

**EP Energy Developments Ltd.**

**Planning Statement**

**Tynagh North OCGT**

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## Executive Summary

- This Statement is submitted to An Bord Pleanála in support of a Strategic Infrastructure Development ('SID') planning application by EP Energy Developments Ltd.<sup>1</sup> ('the Applicant') for a new 350 MW Open Cycle Gas Turbine ('OCGT') power plant and associated infrastructure on land to the north of Tynagh Power Station, Derryfrench, Tynagh, Loughrea, Co. Galway.
- The Applicant, EP Energy Developments Ltd., is a subsidiary of EP UK Investments Ltd. (EPUKI) which owns and operates a number of power stations in Ireland and the UK.
- The Site area measures 5.53 hectares and is wholly located within the administrative area of Galway County Council ('GCC'). The Site of the Proposed Development is located to the north of the existing Tynagh CCGT Power Station. A description of the Site and its surroundings is provided in Section 2 of this Statement.
- The Site is ideally suited for new generation capacity as it benefits from proximity to a range of existing supply and transmission infrastructure including a high pressure buried gas pipeline, an electricity substation and a 220kV overhead power line.
- The Proposed OCGT will be fuelled by natural gas and will operate as a 'peaking plant' that will be capable of starting up rapidly to provide backup power generation when there is a gap between renewable power generation and demand. The key objective of the development is to facilitate the continued expansion of Ireland's renewable generation capacity while maintaining security of supply.
- The proposed 350MW OCGT plant and the existing CCGT plant at Tynagh will operate independently of one another, as will the OCGT plant which is awaiting determination under ABP-313538-22 (in the event of permission being granted). The three plants will deliver power to the grid through separate transformers, gas AGI connections and electrical substation bays.
- The need for development of this type is clearly established, as detailed in Section 3 of this Statement. The National Development Plan (2021-2030) (NDP) is clear that maintaining security of energy supply is a key national priority for the coming decade and beyond. This has been further underlined by the Government's 'Policy Statement on Security of Electricity Supply', published in November 2021, and Eirgrid's 'Ireland Capacity Outlook 2022 – 2031', published in October 2022. The latest Climate Action Plan ('CAP23') also emphasises the need for urgent delivery of new gas-fired generation capacity.
- The application is supported by comprehensive Environmental Impact Assessment Report ('EIAR'). The headline findings of the EIAR are summarised in Section 5 of this Statement.
- The Proposed Development would have limited Environmental Impact as evidenced in the EIAR, which concludes that it will have no significant residual effects on the

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<sup>1</sup> 3<sup>rd</sup> Floor, The Crescent Building, Northwood Park, Santry, Dublin 9, D09 X8W3

environment with the exception of landscape and visual effects. EIAR Chapter 20 concludes that the Development will have slight to moderate adverse landscape and visual effects during construction and operation.

- The Proposed Development is consistent with, and contributes towards, the achievement of proper planning and sustainable development of the area in which it is located, in line with the policies and objectives of the relevant statutory plans, as detailed in Section 6 of this Statement. Notably, the Proposed Development will contribute to the achievement of National targets outlined in the NDP to deliver circa 2 GW of new conventional generation capacity by 2030 in order to maintain security of supply during this period of transition toward a more renewables-based system.
- The Proposed Development will contribute to the transition toward a low-carbon economy as envisaged in the Galway County Development Plan, the National Planning Framework ('NPF'), the NDP and the Climate Action Plan by supporting the transition to a more diverse renewables-based power generation system.
- The Proposed Development will provide a range of benefits:
  - 350MW additional generation capacity to meet increasing electricity demand and address forecast capacity shortfalls;
  - A new source of backup power to complement renewable generation technologies and strengthen the electricity grid in the Galway area;
  - Support the Country in its transition to a renewable-based generation system and towards achieving net-zero emissions by 2050;
  - Significant private sector capital investment in the regional economy;
  - Up to 200 construction jobs as well as supply chain opportunities for local businesses;
  - Efficient use of vacant land adjoining an existing CCGT Power Station, benefitting from existing supply and transmission infrastructure; and
  - Supports economic development objectives which rely on secure energy supply.
- Considering the urgent need for the Proposed Development, its compliance with planning policy, and its limited environmental impact it is respectfully requested that planning permission is granted for this much-needed development without delay.

## 1.0 Introduction

- 1.1 This Statement is provided in support of a SID planning application by EP Energy Developments Ltd.<sup>2</sup> ('the Applicant') for a new 350MW Open Cycle Gas Turbine ('OCGT') power plant and associated infrastructure on vacant land to the north of the existing Tynagh Power Station in Derryfrench, Tynagh, Loughrea, Co. Galway.

### ***Description of Development***

- 1.2 The Proposed Development description, as contained on the statutory notices for the planning application, reads as follows:

*An Open Cycle Gas Turbine power plant (350MW) and associated infrastructure on land to the north of Tynagh Power Station, Derryfrench, Tynagh, Loughrea, Co. Galway.*

*The proposed development will include: Demolition of existing vacant shed structure on site; Installation of an Open Cycle Gas Turbine (OCGT) unit and associated plant [Including GT enclosure; air intake; stack (40m high); circuit breaker; main, auxiliary and ancillary transformers; switchyard; acoustic barriers; electrical rooms; finfan coolers; skids (to include gas skid, distillate fuel skid, lube oil skid, CO2 fire fighting skid); propane store; Continuous Emissions Monitoring System (CEMS); pump out kiosk; gantry; hardstanding maintenance area]; Secondary fuel storage area [1 no. bunded fuel oil storage tank; sludge tank; fuel forwarding building; fuel unloading area]; Fuel pipe gantry; Demineralised water storage tank; Firewater storage tank and pumphouse; And all associated ancillary development, site works and services including underground pipework and cabling, drainage infrastructure, fencing and access gate, internal roadways, etc.*

- 1.3 The main component of the Proposed Development is a 350 MW OCGT power plant, fuelled by natural gas, which will operate as a 'peaking plant'. The proposed OCGT will be capable of starting up rapidly to provide backup power generation when there is a gap between renewable power generation and demand. The Proposed Development will help to facilitate the continued expansion of Ireland's renewable generation capacity while maintaining security of supply.
- 1.4 The proposed 350MW OCGT plant and the existing CCGT plant at Tynagh will operate independently of one another, as will the OCGT plant which is awaiting determination under ABP-313538-22 (in the event of permission being granted). The three plants will deliver power to the grid through separate transformers, gas AGI connections and electrical substation bays.

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<sup>2</sup> 3<sup>rd</sup> Floor, The Crescent Building, Northwood Park, Santry, Dublin 9, D09 X8W3

- 1.5 Electricity transmission will be ancillary to the plant, carrying electricity underground from the main transformer to the existing electrical substation to the south, where a new bay will be installed<sup>3</sup>. There are no alterations proposed to the electricity network outside of the site as part of this development. The presence of the existing gas and electricity infrastructure at Tynagh Power Station is a key benefit of the site.
- 1.6 The key elements of the project are the OCGT unit and associated balance of plant and equipment; emissions stack, acoustic barriers; a secondary fuel storage and unloading facility; water storage tanks and surface water drainage system. No natural gas storage is proposed.

### ***Need for Development***

- 1.7 The Development is urgently needed to provide added resilience to Ireland's electricity grid and address forecast electricity capacity shortfalls in the coming years.
- 1.8 The need for the Proposed Development is clearly established. The National Development Plan (2021-2030) (NDP)<sup>4</sup> is clear that maintaining security of energy supply is a key national priority for the coming decade and beyond. This has been further underlined by the Government's 'Policy Statement on Security of Electricity Supply'<sup>5</sup>, published in November 2021, and Eirgrid's 'Ireland Capacity Outlook 2022 – 2031', published in October 2022<sup>6</sup>. The latest Climate Action Plan ('CAP23') also emphasises the need for urgent delivery of new gas-fired generation capacity<sup>7</sup>.
- 1.9 The NDP identifies an *urgent requirement* to deliver circa 2 GW of new conventional (mainly gas-fired) generation capacity by 2030, alongside c. 15.5 GW of new renewable capacity within the next ten years just to keep pace with increased demand for electricity, with Eirgrid's Capacity Outlook forecasting capacity deficits for each year up to 2031. The position is stark, and has been exacerbated by:
- Lower than expected availability of some existing power stations
  - Anticipated new power stations not being developed as planned
  - Exceptional growth in demand for electricity due to increased economic activity, including the growth of large energy users such as data centres
  - The expected closure over the coming years of power stations which make up approx. 25% of existing conventional generation capacity
- 1.10 Approximately 1,650MW of generation capacity is scheduled to be retired in the Republic of Ireland over the coming years, with a further 500-600MW retiring in

<sup>3</sup> This expansion of the existing substation will be subject to a separate planning consent

<sup>4</sup> <https://www.gov.ie/en/publication/774e2-national-development-plan-2021-2030/>

<sup>5</sup> <https://www.gov.ie/en/publication/a4757-policy-statement-on-security-of-electricity-supply/#>

<sup>6</sup> [https://www.eirgridgroup.com/site-files/library/EirGrid/EirGrid\\_SONI\\_Ireland\\_Capacity\\_Outlook\\_2022-2031.pdf](https://www.eirgridgroup.com/site-files/library/EirGrid/EirGrid_SONI_Ireland_Capacity_Outlook_2022-2031.pdf)

<sup>7</sup> <https://www.gov.ie/en/publication/7bd8c-climate-action-plan-2023/>

Northern Ireland. Risks around extended periods of low renewable generation output and delays in the delivery of planned offshore capacity must also be countered.

- 1.11 New conventional generation capacity, in particular ‘open cycle’ technology which can respond quickly to shortfalls in power generation at times of high demand, is therefore essential and its delivery must be prioritised. This has been emphasised in a Departmental Circular Letter (12/2021) issued to An Bord Pleanála and the Directors of Planning of each local authority in December 2021. The Departmental Circular states that *“the development of new conventional generation (including gas-fired and gasoil distillate-fired generation) is a national priority”* and that the determination of applications for such infrastructure *“should be prioritised as much as possible”*.
- 1.12 The latest Climate Action Plan further emphasises the need for urgent delivery, stating that *“rapid delivery of flexible gas generation is required at scale and in a timeframe to replace emissions from coal and oil generation before the second budget period”* (2026-2030)<sup>8</sup>.
- 1.13 The Proposed OCGT plant is exactly the type of flexible gas generation capacity that is required. It provides quick response electricity generation capability which will help to maintain security of supply while supporting Ireland in its transition to a low carbon economy in line with NDP and CAP23 objectives. The Proposed Development will also help to replace generation capacity that will be lost through the planned retirement of more carbon-intensive power stations in the coming years.
- 1.14 The Applicant is acutely aware of the unprecedented pressure on the national grid at present and is committed to optimising the contribution of the Site and adjoining lands to maintaining security of supply in the coming years.
- 1.15 The need for the Proposed Development is considered further in Section 3 of this Statement.

### **Capacity Market**

- 1.16 The proposed OCGT plant is to be delivered under the terms of a Capacity Auction that will be run by the Single Energy Market Operator (‘SEMO’) in Q1 2023, and is a separate project in addition to the 299MW OCGT development on land to the south, which is currently awaiting determination by An Bord Pleanála (ABP-313538-22).

