic. With regard to climate action the Strategy notes 'the need to enhance climate resilience and to accelerate a transition to a low carbon society recognising the role of natural capital and ecosystem services in achieving this'. The Strategy also recognises the implications surrounding the demand for energy in the coming years and states that 'a secure and resilient supply of energy is critical to a well-functioning region being relied upon for heating, cooling and to fuel transport, power industry, and generate electricity. With projected increases in population and economic growth, the demand for energy is set to increase in the coming years'.
- 2.5.2 The following 'Regional Policy Objectives' aim to ensure that the development of the electricity network is undertaken in a safe and secure way which meets projected demand levels and is consistent with Government Policy and the need to achieve a long-term, sustainable and competitive energy future for Ireland:
 - **RPO 10.19**: Support the roll-out of the Smart Grids and Smart Cities Action Plan enabling new connections, grid balancing, energy management and micro grid development.
 - RPO 10.20: Support and facilitate the development of enhanced electricity and gas supplies, and associated networks, to serve the existing and future needs of the Region and facilitate new transmission infrastructure projects that might be brought forward in the lifetime of this Strategy. This Includes the delivery of the necessary integration of transmission network requirements to facilitate linkages of renewable energy proposals to the electricity and gas transmission grid.
 - **RPO 10.22**: Support the reinforcement and strengthening of the electricity transmission and distribution network to facilitate planned growth and transmission/ distribution of a renewable energy focused generation across the major demand centres to support an island population of 8 million people.

2.6 Local Planning Policy

- 2.6.1 This section describes the local development plan policies of relevance to the Proposed Development. Part II of the Planning and Development Act (2000), as amended (hereafter referred to as 'The Act') requires that where, in making any determination under The Act, regard needs to be given to the local development plan, the determination must be made in accordance with the plan unless material considerations indicate otherwise.
- 2.6.2 The local development plan policy context is contained within the Offaly County Development Plan (CDP) 2021 2027 and the Westmeath County Development Plan 2021-2027.
- 2.6.3 In considering local policy compliance, it should be noted that An Bord Pleanála granted SID permission in April 2010 for the construction of a 600MW power plant on the existing Derrygreenagh Works site. In 2019, a 5-year extension to this permission was granted by Offaly County Council, extending the life of the planning consent to 2025. As such, the acceptability in principle of the Proposed Development has been established for some time.

Offaly County Development Plan 2021 - 2027

- 2.6.4 The Plan emphasises the importance of achieving a transition to a low carbon economy and reducing dependency of fossil fuels.
- 2.6.5 Chapter 3 (Climate Action and Energy) seeks to "achieve a transition to an economically competitive, low carbon climate resilient and environmentally sustainable county".
- 2.6.6 Policies relating to Energy include the following:
 - **CAEP-01 Electricity Transmission and Distribution**: Support and facilitate the development, reinforcement, renewal and expansion of the electricity transmission and distribution grid, including the development of new lines, pylons and substations as required to provide for the future physical and economic development of Offaly.
 - **CAEP-09:** Raise general awareness of issues associated with climate action and climate change mitigation and adaptation.
 - **CAEP-11:** Support the transition to a competitive, low carbon, climate-resilient and environmentally sustainable economy by 2050, by way of reducing greenhouse gases, increasing renewable energy, and improving energy efficiency.
 - CAEO-09 Gas: Support the further extension of the gas grid into County Offaly to serve existing and envisaged future residential, commercial and industrial development.
- 2.6.7 Chapter 3 of the Plan also identifies how peatlands can facilitate new energy proposals and therefore support diversification of energy production and help the transition to a low carbon economy.
- 2.6.8 **CAEP-13 Peatlands**: The Council recognises that the industrial peatlands in the midlands are a significant resource will transition to after uses ranging from amenity, tourism, biodiversity services, 'wild areas', flood management, climate mitigation, energy development, industry, education, conservation and many more.

Westmeath County Development Plan (2021 - 2027)

2.6.9 The Westmeath County Development Plan states that "a secure and resilient supply of energy is critical to a well-functioning economy, being relied upon for heating, cooling, and to fuel transport, power industry, and generate electricity".

- 2.6.10 Chapter 10 (Transport, Infrastructure and Energy) of the Plan outlines that it will continue to support infrastructure renewal and the development of electricity and gas networks throughout the County. The Plan sets out the following policy objectives to support the development of county's gas and electricity network, as well as generation capacity:
 - **CPO 10.169:** Support and promote the sustainable improvement and expansion of the electricity transmission and distribution network that supply the County, subject to landscape, residential, amenity and environmental considerations.
 - **CPO 10.171:** Support and promote the improvement and extension of gas infrastructure to serve the County.
 - **CPO 10.172:** Co-operate and liaise with statutory and other energy providers in relation to power generation, in order to ensure adequate power capacity for the existing and future needs of the County.
 - CPO 10.174: Support and facilitate the development of enhanced electricity and gas supplies, which do not negatively impact on environmental quality, landscape, wildlife, habitats or residential amenity and which are critical to the economic development of the County.
 - CPO 10.176: Support and facilitate the development of enhanced electricity and gas supplies, and associated networks, to serve the existing and future needs of the Region and facilitate new transmission infrastructure projects that might be brought forward in the lifetime of this Strategy including the delivery of the necessary integration of transmission network requirements to facilitate linkages of renewable energy proposals to the electricity and gas transmission grid in a sustainable and timely manner subject to appropriate environmental assessment and the planning process.

2.7 References

2030 Climate Energy Framework - <u>https://climate.ec.europa.eu/eu-action/climate-strategies-targets/2030-climate-energy-framework_en</u>

Climate Action and Low Carbon Development (Amendment) Act 2021https://www.irishstatutebook.ie/eli/2021/act/32/enacted/en/html

Climate Action Plan 2024, Department of the Environment, Climate and Communications December 2023

The Eirgrid/SONI Ireland Ten Year Generation Capacity Statement 2023-2032

Energy Road Map 2050 - <u>https://energy.ec.europa.eu/publications/energy-roadmap-</u> 2050_en

National Energy Security Framework, Department of the Environment, Climate and Communications, 2022

National Planning Framework - Ireland 2040 Our Plan (NPF) (2018) Department of Housing, Local Government and Heritage 2020

National Development Plan 2021-2030, Department of Public Expenditure, NDP Delivery and Reform 2021

Policy Statement on Security of Electricity Supply, Department of the Environment, Climate and Communications 2021

The White Paper: Ireland's Transition to a Low Carbon Energy Future 2015-2030 Department of the Environment, Climate and Communications 2020