### **Seventh Schedule Development**

- 1.17 As the energy output of the proposed development will be 350MW it constitutes ‘Seventh Schedule’ development under the Planning and Development Act (‘A thermal power station or other combustion installation with a total energy output of

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<sup>8</sup> CAP23, p. 123

300 megawatts or more'). We consider that it constitutes 'Strategic Infrastructure Development' (SID) under the terms of Section 37A of the Act, as it is clearly of strategic economic importance to the State and the region. Furthermore, it will contribute significantly to the realisation of national and regional planning objectives and will, in delivering a nationally significant quantum of flexible, fast start-up generation capacity to the grid, have effects far beyond the local planning authority area in which it is situated.

### ***Location of Development***

- 1.18 The Proposed Development is situated on land to the north of the existing Tynagh Power Station in Derryfrench, Tynagh, Loughrea, Co. Galway (Grid Reference X: 174450; Y213165) ('the Site'). The Site area measures 5.53 hectares and is wholly located within the administrative area of Galway County Council ('GCC'). A description of the Site and its surroundings is provided in Section 2.
- 1.19 The Site benefits from proximity to a range of supply and transmission infrastructure including a high pressure buried gas pipeline, an electricity substation and a 220kV overhead power line. It is ideally suited for the provision of new generation capacity.

### ***Compliance with Policy***

- 1.20 This Statement demonstrates that the Proposed Development is consistent with, and contributes towards, the proper planning and sustainable development of the area which it is located, in line with the policies and objectives of the relevant statutory plans.
- 1.21 The policy context is outlined in Section 4 of this Statement.

### ***Development Benefits***

- 1.22 The Proposed Development will provide a range of benefits:
- 350MW additional generation capacity to meet increasing electricity demand and address forecast capacity shortfalls;
  - A new source of backup power to complement renewable generation technologies and strengthen the electricity grid in the Galway area;
  - Support the Country in its transition to a renewable-based generation system and towards achieving net-zero emissions by 2050;
  - Significant private sector capital investment in the regional economy;
  - Up to 200 construction jobs as well as supply chain opportunities for local businesses;
  - Efficient use of vacant land adjoining an existing CCGT Power Station, benefitting from existing supply and transmission infrastructure; and

- Supports economic development objectives which rely on secure energy supply.
- 1.23 The application is supported by a comprehensive Environmental Impact Assessment Report (EIAR). This Statement should be read in conjunction with the Environmental Impact Assessment Report (EIAR), which has been prepared by AECOM on behalf of the Applicant.
- 1.24 This Planning Statement provides detail on the Site, the nature and extent of the Proposed Development, the planning context applying and the comprehensive assessment of environmental impact that has been undertaken. It should be read in conjunction with the full suite of drawings and documents submitted with the application, and is set out as follows:
- Section 1 - Introduction
  - Section 2 - Site Details
  - Section 3 - Proposed Development
  - Section 4 - Policy Context
  - Section 5 - Environmental Impact
  - Section 6 - Planning Assessment
  - Section 7 - Conclusion

## 2.0 Site Details

### 2.1 Site Description

- 2.2.1 The Proposed Development is situated in the townland of Derryfrench, Tynagh, Loughrea, Co. Galway (Grid Reference X: 174450; Y:213165). The Site is located to the north of the existing Tynagh Power Station, approximately 1.5km north of Tynagh Village. The Site area is 5.53 hectares.
- 2.1.2 The Proposed Development area is part of the former Tynagh Mine complex and is of a brownfield character. The area in which it sits is classified in the County Development Plan as being of low landscape value and sensitivity.
- 2.1.3 It formerly served as a construction compound for the existing Tynagh Power Station, and includes the remains of a structure which dates from the construction period (which is to be demolished as part of the proposed development). There are existing high voltage overhead power lines running through the centre of the site, which connect to the existing ESB substation to the south.

### 2.2 Surrounding Area

- 2.2.1 Lands surrounding the existing Power Station are typically rural in nature, principally agricultural pastureland with hedgerows, stone walls and undulating terrain. The existing Power Station buildings, internal road, fencing and a tailing pond are adjacent to the south of the Site, an enclosed former mine lagoon is positioned southeast of the Site, and the Sperrin Galvanisers Ltd. (IPPC) licensed facility is located to the west. Within the wider area the Site is surrounded by the following features:
- Within – former mine brownfield and existing woodland
  - North-west – existing woodland and residential properties with outbuildings (440m)
  - North-east – Milchem Equestrian Centre (330m);
  - East – Mine tailing pond (40m);
  - West – LP4310 Gurtymadden (note - some public documents refer to this road as Gortymadden) to Tynagh Road (300m) and residential property west of LP4310 (330m);
  - South-west – Industrial buildings of Sperrin Galvanisers (100m) and residential properties at Derryfrench (420m);and
  - South – Mine lagoon (280m), residential property (700m), industrial buildings (1.4km), and village of Tynagh (1.8km).
- 2.2.2 Further details of the Site and surrounding environment are available within the EIAR Chapter 4 (Volume I).

- 2.2.3 The Proposed Development provides a valuable opportunity to make more efficient use of vacant land adjoining an existing power station and associated infrastructure.

## 2.3 Planning History

### Site

- 2.3.1 The Site lies to the north of the existing Tynagh Power Station which was permitted by Galway County Council in 2003 (Planning reg. ref. 03/2943 & 04/2511). The existing gas AGI within Tynagh Power Station was also permitted by Galway County Council in 2004 (Planning reg. ref. 04/2193).
- 2.3.2 In April 2022 Galway County Council ('GCC') issued notification of a decision to grant planning permission to the Prospective Applicant for a separate OCGT development within the existing power station site, comprising a new 299 MW Open Cycle Gas Turbine ('OCGT') plant and associated infrastructure and buildings. This was appealed by An Taisce on 11<sup>th</sup> May 2022 and the case is currently awaiting determination by An Bord Pleanála (ABP-313538-22). Further planning history detail for the Site is provided in Table 2.1 below.

| Reference | Date submitted | Applicant name            | Location and description   | Status                                |
|-----------|----------------|---------------------------|--|---------------------------------------|
| 03/2943   | 09/04/2003     | Mountside Properties Ltd. | Derryfrench, Tynagh, Loughrea<br><br>Construction of electricity generating facility.  | Granted with conditions on 22/09/2003 |
| 04/2511   | 31/05/2004     | Tynagh Energy Limited     | Derryfrench, Tynagh, Loughrea<br><br>(1) amendment of buildings and structures previously permitted under Planning Ref 03/2943 and<br><br>(2) the construction of gate house, fin-fan cooler, carpark in switch yard, gas cylinder storage shed, feed pump building, | Granted with conditions on 22/07/2004 |

| Reference | Date submitted | Applicant name                          | Location and description  | Status   |
|-----------|----------------|---|---|--|
|           |                |   | emergency generator and liquid fuel unloading station.  |  |
| 04/2193   | 13/05/2004     | Michael Dufficy, c/o. Bord Gais Eireann | Derryfrench, Tynagh, Loughrea<br><br>Natural gas pressure reducing station consisting of 4 no. single storey buildings, fenced area and associated pipe work. Gross floor space of proposed new buildings 115 sq.m. | Granted with conditions on 06/07/2004  |
| 21/2192   | 24/11/2021     | EP Energy Developments Ltd.             | Derryfrench, Tynagh, Loughrea<br><br>Construction of a OCGT, comprising a new 299 MW Open Cycle Gas Turbine ('OCGT') plant and associated infrastructure and buildings.   | GCC issued notification of a decision to grant planning permission but An Taisce appealed decision; currently awaiting determination by ABP (ref: (ABP-313538-22)) |

Table 2.1 Site planning history

### ***Surrounding Area***

- 2.3.3 The 220kV overhead power line which connects the existing CCGT Power Station to the ESB transmission network to the north was permitted by Galway County Council in 2004 (Planning reg. ref. 04/1974). Detail of this application is provided in Table 2.2 below.

| Reference | Date submitted | Applicant name        | Location and description   | Status                                |
|-----------|----------------|-----------------------|--|---------------------------------------|
| 04/1974   | 29/04/2004     | Tynagh Energy Limited | Cloonprask<br><br>220 kV overhead transmission line from ESB transmission network to 400 MW power station. | Granted with conditions on 22/06/2004 |

Table 2.2 Overhead line application

2.3.4 We have identified several planning applications submitted over the last five years within 1km of the Site. Details of these are provided in Table 2.3.

| Reference | Date submitted | Applicant name  | Location and description  | Status                                |
|-----------|----------------|---|---|---------------------------------------|
| 20/1972   | 18/12/2020     | S. Loughrey & N. Briscoe<br>C/o OPC Design & Planning | Derryfrench<br><br>For the construction of a Dwelling House, Domestic garage, Treatment Unit, Percolation area and all associated site services. Gross floor space of proposed works: 270m <sup>2</sup> .<br><br>This development is situated approximately 350m to the West of the Site.   | Granted with conditions on 07/06/2021 |
| 19/633    | 26/04/2019     | Sperrin Galvanisers (IRE) Ltd.                        | Derryfrench<br><br>To extend workshop and to complete all associated site works. Permission is also sought to erect acoustic fencing along a section of the existing site boundary. The site is located within the confines of a Major Accident Site under the Seveso Directive. Gross floor space of proposed works: 600m <sup>2</sup> | Granted with conditions on 29/07/2019 |

| Reference       | Date submitted | Applicant name                 | Location and description   | Status                                |
|-----------------|----------------|--------------------------------|--|---------------------------------------|
|                 |                |                                | This development adjoins the Site along its Western boundary.  |                                       |
| GCC ref. 18/221 | 26/02/2018     | Sperrin Galvanisers (IRE) Ltd. | <p>Derryfrench</p> <p>To extend workshop and complete all associated site works. Permission is also sought to erect acoustic fencing along a section of the existing site boundary. Gross floor space of proposed works 600m<sup>2</sup>. The Site is located at Derryfrench, Tynagh, Co. Galway and is within the confines of a Major Accident Site as determined by the Seveso Directive.</p> <p>This development adjoins the Site along its Western boundary.</p> | Granted with conditions on 20/04/2018 |

**Table 2.3 Historic planning applications within 1km of the Site**

## 3.0 Proposed Development

### 3.1 The Applicant

- 3.1.1 The Applicant, EP Energy Developments Ltd., is a subsidiary of EP UK Investments Ltd. (EPUKI), which owns and operates a number of power stations in Ireland and the UK.
- 3.1.2 These include the existing Tynagh Power Station, Kilroot Power Station and Ballylumford Power Station in Northern Ireland and, in Great Britain, Langage Power Station and South Humber Power Station which are gas-fired power stations located near Plymouth, Devon and Immingham, North-East Lincolnshire, and Lynemouth Power Station, a biomass fuelled power plant in Northumberland. EPUKI also owns sites with consent for new power stations in Norfolk, North-East Lincolnshire and North Yorkshire.
- 3.1.3 EPUKI is a subsidiary of Energetický A Průmyslový Holding ('EPH'). EPH owns and operates energy generation assets in the Czech Republic, Slovak Republic, Germany, Italy, Hungary, Poland, Republic of Ireland and the United Kingdom.

### 3.2 Need for the Proposed Development

- 3.2.1 The National Development Plan (2021-2030) (NDP)<sup>9</sup> is clear that maintaining security of energy supply is a key national priority for the coming decade and beyond. This has been further underlined by the Government's 'Policy Statement on Security of Electricity Supply'<sup>10</sup>, published in November 2021, and Eirgrid's 'Ireland Capacity Outlook 2022 – 2031', published in October 2022<sup>11</sup>. The latest Climate Action Plan ('CAP23') also emphasises the need for urgent delivery of new gas-fired generation capacity.
- 3.2.2 The Proposed Development is urgently needed to provide resilience to Ireland's electricity grid and address forecast electricity capacity shortfalls. The proposed OCGT peaking plant will support intermittent renewable generation technologies by running for short periods of time when there is insufficient electricity being generated from renewable technologies to meet demand. The Proposed Development will also help to replace the generation capacity lost through the planned retirement of more carbon-intensive power stations.
- 3.2.3 The Climate Action Plan 2023 (Published December 2022) sets out a 'roadmap' to achieve a net zero carbon energy system by 2050. It commits Ireland to aim for up to 80% of its electricity supply to be generated from renewables by 2030, with no generation from peat and coal. For the electricity sector, the need for additional gas-

<sup>9</sup> <https://www.gov.ie/en/publication/774e2-national-development-plan-2021-2030/>

<sup>10</sup> <https://www.gov.ie/en/publication/a4757-policy-statement-on-security-of-electricity-supply/#>

<sup>11</sup> [https://www.eirgridgroup.com/site-files/library/EirGrid/EirGrid\\_SONI\\_Ireland\\_Capacity\\_Outlook\\_2022-2031.pdf](https://www.eirgridgroup.com/site-files/library/EirGrid/EirGrid_SONI_Ireland_Capacity_Outlook_2022-2031.pdf)

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 before the second budget period'* (i.e. 2026 – 2030)<sup>12</sup>. Accordingly, the key measures for the sector include that *"The CRU and EirGrid will ensure an adequate level of conventional dispatchable generation capacity and deliver at least 2 GW of new flexible gas-fired generation"*<sup>13</sup>.

- 3.2.4 The need to develop new backup gas power generation plants, such as the proposed development, to facilitate the increased uptake of renewable technologies and support the Government's climate reduction targets as well as providing improved security of supply is well established, as discussed further below.

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

- 3.2.5 'Ireland's Transition to a Low Carbon Energy Future 2015- 2030' (Government White Paper) sets out a framework to guide National policy in the energy sector up to 2030 and, in some cases, to 2050 taking account of European and international climate change objectives.
- 3.2.6 The 'Energy Vision 2050' established in the White Paper aims to reduce greenhouse gas (GHG) emissions from the energy sector to between 80% and 95% of 1990 levels. To achieve this transition to low carbon energy, energy supply will need to be diversified to include a greater share of renewable generation sources and shift away from reliance on carbon-intensive fuels such as peat and coal in favour of lower carbon fuels like natural gas. The White Paper notes that:

*"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"*<sup>14</sup>.

*"Onshore wind continues to be the main contributor (18.2% of total generation and 81 % of RESE 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. Due to the variability of wind conditions, wind generation poses challenges to the operation of electricity grids. In Ireland, these challenges are being addressed by the electricity system operators under their DS3 programme"*<sup>15</sup>. (emphasis added)

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<sup>12</sup> CAP23, Page 123

<sup>13</sup> CAP23, Page 139

<sup>14</sup> Paragraph 103, Government White Paper – Ireland's Transition to a Low Carbon Energy Future 2015-2030 (19/06/2020) Department of the Environment, Climate and Communications

<sup>15</sup> Paragraph 128, Government White Paper – Ireland's Transition to a Low Carbon Energy Future 2015-2030 (19/06/2020) Department of the Environment, Climate and Communications

- 3.2.7 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 electricity grid network can operate reliably and efficiently with the integration of additional renewable generation.

#### ***National Mitigation Plan 2017***

- 3.2.8 The first National Mitigation Plan for Ireland, introduced in 2017, outlines initial steps to be taken to achieve decarbonisation. The Plan begins the process of developing medium to long term mitigation choices for the next and future decades.
- 3.2.9 Analysis by the Sustainable Energy Authority of Ireland found that, since 1990, there has been a positive correlation between the reduced share of high carbon content fuels in electricity generation, such as peat, coal and oil, in relation to the rise in the relatively lower carbon natural gas and zero carbon renewables. This trend of resource consumption supports the Plan's forecast that:

*"Between now and 2050 we [Ireland] will move from a centralised fossil fuel-based electricity system to a low carbon power system. Smart operation of the power system at both transmission and distribution level and energy efficiency will enable maximisation of the existing grid. Increased levels of renewable generation will be accompanied by the development of large-scale technology solutions, such as pumped storage and battery storage, together with demand response to complement the challenges posed"*<sup>16</sup>.

- 3.2.10 The Plan states that, as greater volumes of intermittent renewable electricity are connected to the grid, new measures and systems will be required within the distribution system to maintain grid security and stability<sup>17</sup>.
- 3.2.11 As part of this, modes of supporting the electricity network during periods when there is a gap between renewable power generation and power demand will be needed. This project is designed specifically for this purpose, being able to respond quickly to shortfalls in power generation at times of high demand.

#### ***National Development Plan 2021-2030***

- 3.2.12 The renewed NDP was published on 04<sup>th</sup> October 2021 and will guide national investment decisions up to 2030. The NDP aims to facilitate the implementation of the 'National Strategic Outcomes' contained in the National Planning Framework (NPF) and address the challenges posed by current issues such as climate action and population growth.

<sup>16</sup> P 35, National Mitigation Plan 2017 (18/07/2017) Department of the Environment, Climate and Communications

<sup>17</sup> P 45, National Mitigation Plan 2017 (18/07/2017) Department of the Environment, Climate and Communications

3.2.13 In the context of the energy sector, the principal objective of the NDP is to assist in ensuring a *'long-term, sustainable and competitive energy future for Ireland'*. The NDP's focus for investment in the energy system is to:

- *'ensure that it meets the challenge of integrating world-leading levels of renewable wind and solar electricity whilst ensuring security of supply; and*
- *ensure that it is fit for purpose in the medium- to longer-term in order to meet projected demand levels.<sup>18'</sup>*

3.2.14 The NDP emphasises that ensuring continued security of energy supply is a priority at national level and within the overarching EU policy framework and acknowledges that achieving the decarbonisation of energy supply presents a significant challenge in the face of rapidly increasing electricity demand.

3.2.15 Energy demand over the next 10 years will be driven by increasing demand from large energy users, continued population growth and the increased electrification of transportation and buildings. For example, the NDP notes that *'electricity demand from large energy users, including data centres, is forecast to grow to up to 27% of total power demand in 2030<sup>19'</sup>*.

3.2.16 The NDP commits to achieving up to 80% of Ireland's electricity capacity from renewable sources by 2030, which 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. The NDP aims to deliver circa 15.5 GW of renewable generation capacity over the next ten years alongside circa 2 GW of conventional capacity<sup>20</sup>.

3.2.17 Strategic Investment Priority no. 4 of the NDP aims to:

*'deliver circa 2 GW 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<sup>21'</sup>*

3.2.18 The NDP notes that, notwithstanding the significant investment in conventional generation capacity that is required over the next ten years, the proportion of electricity generated by natural gas is expected to decrease from circa 50% to circa 30% by 2030 because *'conventional generation plant will spend much of its time in*

<sup>18</sup> p 126, National Development Plan 2021-2030 (4/10/2021) Department of Public Expenditure and Reform

<sup>19</sup> p 123, National Development Plan 2021-2030 (4/10/2021) Department of Public Expenditure and Reform

<sup>20</sup> p 122, National Development Plan 2021-2030 (4/10/2021) Department of Public Expenditure and Reform

<sup>21</sup> p 123, National Development Plan 2021-2030 (4/10/2021) Department of Public Expenditure and Reform

*reserve and will only operate when required to balance the system in times of high demand and low wind/solar generation<sup>22</sup>.*

### **Ireland Capacity Outlook 2022-2031**

3.2.19 EirGrid’s latest capacity outlook identifies capacity deficits for each year up to 2031. It states that *“there is no question that the current outlook, based on the best information available, is serious”* and that, to address the challenge, *“a balanced portfolio of new capacity is required and this includes the need for new cleaner gas fired generation plant”*. It highlights the need for *“the delivery, through the all-island capacity auctions, of over 2,000 MW of enduring flexible gas-fired generation capacity”* by 2030 alongside additional measures including the procurement of temporary emergency generation capacity and extending the operation of older generators<sup>23</sup>.

#### **Summary**

3.2.20 There is now an urgent need to develop new responsive gas-fired power plants, such as the Proposed Development, to support the Government’s renewable energy commitments and to ensure security of electricity supply over the next five to ten years. The Proposed OCGT plant is designed for this purpose. It provides quick response generation capability which will help to ensure security of supply over the coming years.

### **3.3 Description of Development**

3.3.1 The Proposed Development description reads as follows:

*An Open Cycle Gas Turbine power plant (350MW) and associated infrastructure on land to the north of Tynagh Power Station, Derryfrench, Tynagh, Loughrea, Co. Galway.*

*The proposed development will include: Demolition of existing vacant shed structure on site; Installation of an Open Cycle Gas Turbine (OCGT) unit and associated plant [Including GT enclosure; air intake; stack (40m high); circuit breaker; main, auxiliary and ancillary transformers; switchyard; acoustic barriers; electrical rooms; finfan coolers; skids (to include gas skid, distillate fuel skid, lube oil skid, CO2 fire fighting skid); propane store; Continuous Emissions Monitoring System (CEMS); pump out kiosk; gantry; hardstanding maintenance area]; Secondary fuel storage area [1 no. bunded fuel oil storage tank; sludge tank; fuel forwarding building; fuel unloading area]; Fuel pipe gantry; Demineralised water storage tank; Firewater storage tank and pumphouse; And all associated ancillary development, site works and services*

<sup>22</sup> p 125, National Development Plan 2021-2030 (4/10/2021) Department of Public Expenditure and Reform

<sup>23</sup>[https://www.eirgridgroup.com/sitefiles/library/EirGrid/EirGrid\\_SONI\\_Ireland\\_Capacity\\_Outlook\\_2022-2031.pdf](https://www.eirgridgroup.com/sitefiles/library/EirGrid/EirGrid_SONI_Ireland_Capacity_Outlook_2022-2031.pdf), pages 4 – 6

*including underground pipework and cabling, drainage infrastructure, fencing and access gate, internal roadways, etc.*

- 3.3.2 The main element of the Proposed Development is a 350 MW OCGT fuelled by natural gas which will operate as a 'peaking plant'. The proposed OCGT will spend most of its time on standby and will be capable of starting up rapidly to provide backup power generation.

#### Components of Proposed Development

- 3.3.3 The Proposed Development will comprise the following main components:

##### **Open Cycle Gas Turbine**

- OCGT unit comprising a single gas turbine and a single alternating current (AC) generator. The generator and gas turbine will be housed in separate acoustic enclosures with ventilation ducts.
- Emissions stack will be a height of 40m diameter and will be fitted with a continuous emissions monitoring system (CEMS) to monitor flue gas composition.
- Outdoor step-up transformer to increase the voltage of the generated power to a level suitable for export to the existing electrical substation to the south.
- Forced air cooling radiators will be used to manage waste heat from the lubrication oil and other essential systems when operational.
- Ancillary systems will be in containers and enclosures adjacent to the gas turbine.

##### **Secondary Fuel Storage Facility**

- The proposed plant is required under the Grid Code to maintain a secondary fuel supply of approximately 6,100m<sup>3</sup>(~5,200 tonnes) to be stored in a tank within a bunded area on site. The purpose of this secondary fuel is to ensure that power can still be supplied to the electricity network in the event of an interruption to supply from the gas network. The secondary fuel will only be used for testing and in the highly unlikely event that both the gas connection is unavailable and other generation capacity on the transmission grid cannot meet demand.
- A fuel treatment plant will be required to remove any contaminants from the secondary fuel that may accumulate during storage, which will be collected in a tank contained within the bunded area prior to its safe disposal.
- The secondary fuel will be received via road tanker at an unloading station adjacent to the bunded area and transferred to the tank via a set of unloading pumps.
- A fuel forwarding pump set will forward the secondary fuel from the storage area to the plant when required.

##### **Demineralised Water Tank**

- The proposed plant will have a 6,000m<sup>3</sup> demineralised water storage tank which will be used for power augmentation of the gas turbine to achieve 350MW output. This will be sufficient water for 3 days continuous operation at base load.

### **Fire Water Tank**

- A fire water tank with a capacity of 1000m<sup>3</sup> is required for IE license compliance. This will be located to the west of the OCGT as part a full site fire safety system.

3.3.4 In connection with and in addition to the above, the following infrastructure will be included:

- internal roads
- external lighting
- security fencing and gates;
- utilities, pipes, cables and connection to existing surface water drainage systems
- pipe gantries
- acoustic barriers
- stores
- hardstanding maintenance area
- skids

### **Operation of Proposed Development**

3.3.5 The OCGT facility will operate as a peaking plant. Its purpose is to start up on demand to respond rapidly to fluctuations in supply needed to ensure security of supply to electricity users.

3.3.6 The Proposed Development will be started and stopped automatically under the supervision of trained operators in response to requests for power from the electricity grid operator. The OCGT plant is specifically designed to start-up, shutdown and ramp (change its output) rapidly in response to changes in the requirement for power from the electricity grid.

3.3.7 The proposed 350MW OCGT plant and the existing CCGT plant at Tynagh will operate independently of one another, as will the OCGT plant which is awaiting determination under ABP-313538-22 (in the event of permission being granted). The three plants will deliver power to the grid through separate transformers, gas AGI connections and electrical substation bays.

3.3.8 Electricity transmission will be ancillary to the plant, carrying electricity underground from the main transformer to the existing electrical substation to the south, where a new bay will be installed<sup>24</sup>. There are no alterations proposed to the electricity network outside of the site as part of this development. A new gas AGI ('Above Ground Installation') will also be required, connecting to the existing gas pipeline that serves the site<sup>25</sup>. The presence of the existing gas and electricity infrastructure at Tynagh is a key benefit of the site.

<sup>24</sup> This expansion of the existing substation will be subject to a separate consent process

<sup>25</sup> The AGI will be subject to a separate consent process

### 3.4 Pre-Application Consultation

- 3.4.1 This section outlines the consultation undertaken in relation to the Proposed Development prior to submission of the planning application and EIAR. EIAR Chapter 6 provides further details of the pre-application consultation.

#### Strategic Infrastructure Development Pre-Application Consultation

- 3.4.2 The Applicant submitted a request on 22<sup>nd</sup> November 2022 to An Bord Pleanála to enter into pre-application consultation under Section 37B of the Planning and Development Act 2000 (as amended) and attended a pre-application meeting with the Board on 18<sup>th</sup> January 2023. The principal matters discussed related to the need for the proposal, the planning history of the site, the existing appeal (ref: ABP-313538-22), alternatives considered and the issues pertaining to the development in terms of planning policy and potential environmental impacts.
- 3.4.3 Following the meeting the Applicant submitted written clarifications to the Board's Inspector and formal closure of the Pre-Application Consultation process was requested by the Applicant on 25<sup>th</sup> January 2023.

#### Public Notices

- 3.4.4 In accordance with the requirements for public notices set out under Section 214 of the Planning and Development Regulations 2001, as amended, the applicant has notified the public of this application by means of erecting site notices on the relevant lands and publishing a newspaper notice in 2 no. newspapers approved by Galway County Council and in circulation in the area. Copies of the site notice and newspaper notices are included in the planning application pack.
- 3.4.5 In addition, an application website has been created, which which is referenced in the public notices and contains a full set of the submitted application documents for ease of inspection by members of the public.

## 4.0 Policy Context

### 4.1 Introduction

- 4.1.1 This Section sets out the planning policy context at national, regional and local level as it applies to the Proposed Development. Energy policy in Ireland is driven by international climate change agreements to increase renewable energy generation. The European Commission's 2030 Climate and Energy Framework, published following the Paris Agreement, sets a binding target of at least 32% of renewable energy for EU member states by 2030. Ireland's Climate Action Plan 2023 commits Ireland to aim for at least 80% of electricity supply to be generated from renewables by 2030.
- 4.1.2 As identified in Section 3.2 of this Statement, a wide range of policy and guidance documents, including Ireland's Climate Action Plan (2023) and the National Development Plan, recognise that achieving significant increases in renewable generation will require investment in renewable generation capacity and associated systems, such as OCGT peaking plants, to manage intermittent power supply.

### 4.2 National Policy

#### **Ireland's Transition to a Low Carbon Energy Future 2015-2030**

- 4.2.1 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.
- 4.2.2 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"<sup>26</sup>.*

*"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."<sup>27</sup>*

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<sup>26</sup> Department of Communications, Climate Action and Environment (DECC). (2015). The White Paper: Ireland's Transition to a Low Carbon Energy Future 2015-2030. (Para 103, Page 48)

<sup>27</sup> Department of Communications, Climate Action and Environment (DECC). (2015). The White Paper: Ireland's Transition to a Low Carbon Energy Future 2015-2030. (Para 128, Page 53)

*“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”<sup>28</sup> (emphasis added).*

*“Due to the variability of wind conditions, wind generation poses challenges to the operation of electricity grids. In Ireland, these challenges are being addressed by the electricity system operators under their DS3 programme”<sup>29</sup>.*

- 4.2.3 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”*<sup>30</sup>. 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 network can continue to operate efficiently with the integration of variable renewable energy sources.

#### **National Mitigation Plan 2017**

- 4.2.4 The first ‘National Mitigation Plan’ (NMP) represents an initial step for Ireland on a pathway to achieve decarbonisation. It lays the foundations for transitioning Ireland to a low carbon, climate-resilient and environmentally sustainable economy by 2050. It notes that there has been a positive correlation between the reduced share of high carbon content fuels in electricity generation, such as peat, coal, and oil, in relation to the rise in the relatively lower carbon natural gas and zero carbon renewables. This trend of resource consumption supports the NMP’s forecast that:

*“Between now and 2050 we [Ireland] will move from a centralised fossil fuel-based electricity system to a low carbon power system. Smart operation of the power system at both transmission and distribution level and energy efficiency will enable maximisation of the existing grid. Increased levels of renewable generation will be accompanied by the development of large-scale technology solutions, such as pumped storage and battery storage, together with demand response to complement the challenges posed”<sup>31</sup>.*

- 4.2.5 The NMP recognises that, as greater volumes of intermittent renewable electricity are connected to the grid, new measures and systems will be required in order to maintain grid security and stability.

#### **National Planning Framework**

- 4.2.6 ‘Project Ireland 2040 - National Planning Framework’, hereafter referred to as the NPF, is a 20-year planning framework designed to guide public and private

<sup>28</sup> Department of Communications, Climate Action and Environment (DECC). (2015). The White Paper: Ireland’s Transition to a Low Carbon Energy Future 2015-2030. (Page 54)

<sup>29</sup> Department of Communications, Climate Action and Environment (DECC). (2015). The White Paper: Ireland’s Transition to a Low Carbon Energy Future 2015-2030. (Para 128, Page 53)

<sup>30</sup> <http://www.eirgridgroup.com/site-files/library/EirGrid/DS3-Programme-Brochure.pdf> (Page 2)

<sup>31</sup> Department of Communications, Climate Action & Environment, (2017). National Mitigation Plan. July 2017 (Page 35)

investment, to create and promote opportunities for Irish citizens, and to protect and enhance Ireland's built and natural environment.

- 4.2.7 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 of 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."*<sup>32</sup>

- 4.2.8 The NPF notes that Ireland's National Energy Policy is focused on three pillars:

- Sustainability;
- Security of Supply; and
- Competitiveness.

- 4.2.9 In line with these pillars, National Strategic Outcome 8 (Transition to Sustainable Energy) notes 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, i.e. renewables, 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."*<sup>33</sup>

- 4.2.10 Some other key National Policy Objectives aimed at further achieving the transition to sustainable energy include:

- **National Policy Objective 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;*
- **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*

<sup>32</sup> Project Ireland 2040 – National Planning Framework, DHPLG, February 2018

<sup>33</sup> Government of Ireland, (2018). National Planning Framework. Project Ireland 2040 (Page 147).

- **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.*

4.2.11 The Proposed Development complements the national policy objectives around the creation of a lower carbon and more distributed energy generation system.

#### **National Development Plan**

4.2.12 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.

4.2.13 The NDP was updated in October 2021. The 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 ensuring security of supply; and*
- *ensure that it is fit for purpose in the medium- to longer-term in order to meet projected demand levels.'*<sup>34</sup>

4.2.14 It emphasises that *'ensuring continued security of energy supply is considered a priority at national level and within the overarching EU policy framework'*<sup>35</sup>.

4.2.15 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.

4.2.16 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'*<sup>36</sup>.

4.2.17 The Plan clarifies that much of the 2GW of new conventional (mainly gas-fired) generation capacity needed will need to be delivered within the next five years to meet demand.

<sup>34</sup> Department of Public Expenditure and Reform, (2021). National Development Plan 2021-2030 (Page 126)

<sup>35</sup> Department of Public Expenditure and Reform, (2021). National Development Plan 2021-2030 (Page 125).

<sup>36</sup> Department of Public Expenditure and Reform, (2021). National Development Plan 2021-2030 (Page 125)

### **Policy Statement on Security of Electricity Supply (2021)**

- 4.2.18 The Government’s Policy Statement on Security of Electricity Supply (November 2021) sets out a number of updates to national 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.
- 4.2.19 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.*

### **The Eirgrid/SONI Ireland Capacity Outlook 2022 - 2031**

- 4.2.20 The latest all-Ireland 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”*<sup>37</sup>.
- 4.2.21 It predicts capacity deficits during the 10 years to 2031 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”*<sup>38</sup>.
- 4.2.22 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”*<sup>39</sup>.
- 4.2.23 Reflecting and building upon the commitments stated within the NDP, it states that we must deliver *“over 2000MW of enduring flexible gas-fired generation capacity”* by 2030<sup>40</sup>.

### **Climate Action Plan 2023**

- 4.2.24 The Climate Action Plan 2023 (Published December 2022) sets out a 'roadmap' to achieve a net zero carbon energy system by 2050. It commits Ireland to aim for up to 80% of its electricity supply to be generated from renewables by 2030, with no generation from peat and coal. 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*

<sup>37</sup> Eirgrid/SONI (2022), Ireland Capacity Outlook 2022 – 2031 (Page 4)

<sup>38</sup> Eirgrid/SONI (2022), Ireland Capacity Outlook 2022 – 2031 (Page 5)

<sup>39</sup> Eirgrid/SONI (2022), Ireland Capacity Outlook 2022 – 2031 (Page 5)

<sup>40</sup> Eirgrid/SONI (2022), Ireland Capacity Outlook 2022 – 2031 (Page 6)

*generation is needed at scale and in a timeframe to replace emissions from coal and oil generation before the second budget period' (i.e. 2026 – 2030)<sup>41</sup>.*

- 4.2.25 Accordingly, the key measures for the sector include that *“The CRU and EirGrid will ensure an adequate level of conventional dispatchable generation capacity and deliver at least 2 GW of new flexible gas-fired generation”<sup>42</sup>.*

### 4.3 Regional Planning Policy

#### **North-West Regional Assembly: Regional Spatial and Economic Strategy 2020-2032**

- 4.3.1 The Regional Spatial and Economic Strategy (RSES) for the North-West region was adopted in 2020 and provides a high-level development framework for the region that supports the implementation of the NPF. It identifies ‘Five Growth Ambitions’ which aim to link strategic and operational challenges with prioritised capital interventions. One of these growth ambitions is ‘Infrastructure Ambition’, with the Strategy noting that the *‘provision and maintenance of economic infrastructure, such as energy, water, and wastewater, are key to delivering compact growth and a connected, vibrant, inclusive, resilient and smart region.’<sup>43</sup>*
- 4.3.2 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, Government Policy and the need to achieve a long-term, sustainable and competitive energy future for Ireland:
- **RPO 8.1** - *The Assembly support the development of a safe, **secure and reliable** electricity network and the transition towards a low carbon economy centred on energy efficiency and the growth projects outlined and described in this strategy. (emphasis added)*
  - **RPO 8.2** - *Support the reinforcement and strengthening of the electricity transmission network with particular reference to the regionally important projects contained within Table 11.*
  - **RPO 8.3** - *The Assembly support the necessary integration of the transmission network requirements to allow linkages with renewable energy proposals at all levels to the electricity transmission grid in a sustainable and timely manner.*
  - **RPO 8.4** - *That reinforcements and new electricity transmission infrastructure are put in place and their provision is supported, 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. Ensure that development minimises impacts on designated areas.*

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<sup>41</sup> CAP23, Page 123

<sup>42</sup> CAP23, Page 139

<sup>43</sup> Northern and Western Regional Assembly. (2020). Northern and Western Assembly Regional Spatial and Economic Strategy (RSES), (Page 32).

#### 4.4 Local Planning Policy

4.4.1 This section describes the local development plan policies of relevance to the Proposed Development.

4.4.2 The local development plan policy context is contained within the Galway County Development Plan 2022-2028.

##### **Galway County Council – County Development Plan 2022-2028**

4.4.3 The Plan outlines the importance of having high quality energy infrastructure and also the importance of supporting the development of renewable energy sources in the interest of delivering on the National Climate Change Strategy and providing security of energy supply throughout the County and region. Chapter 7 of the Plan outlines the ambitions within the county to deliver infrastructure and utilities in a sustainable manner, recognising that this is of critical importance with regard to the future development of the county. Section 7.7 notes that a strong electricity infrastructure and transmission grid is *‘essential for the county in order to attract and retain high-tech industrial investment, to ensure competitive energy supplies, to achieve balanced development, to reduce dependency on fossil fuels, and to achieve climate change targets’*<sup>44</sup>

4.4.4 The Plan states that it is the policy objective of the Council *‘to work in conjunction with Eirgrid to protect existing electricity infrastructure, and to facilitate the timely delivery of new electricity infrastructure.’*<sup>45</sup> Policy Objectives have been provided within the CDP to support this priority objective relating specifically to electricity and gas:

- **Policy EG 1 – Enhancement of Electricity Infrastructure** - *Support and promote the sustainable improvement and expansion of the electricity transmission and distribution network that supply the County, while taking into consideration landscape, residential, amenity and environmental considerations.*
- **Policy EG 2 – Delivery of Electricity and Gas Infrastructure** - *Support the provision and extension of electricity and gas transmission networks within the county which are critical to the economic development of the County subject to environmental quality, landscape, wildlife, habitats or residential amenity.*
- **Policy EG 3 – Power Capacity** - *To support 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.*
- **Policy EG 4 – Ireland’s Grid Development Strategy** - *Support the implementation of Ireland’s Grid Development Strategy, while taking into account landscape, residential, amenity and environmental considerations.*

4.4.5 Chapter 14 (Climate Change, Energy and Renewable Resource) of the Plan outlines the council’s ambitions to *‘reduce the carbon footprint by integrating climate action into the planning system in support of national targets, support indigenous renewable*

<sup>44</sup> Galway County Council ( 2022), Galway County Development Plan 2022-2028, Page 223

<sup>45</sup> Galway County Council (June 2022), Galway County Development Plan 2022-2028 (Page 151).

*sources in order to reduce dependence on fossil fuels and improve security of supply and the move to a competitive low carbon economy*<sup>46</sup>. This section of the CDP states that is a strategic aim of the Council to *'reduce the County's CO<sub>2</sub> emissions by achieving international, national, regional and any local targets for achieving a low carbon economy by 2050'* and to reduce County Galway's dependency on imported fossil fuels *'and to provide alternative energy sources by harnessing the County's potential for renewable energy sources while strengthening the grid transmission networks*<sup>47</sup> (emphasis added). It sets out the following policy objectives for the county's electricity and gas network:

- **Policy EG 1 – Gas Network and Generating Capacity** - *To support the development of the gas network and associated generating capacity in order to sustainably support and augment renewable electrical energy generated in County Galway.*
- **Policy EG 2 - Electricity Transmission Networks**
  - (a) *To support the development of the transmission grid network in order to sustainably accommodate both consistent and variable flows of renewable energy generated in County Galway.*
  - (e) *It is important that the necessary transmission and distribution infrastructure is facilitated and put in place in order to maximise the renewable energy potential of County Galway. Liaison with Eirgrid, as a TSO, and alignment with their transmission plans and strategies will be of vital importance in this respect.*
- **EG 3 Natural Gas and Synthetic Networks** - *To facilitate the delivery and expansion of the Natural Gas and Synthetic Gas infrastructure for storage, transmission and energy generation throughout the County for both domestic and business/industry use and to have regard to the location of existing gas infrastructure pipeline in the assessment of planning applications. (emphasis added)*

4.4.6 With reference to renewable energy generation, Policy RE7 states that it is an objective:

*"To facilitate and support appropriate levels of renewable energy generation in County Galway, considering the need to transition to a low carbon economy and to reduce dependency on fossil fuels."*

4.4.7 In meeting this objective the CDP (Section 14.8) recognises the need to ensure security of supply, noting that:

*'With projected increases in population and economic growth, the demand for energy is set to increase in the coming years. A secure and resilient supply of energy is critical*

<sup>46</sup> Galway County Council (June 2022), Galway County Development Plan 2022-2028 (Page 263)

<sup>47</sup> Galway County Council (June 2022), Galway County Development Plan 2022-2028 (Page 264)

*to a well-functioning economy, being relied upon for heating, cooling, and to fuel transport, power industry, and generate electricity.*<sup>48</sup> (emphasis added).

**CDP Appendix 1: Local Authority Renewable Energy Strategy**

- 4.4.8 To facilitate the sustainable growth of renewable energies a ‘Local Authority Renewable Energy Strategy’ (LARES) has been prepared for the county and is included as Appendix 1 of the CDP. Within the ‘LARES’ it is recognised that *‘natural gas, particularly renewable and indigenous gas, will continue to have a role to play in the transition to a low carbon economy. As such, renewable energy developments may require support from such sources in times of high energy demand.’*<sup>49</sup> It goes on to state that *‘the gas network plays a key role as part of the supporting infrastructure for renewable energy developments.’*<sup>50</sup>

**CDP Appendix 4: Landscape Character Assessment**

- 4.4.9 The Site is identified in ‘Appendix 4 of the CDP 2022-2028: Landscape Character Assessment’ as part of the Kilcrow Basin Unit, which falls within the wider ‘Central Galway Complex Landscape’.
- 4.4.10 The character of the Kilcrow Basin is described as a *‘working landscape, locally elevated. Larger areas of bog and forestry. Elevated concentrations of settlements and infrastructure’*<sup>51</sup>.
- 4.4.11 In terms of landscape sensitivity, the area in which the Proposed Development is sited is designated as ‘Low’, which is defined as an area which is *‘unlikely to be adversely affected by change’*<sup>52</sup>. This marks a reduction in the sensitivity of the surrounding landscape in comparison with the 2015-2021 CDP which identifies it as ‘Class 2 – Moderate’.

<sup>48</sup> Galway County Council (June 2022), Galway County Development Plan 2022-2028 (Page 279)

<sup>49</sup> Galway County Council (June 2022), Galway County Development Plan 2022-2028 - Appendix 1: [Local Authority Renewable Energy Strategy \(Page 38\)](#)

<sup>50</sup> Galway County Council (June 2022), Galway County Development Plan 2022-2028 - Appendix 1: [Local Authority Renewable Energy Strategy \(Page 38\)](#)

<sup>51</sup> Galway County Council (June 2022), Galway County Development Plan 2022-2028 – Appendix 4: [Landscape Character Assessment \(Page 21\)](#)

<sup>52</sup> Galway County Council (June 2022), Galway County Development Plan 2022-2028 – Appendix 4: [Landscape Character Assessment \(Page 22\)](#)

## 5.0 Environmental Impact Assessment

### 5.1 Need for EIAR

5.1.1 An EIAR is provided in accordance with the EU EIA Directive 2011/92/EU, as amended by EIA Directive 2014/52/EU and the European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018, in order to inform the consideration of the Application and provide the planning authority with the environmental information that must be taken into account when determining the Application.

### 5.2 Air Quality and Climate

5.2.1 A robust assessment of the likely air quality and emissions impacts of the proposed development has been undertaken in the EIAR and the findings are presented in the EIAR Chapter 7. The air quality impacts from the operational traffic of the Proposed Development are not considered in Chapter 7 because road traffic is expected to be minimal. The headline findings are summarised below:

- At construction and decommissioning stage, the main potential air quality effects include dust deposition and associated elevation in PM<sup>10</sup> (particulate matter) concentrations. The risk of dust impacts arising during construction is Negligible to Low.
- The application of good working practice measures and mitigation regularly employed in the construction industry and included within the outline Construction Environmental Management Plan ('oCEMP') (refer to Appendix 5A, EIAR Volume II) will reduce potential construction stage air quality effects at receptors to a Not Significant level.
- The predicted air quality effects of eventual decommissioning and demolition of the Proposed Development are considered to be comparable to, or less than, those assessed for construction activities and are therefore Not Significant.
- During the operational stage the main potential air quality effects are emissions from the OCGT stack.
- The emissions stack height for the Proposed Development has been determined at 40m (above finished ground level) to provide appropriate dispersion of the emitted pollutants. As part of the cumulative assessment the proposed development, the existing Tynagh CCGT Power Station and the submitted OCGT (ref: ABP-313538-22 ) have been assessed together.
- The operational air quality assessment has assumed that the Emissions Limit Values (ELVs) will be met for the operational plant as required and in accordance

with use of Best Available Techniques (BAT) under the Environmental Protection Agency's (EPA) environmental permitting regime. This will be regulated by EPA through the Industrial Emissions Licence (IEL) required for the operation of the Proposed Development.

5.2.2 Section 19.4 of the EIAR (Chapter 19, Volume I) assesses the cumulative effects of the Proposed Development in conjunction with other projects. The assessment finds that cumulative air quality effects on human health as a result of changes in NO<sub>2</sub> and CO concentrations are considered to be Not Significant and concludes that cumulative impacts on air quality are expected to be Negligible.

5.2.2 EIAR Chapter 7 also considers the likely effect of greenhouse gas (GHG) emissions on the climate arising from the Proposed Development and the resilience of the Proposed Development to climate change. A full GHG assessment is presented in the EIAR Technical Appendix 7B. The GHG assessment headline findings are summarised below:

- The significance of effects at the construction phase is 'Minor Adverse' on the basis that the emissions from the construction of the Proposed Development would contribute considerably less than 1% of the current published carbon budgets to 2036.
- The significance of effects at the operational phase is also 'Minor Adverse' on the basis that the operation of the Proposed Development will contribute considerably less than 1% of any of the existing ROI carbon budgets.
- The Proposed Development can be defined as 'moderate adverse' effect. However, the plant will continue to operate beyond 2050 and therefore falls short of fully contributing to ROI's net zero trajectory. It is also acknowledged that whilst the ROI is moving towards decarbonising the grid, gas-fired peaking plant power stations are required as an important part of the overall transition fuel mix in order to ensure the ROI's energy security. The operational requirements of the Proposed Development will inevitably change during its design life and it will be subject to regular reviews to identify potential modifications and amendments to enable continued alignment with ROI climate goals.

5.2.3 EIAR Chapter 7 also assesses the resilience of the Proposed Development to the effects of climate change. The assessment finds that the effects on the Proposed Scheme are likely to be minimal (refer to Table 7.22, EIAR Chapter 7 for key potential climate change impacts and relevant adaptation/ resilience measures).

### **5.3 Cultural Heritage and Archaeology**

5.3.1 A robust assessment of the likely cultural heritage and archaeology impacts has been undertaken in the EIAR and the findings are presented in the EIAR Chapter 8. The headline findings are summarised below:

- The Proposed Development is located primarily on land which has been severely disturbed by previous development associated with the former Tynagh mine and the existing CCGT Power Station. Given these conditions, no previously unrecorded heritage assets will be impacted by groundworks associated with the Proposed Development. The magnitude of impact is assessed as Negligible and therefore Not Significant.
- There is one designated heritage asset within the 1km study area which is considered to be regionally important - thatched cottage (RPS 3648) - and four designated heritage assets within the wider study area which are considered to be regionally important [Castletown Bridge (RPS 3651), Ryans (RPS 332), Lisduff House (RPS 3653) and entrance gates to Rathmore House (RPS 3657)].
- The construction of the Proposed Development has potential to impact the setting of the designated assets by noise, dust, vibration and visual intrusion. The adverse impacts to the thatched cottage (RPS 3648) and Castletown Bridge (RPS 3651) would be short-term and Not Significant. There would be no impact on other heritage assets in the 1km study area and the wider study area including post-box (RPS 3647), Ryans (RPS 332), Lisduff House (RPS 3653) and entrance gates to Rathmore House (RPS 3657). No further mitigation has been proposed at construction stage as the effects are Not Significant
- At operational stage the Proposed Development has potential to impact the setting of the designated assets by noise, dust, vibration and visual intrusion. The significance of effect on designated heritage assets will remain as determined for the construction stage. Again, no further mitigation has been proposed during the operational stage as the effects are Not Significant
- The temporary effects at decommissioning stage are of a similar nature and duration to those temporary effects arising from the construction process. The potential construction effects identified above are also representative of predicted decommissioning effects.
- A Decommissioning Plan (including a Decommissioning Environmental Management Plan) would be prepared and agreed with the relevant authority at that time which will consider all likely environmental risks on the Site and contain guidance on how risks can be removed or mitigated.

5.3.2 Section 19.4 of the EIAR (Chapter 19, Volume I) assesses the cumulative effects of the Proposed Development in conjunction with other projects. The cultural heritage and archaeology assessment identifies three applications which have the potential to cause cumulative effects with the Proposed Development (Reg. Ref. 21/2192, 19633 and 18221). The assessment confirms that a planning application (ref: 19633) in relation to Sperrin Galvanisers Ltd and proposed development will have a noise impact upon the setting of the thatched house (RPS 3648), therefore there is potential for a cumulative effect on the setting of this heritage asset.

## 5.4 Biodiversity

5.4.1 A robust assessment of the likely biodiversity impacts has been undertaken in the EIAR and the findings are presented in the EIAR Chapter 9. The headline findings are summarised below:

- There are thirteen European sites within 15km of the Site, the closest of which is Slieve Aughty Mountains SPA, 5.9km south-west of the Site.
- A Habitats Regulations Assessment (HRA) Screening for Appropriate Assessment has been prepared on behalf of the Applicant (refer to Appendix 9D, EIAR Volume II). It concludes there will be no likely significant effects to any European site as a result of the construction of the Proposed Development.
- There will be an unavoidable loss of grassland (approximately 0.75ha) and scrub (0.08ha) to facilitate the proposed development. The loss of the grassland on site will likely reduce the biodiversity on Site and clearance of this habitat will likely impact a range of fauna including invertebrates. Therefore, compensation of these habitats will be required and an area of hardstanding in the west of the site will be removed (0.9 ha) and managed for grassland.
- At construction stage potential impacts to breeding birds (including habitat loss and injury or mortality) could be Significant in the absence of mitigation. Proposed mitigation measures include restricting the removal of vegetation to non-breeding season unless carried out under the supervision of a suitably experienced Ecological Clerk of Works (ECOW). Furthermore, if nests are found, work must stop immediately until birds fledge and cease to return. With the implementation of mitigation, residual impacts to breeding birds are Not Significant.
- During construction, there will potentially be an increase of lighting, noise, and visual disturbance. However, bird species currently using the Site do so under the existing baseline of noise, light, and visual disturbance, and therefore are habituated to such impacts. A temporary increase of such impacts is considered unlikely to constitute a significant effect.
- The air quality modelling (EIAR Chapter 7, Volume I and Appendix 7A, EIAR Volume II) and Screening for Appropriate Assessment (Appendix 9D, EIAR Volume II) assess the potential impacts on sensitive habitats and species within European sites during the operational stage.
- Air quality modelling has concluded that the Proposed Development will not give rise to significant adverse air quality effects on sensitive habitats or species within European sites during the operational stage. The Screening for Appropriate Assessment concludes there will be no likely significant effects to

any European site during the operational stage. There are also no operational phase impacts predicted that would impact breeding birds.

- The temporary effects at decommissioning stage are of a similar nature and duration to those temporary effects arising from the construction process. The potential construction effects identified above are representative of predicted decommissioning effects.
- A Decommissioning Plan (including a Decommissioning Environmental Management Plan) would be prepared and agreed with the relevant authority at that time which will consider all likely environmental risks on the Site and contain guidance on how risks can be removed or mitigated.

5.4.2 Section 19.4 of the EIAR (Chapter 19, Volume I) assesses the cumulative effects of the Proposed Development in conjunction with other projects. The biodiversity assessment concludes that following the consideration of all other projects and plans in the surrounding environment, it has been determined that none will act cumulatively with the Proposed Development to cause cumulative impacts. The likelihood of adverse significant cumulative effects on biodiversity is negligible and Not Significant.

## 5.5 Landscape and Visual Effects

5.5.1 A robust assessment of the likely landscape and visual impacts has been undertaken in the EIAR and the findings are presented in the EIAR Chapter 10. The headline findings are summarised below:

- At construction stage, landscape and visual effects will be temporary adverse and will result in:
  - Likely effects to landscape character or visual amenity within the locality or the wider study area as a result of the visibility of construction activities such as scaffolding, cranes, the movement of construction vehicles along local roads, and other tall equipment such as machinery on site;
  - Effects of temporary site infrastructure such as site traffic and temporary site construction compounds;
  - Likely direct effects arising from construction of the development will be confined to the Site.

5.5.2 The highest landscape and visual effects during the construction stage will be experienced within a radius of up to approximately 500m from the Site. Construction works will also be visible beyond the 5km study area, particularly to the north. While discernible, the construction effects in long distance views are not considered significant as they form part of a wide panoramic view in which they form one visible component of many.

- The operational phase landscape effects are summarised here:
  - The main landscape effects of the Proposed Development will be associated with the introduction of an air intake structure and emissions stack, integrating with the established industrial character of the site and its surroundings. The Proposed Development will not change the existing prevailing industrial landscape character within the core and wider study area.
  - Direct and long-term change (or modification) will occur locally where the Proposed Development will be physically located as a result of the introduction of plant on land currently occupied as a brownfield site associated with the existing CCGT Power Station.
  - Indirect change will occur outside of the Site boundary, where the Proposed Development has an influence on the perception of landscape character. The indirect change in landscape character is greatest within its immediate and close surroundings within an approximate 500m radius from the Site boundary where open and partial views are possible. Views from the south-west and east are largely screened by vegetation and landform. A significant bund associated with the former mine screens views from the south-western section of the study area. The Proposed Development will add to the industrial landscape character present in these views.
  - Indirect change and the significance of landscape effects will reduce with increasing distance from the Site beyond approximately 3km from the Site boundary and change from Moderate to Slight Adverse.
  - In summary, the landscape effects of the Proposed Development from within 500m of the Site boundary are considered to be Moderate Adverse, effects within 3km are considered to range from Slight to Moderate Adverse, and effects within 5km are considered to be Slight Adverse.
- The operational phase visual effects are summarised here:
  - The Proposed Development will be perceived to densify the industrial building complex at the existing CCGT Power Station Site. The Proposed Development will introduce another industrial feature to the skyline particularly when seen in conjunction with the existing CCGT Power Station and the submitted OCGT (ref: ABP-313538-22 ), however, the existing CCGT Power Station with its 55m high emissions stack will remain the most prominent industrial feature.
  - The highest visual effects will be experienced within approximately 500m radius from locations with open or partial views of the proposed 40m high emissions stack and sections of the plant.
  - Views beyond approximately 500m will concentrate mainly on the upper sections of the emissions stack and air intake plant, which will be apparent but, as for the entire Proposed Development, it will be seen in

conjunction with the existing already prominent CCGT Power Station structures including the existing 55m emissions stack as well as the submitted OCGT (ref: ABP-313538-22).

- In long distance views (3km – 5km) effects will vary depending on the location of the observer and prevailing weather conditions. Within 3km of the Site, the Proposed Development will intensify and extend the perceived industrial character of the Site. Beyond 3km the Proposed Development will be barely distinguishable from the existing CCGT power Station and the submitted OCGT (ref: ABP-313538-22).

5.5.3 In summary, the visual effects of the Proposed Development are considered to range from Moderate Adverse to Not Significant (refer to Table 10.13 EIAR Chapter 10, Volume I).

5.5.4 The temporary effects at decommissioning stage are of a similar nature and duration to those temporary effects arising from the construction process. The potential construction effects identified above are also representative of predicted decommissioning effects.

5.5.5 Section 19.4 of the EIAR (Chapter 19, Volume I) assesses the cumulative effects of the Proposed Development in conjunction with other projects. No applications were identified as having potential to act cumulatively with the Proposed Development as they are all small-scale developments, except for the proposed submitted OCGT (ref: ABP-313538-22). However, the site of the submitted OCGT (ref: ABP-313538-22) is located on a brownfield site of existing hardstanding currently utilised as a car park, warehouse and administrative building. Therefore, given the size, scale, and nature of other planning applications, none will interact with the Proposed Development to cause significant cumulative impacts. The landscape and visual assessment concludes that none of the identified committed developments will interact with the Proposed Development to cause cumulative impacts.

## 5.6 Noise and Vibrations

5.6.1 A robust assessment of the likely noise and vibration impacts has been undertaken in the EIAR and the findings are presented in the EIAR Chapter 11. The headline findings are summarised below:

- At construction stage, no significant adverse impact is expected at the residential receptor positions assessed with regards to construction phase sound levels generated by on-site activities. A negligible impact is predicted on the N65 and a minor impact is predicted on LP4310 Gurtymadden to Tynagh Road.
- No significant adverse effect is expected at residential receptor positions with regards to construction phase sound levels generated by additional traffic flows on existing roads.
- At operation stage, sound emissions from the Proposed Development would exceed the nominated criteria at all receptor locations without design mitigation.

The proposed mitigation measures include a 7m high acoustic barrier around the fin fan cooler, an 8m high acoustic barrier around the transformer and a 10m high barrier around the generator, turbine, diffuser and stack incorporated within the design. A noise map is presented in Figure 11.4 of the EIAR (refer to EIAR Volume III) showing predicted noise contours across and in the vicinity of the site. With mitigation, sound emissions from the Proposed Development comply with the relevant criteria and therefore, the residual effects are assessed to be not significant.

- The operation of the Proposed Development is expected to coincide with the operation of the workshop associated with planning applications 18221 and 19633. Sperrin Galvanisers are understood to have been operating during the baseline survey, therefore any noise from their existing operations is included in the measured baseline levels. Industrial noise is likely to include some noise from Sperrin Galvanisers at location M2. Planning application 19633 states that if the application is approved it *“will further reduce any perception of noise emissions and loss of residential amenity locally”*. Therefore, no cumulative operational impact with the Proposed Development is anticipated.
- Due to the nature of the submitted OCGT (ref: ABP-313538-22), it is likely to operate at the same time as the Proposed Development during the evening and daytime, but not at night. The evening and daytime operational noise criteria are 5 dB and 10 dB higher than the night-time criteria respectively. Therefore, as both plants are designed to meet the night-time criteria, the cumulative impact of both plants operating at the same time would not exceed the evening and daytime criteria. If both developments are granted permission and circumstances changed such that there was a need to routinely operate both plants at the same time at night, then the operator would apply additional mitigation to one or both of the developments to ensure the cumulative noise impact does not exceed the noise criteria as set out within Table 11.11 of Chapter 11 of the EIAR.
- The temporary effects at decommissioning stage are of a similar nature and duration to those temporary effects arising from the construction process. The potential construction effects identified above are also representative of predicted decommissioning effects.

5.6.2 Section 19.4 of the EIAR (Chapter 19, Volume I) assesses the cumulative effects of the Proposed Development in conjunction with other projects. As set out within table 11.17 of Chapter 11 of the EIAR, the cumulative predicted construction noise levels for the estimated noisiest period of construction for both developments are below the weekday daytime and Saturday morning assessment. No significant cumulative adverse effect is therefore expected at residential receptor positions with regards to construction phase noise levels generated by the Proposed Development on-site activities and potential concurrent construction activities related to construction of an OGCT at the existing Tynagh Power Station.

5.6.3 The noise assessment concludes that no cumulative operational phase noise effect has been identified.

## 5.7 Water Environment

5.7.1 A robust assessment of the likely impacts on the water environment has been undertaken in the EIAR and the findings are presented in the EIAR Chapter 12. The headline findings are summarised below:

- At the construction stage the Proposed Development has the potential to impact on surface and groundwater water quality as a result of a spillage of construction chemicals/ wastewater or the disturbance of contaminated ground; increase discharges of potentially contaminated site runoff as a result of dewatering any excavation; increase risk of groundwater flooding as a result of any below ground excavations; and alter fluvial and overland flow paths as a result of works without mitigation.
- The Proposed Development would result in a negligible impact to the surface water environment at construction stage taking account of embedded mitigation measures (refer to Section 12.6 EIAR Chapter 12, Volume I). The mitigation measures include the preparation of a Construction Environmental Management Plan (CEMP) to be approved by the planning authority which will detail the measures necessary to avoid, prevent and reduce adverse effects, where possible, upon the local surface water (and groundwater) environment.
- During operation the Proposed Development has the potential to impact on receiving waterbodies as a result of anthropogenic pollutants in surface water runoff; hydromorphology as a result of new drainage outfalls or other structures; and waterbodies located adjacent to the Site as a result of atmospheric deposition of pollutants emitted from the generation equipment.
- Taking account of the embedded mitigation measures (refer to Section 12.6 EIAR Chapter 12, Volume I) it is considered that the Proposed Development would result in an imperceptible effect on surface watercourses and groundwater. The flood risk during operation is considered to be Imperceptible because the Proposed Development is at low risk from any external sources of flooding and the proposals would not cause an increase in upstream or downstream flood risk.
- The potential decommissioning impacts would be similar to the impacts reported for the construction phase, but with fewer earthworks and excavations restricting the magnitude of impact. Pollution control measures as described in the outline CEMP (refer to Appendix 5A for oCEMP), would apply to the decommissioning procedures. Given the restricted nature of the decommissioning works and taking account of the implementation of best practice, the potential for impacts is considered to be Negligible.

5.7.2 Section 19.4 of the EIAR (Chapter 19, Volume I) assesses the cumulative effects of the Proposed Development in conjunction with other projects. The water environment assessment has determined that there are no other committed developments that are likely to give rise to significant cumulative effects in conjunction with the Proposed Development.

5.7.2 The water environment assessment is supported by a site-specific Flood Risk Assessment (FRA) undertaken in accordance with the guidance document 'Planning System and Flood Risk Management – Guidelines for Planning Authorities', DOEHLG 2009 (refer to EIAR Appendix 12A Volume II). This has concluded that the Proposed Development is not at risk from any external sources of flooding and does not itself cause any increase in 'upstream or downstream' flood risk.

## 5.8 Soils and Geology

5.8.1 A robust assessment of the likely soils and geology impacts has been undertaken in the EIAR and the findings are presented in the EIAR Chapter 13. The headline findings are summarised below:

- The residual effects at construction stage taking account of embedded mitigation and standard construction practices (refer to Section 13.6, EIAR Chapter 13, Volume I) are summarised below:
- All construction works will take place on unvegetated made ground. As such, no impact is envisaged on agricultural land or soil resources.
- The potential impacts to groundwater quality as a result of spillages is likely to be negligible taking account of embedded mitigation outlined in EIAR Chapters 12 and 13, including the oCEMP.
- The impact of contaminants in the subsurface migrating into surface water receptors would be negligible on Lough Derg and/ or the River Shannon and the Lisduff (Kilcrow)\_020 river (Poor quality) or its tributaries (Poor quality). This impact would give a Negligible effect for all of the waterbodies.
- The impact on groundwater quality as a result of the mobilisation of existing contaminants in soil and the migration of introduced contaminants in soil as a result of spillages into groundwater receptors is likely to be negligible.
- The impact on construction workers, off-site residential receptors and off-site urban/ industrial land users is likely to be Negligible, with no further control measures required to reduce risks to human health. The effect on off-site residential receptors, off-site urban/ industrial receptors and construction workers is considered to be Not Significant.

5.8.2 The residual effects at operation stage taking account of embedded mitigation and standard operational practices (refer to Section 13.6, EIAR Chapter 13, Volume I) are summarised below:

- There is a likelihood that contaminants could be introduced to the subsurface and soil resources as a result of leakages from fuel storage areas. This would result in a small adverse impact, resulting in a small adverse effect on Urban grade land. These effects are considered to be Imperceptible and therefore no additional mitigation is required.
- The impact of existing or introduced contaminants in the subsurface migrating into surface water receptors would be Negligible. Overall, this gives a slight

adverse effect. These effects are considered to be Imperceptible and therefore no additional mitigation is required.

- The impact of spillages in soil migrating into groundwater receptors is Negligible, with a very low risk of pollution leakages. This would give a small adverse effect for the superficial deposits and Limestone bedrock aquifers. These effects are considered to be Imperceptible and therefore no additional mitigation is required.
- Since the facility will be operated remotely from the Control Room, staff will be limited to occasional maintenance and inspection visits and are therefore unlikely to interact with the underlying ground conditions or hydrogeology. There are no direct or indirect impacts anticipated on off-site human health as a result of the Proposed Development.
- The temporary effects at decommissioning stage are of a similar nature and duration to those temporary effects arising from the construction process. The potential construction effects identified above are also representative of predicted decommissioning effects.
- A Decommissioning Plan (including a Decommissioning Environmental Management Plan) would be prepared and agreed with the relevant authority. As part of this, an environmental Baseline Assessment report will be updated to determine if any contamination has occurred and what, if any, rehabilitation is required.

5.8.3 Section 19.4 of the EIAR (Chapter 19, Volume I) assesses the cumulative effects of the Proposed Development in conjunction with other projects. The soils and geology assessment concludes that there is no potential for significant adverse direct or indirect cumulative impacts on soils and geology during the construction or operational phase.

## 5.9 Traffic

5.9.1 A robust assessment of the likely traffic impacts has been undertaken in the EIAR and the findings are presented in the EIAR Chapter 14. This chapter assesses the additional traffic generated by the Proposed Development and the impact on the surrounding highway network in the construction phase only. The operational phase has been scoped out of the traffic assessment due to the small daily traffic flow generation (only 5-10 daily arrivals on average). The headline findings of the assessment are summarised below:

- At construction stage, the peak hour traffic impact and daily traffic impact on LP4310 Tynagh Road will exceed the 10% threshold. However, this is a result of the existing low traffic on the road and is therefore considered to result in an Insignificant impact as the capacity of the road is not exceeded. A link capacity assessment verified this by showing that the road will continue to operate within significant spare capacity even in a worst-case scenario.

- The overall impact on road pavements and below ground infrastructure on the N65 (National Network Road) from construction vehicles, in comparison with current traffic, is considered Negligible. Furthermore a Bridge Condition survey was completed on the two bridges along L4310 and the N65 national secondary road. This assessment has been informed by a Pavement Assessment on LP4310 Tynagh Road (Appendix 14A, EIAR Volume II).
- During the operational stage, the gas generation plant will fire primarily natural gas which is currently piped to the Site. If the gas supply were to fail, the plant has the ability to function on back up fuel which is stored on site. In these scenarios, approximately 60 No. HGVs would deliver additional back-up fuel to the site by road during day-time hours. However, this is not expected to be a frequent or regular occurrence and would generate fewer daily trips than were assessed for the construction phase. Therefore, no further assessment has been undertaken.
- The temporary effects at decommissioning stage are of a similar nature and duration to those temporary effects arising from the construction process. The potential construction effects identified above are also representative of predicted decommissioning effects.
- Overall, the Proposed Development is not likely to result in any significant effects in traffic terms. there being minimal overall impact on the local roads.
- Additionally, a CTMP will be prepared for the Site to ensure work activities which could impact upon the public highway, are undertaken safely and with minimal impact on traffic movement. An outline CTMP is included in Appendix 14E (refer to EIAR Volume II). The short-term increase in traffic is insignificant and is therefore likely to result in minimal residual environmental effects in terms of temporary construction traffic.

5.9.2 Section 19.4 of the EIAR (Chapter 19, Volume I) assesses the cumulative effects of the Proposed Development in conjunction with other projects. Appendix 14H sets out the construction period overlap between the Proposed Development and the submitted OCGT (ref: ABP-313538-22 ) which could occur for 3 months between November 2024 – January 2025. The assessment considers the cumulative impact of an outage event at the existing CCGT Power Station (which generates approximately 120 vehicle trips) during the construction and operation phases of the Proposed Development because this is not reflected in the baseline traffic data. The results of this assessment showed that the traffic remains within road capacity and therefore no significant cumulative impact is expected.

## 5.10 Land Use

5.10.1 A robust assessment of the likely land use impacts has been undertaken in the EIAR and the findings are presented in the EIAR Chapter 15. The headline findings are summarised below:

- The Site lies within Landscape Character Area of the Kilcow Basin, which falls within the wider 'Central Galway Complex Landscape' which has a sensitivity of Class 2 - Moderate. This will not be impacted during construction.
- The Proposed Development is located adjacent to the existing CCGT Power Station which is regulated as a Lower Tier COMAH/ Seveso Installation. The impact on the existing CCGT Power Station will be Neutral at construction stage.
- During the construction phase there will be no direct or indirect impact to residential land uses. EIAR Chapter 7 and EIAR Chapter 11 determine that there are no indirect residual impacts on residential areas during the construction phase associated with air or noise effects.
- Existing businesses surrounding the Site will not be directly impacted by construction. Sperrin Galvanisers Ltd is the only business within 500m from the Site which is a low sensitivity receptor. The magnitude of direct impact during construction is unchanged (no impact) resulting in a Neutral significance of impact. There will be no indirect impact to industry and business development land. There will be no direct or indirect impact on the permitted planning application by Sperrin Galvanisers Ltd (Reference Number: 19633).
- At operation stage, no residential areas, existing businesses, or lands zoned for industry or business will be directly or indirectly impacted by the Proposed Development. The magnitude of impact during operation is unchanged (no impact), resulting in neutral significance of impact.
- The temporary effects at decommissioning stage are of a similar nature and duration to those temporary effects arising from the construction process. The significance of impact is neutral or slight adverse.
- In summary, there would be no direct or indirect impact on residential land use, community land use or industry and business development land at either construction or operation stage and therefore no further mitigation measures are proposed.

5.10.2 Section 19.4 of the EIAR (Chapter 19, Volume I) assesses the cumulative effects of the Proposed Development in conjunction with other projects. The nearest permitted planning application is by Sperrin Galvanisers Ltd (Reference Number: 19633) outlined in Table 15.5 in Chapter 15 of the EIAR. The acoustic barriers permitted in this application have been constructed, while construction on the permitted extension to the existing workshop has not begun. The permitted extension lies within the current site boundary of Sperrin Galvanisers Ltd and therefore there will be no direct impacts or Cumulative effects from the Proposed Development with respect to construction or operational phase.

5.10.3 The land use assessment concludes that there will be no cumulative effects in terms of land use on the existing CCGT Power Station Site or cumulative effects associated with the Proposed Development and associated planning applications (Reg. Ref. 19633).

## 5.11 Population and Human Health

5.11.1 A robust assessment of the likely population and human health traffic impacts has been undertaken in the EIAR and the findings are presented in the EIAR Chapter 16. EIAR Chapter 16 identifies the potential population and human health impacts with reference to EIAR Chapter 7: Air Quality and Climate, Chapter 11: Noise and Vibration, Chapter 12: Water Environment and Chapter 13: Soils and Geology. The headline findings are summarised below:

- The risk of air quality impacts from dust and particulates upon human receptors during construction has been classed as Low due to the distance from the activity source to the receptors, and the existing low background concentration of particulates. During operation, the impact upon human receptors from NO<sub>2</sub> or CO from the Proposed Development emissions have been identified as Negligible due to not exceeding any Air Quality Standards.
- The noise and vibration impact on residential (human) receptors at construction stage is assessed to be Negligible. Impacts on human health from the construction phase traffic on the LP4310 Gurtymadden to Tynagh Road have been found to be Minor. Without mitigation, the predicted operational sound rating level for the human receptors would exceed the relevant criteria and result in an adverse impact. Mitigation has therefore been incorporated into the design (as detailed in EIAR Chapter 11, Volume I) and the residual impacts on human receptors would be imperceptible and therefore negligible.
- The Water Environment assessment (EIAR Chapter 12) identified no direct adverse impacts to human health at construction stage, however it is acknowledged there may be indirect impacts without mitigation as a result of groundwater or surface water contamination. The mitigation measures outlined within the oCEMP (refer to Appendix 5A, EIAR Volume II) will prevent any adverse impact upon human health arising from contamination of groundwater or surface water.
- The Water Environment assessment (EIAR Chapter 12) identified no direct adverse impacts to human health during operation, however potential impacts were identified that could indirectly impact human health including contamination of ground water or surface water as a result of spills or flooding. The FRA (refer to Appendix 12A, EIAR Volume II) describes the proposed strategy for dealing with surface water runoff to prevent any adverse impacts. Measures to prevent the risks of fire, flooding and spillages will be included in the site operating and management system and regulated by EPA through the Industrial Emissions Licence.
- The Soils and Geology assessment (Chapter 13) identified potential for adverse impacts to human health at construction stage for off-site receptors (residents and construction workers) as a result of the inhalation of contaminated dust and dermal contact with contaminated soil. The mitigation outlined within the oCEMP (Appendix 5A, EIAR Volume II) will prevent any adverse impact upon human health arising from spillages and contaminated groundwater.

- The Proposed Development would have a likely Moderate Beneficial effect on employment during construction. The Proposed Development represents a significant capital investment and local businesses will benefit from the opportunity to supply materials and equipment.
- The Proposed Development would have a likely Minor Beneficial during operation since the plant will be operated, maintained and managed by suitably qualified and trained personnel.
- The Proposed Development would have a Negligible impact upon the regional population of Galway during construction. A temporary increase in the number of workers during construction (a maximum of 200 at any one time) may require employees to stay in the local area which may have a beneficial impact in terms of goods and services providers.

5.11.2 As assessed and outlined in Chapter 19: Cumulative Effects, during operation, no cumulative effects have been identified in terms of air quality and climate, noise and vibration, soils and geology, and the water environment which would produce a significant effect upon human health receptors.

5.11.3 The Proposed Development would not have an impact upon the local or regional population during operation. Due to a projected increase in population, the Proposed Development would likely bring beneficial impacts in terms of a reliable power supply during periods of high demand in the future.

## 5.12 Material Assets

5.12.1 A robust assessment of the likely traffic impacts has been undertaken in the EIAR and the findings are presented in the EIAR Chapter 17. The headline findings are summarised below:

- At construction stage, the estimates of waste generated for the Proposed Development would be Negligible (Not Significant) in line with the stated methodology in EIAR Chapter 17. In a worst-case scenario, any wastes not recycled or reused would be sent to landfill. In this scenario there would also be a Negligible impact as the total waste would not exceed 0.1% of the available landfill capacity in the Connacht – Ulster Region (CUR) (within 30km) for inert material.
- The Proposed Development is required under the Grid Code to maintain a secondary fuel supply of approximately 10,000 m<sup>3</sup> of distillate fuel which will be contained in tanks within a bunded area. A fuel treatment plant will be required to remove any contaminants from the secondary fuel that may accumulate during storage. The safe disposal of contaminants from the secondary fuel supply will not be significant in terms of amount or frequency. As a result, this would represent a Negligible impact (no waste arisings) and thus is considered Not Significant.
- Considering other waste types during operation, small quantities of other chemicals (i.e., lubrication oils, propane, CO<sub>2</sub>, cleaning agents and glycol/antifreeze) will also be delivered to and from the Proposed Development. The

quantities of these waste types cannot yet be determined but they are expected to be low and thus is not considered significant. In a worst-case scenario for a development of this type, the consumable wastes produced are considered Negligible when compared to the methodology outlined in EIAR Chapter 17 since chemicals and effluents will increase in amount by less than 0.1% of current annual waste arisings in the region.

- The existing grid infrastructure has a low sensitivity as the substation already exists and only a connection is required. The magnitude of impact will be Moderate as there will be additional power generation created. As a result, for this material asset change the significance of impact without mitigation will be Slight Beneficial.
- The temporary effects at decommissioning stage are of a similar nature and duration to those temporary effects arising from the construction process. The majority of materials produced during decommissioning are likely to be concrete and steel, which are both likely to be recycled rather than being disposed of.

5.12.2 Section 19.4 of the EIAR (Chapter 19, Volume I) assesses the cumulative effects of the Proposed Development in conjunction with other projects. The material assets assessment has determined that there are no other developments that are likely to give rise to cumulative effects in conjunction with the Proposed Development during construction. The assessment concludes that there will be no cumulative impacts during the operational phase on material assets or waste from Sperrin Galvanisers or the proposed dwelling house.

### 5.13 Major Accidents and Disasters

5.13.1 A robust assessment of major accidents and disasters risk has been undertaken in the EIAR and the findings are presented in the EIAR Chapter 18. The headline findings are summarised below:

- The existing CCGT Power Station has been operational for over 15 years and stores approximately 8,000 tonnes of distillate fuel. It is therefore regulated as a Lower Tier Installation in accordance with the Chemicals Act (Control of Major Accident Hazards (COMAH) involving Dangerous Substances) Regulations 2015 (S.I. No. 209 of 2015). The facilities associated with the Proposed Development will increase the overall inventory of distillate fuel at the site by 10,000 m<sup>3</sup>. The Proposed Development, CCGT and submitted OCGT (ref: ABP-313538-22) plants will be operated independently, however their combined inventory will remain within the Lower Tier COMAH threshold.
- The assessment of potential major accidents identifies the substances present at the Proposed Development which are potentially dangerous (refer to Table 18.1, EIAR Chapter 18, Volume I) and then assesses the likely significance of the environmental impact resulting from potential accident scenarios involving these substances (refer to Table 18.2, EIAR Chapter 18, Volume I).

- The assessment of potential major disasters is summarised in Table 18.3 (EIAR Chapter 18, Volume I) which identifies the potential disasters, both natural and anthropogenic, which are pertinent to the Proposed Development and assesses the likely significance of the resulting environmental impact.
- The assessment identifies a loss of containment and subsequent fire and/ or explosion within the natural gas and distillate fuel systems as the most likely cause of a major accident at the Proposed Development. A summary of the assessment is contained in Table 18.4.
- The risk of a major accident or disaster from the Proposed Development has been assessed as 'Slight'. Neutral or Slight adverse impacts will be adequately addressed by implementing the mitigation measures described in Chapter 18 (refer to Section 18.5). There will be no significant residual impacts associated with major accidents and disasters.

5.13.2 Section 19.4 of the EIAR (Chapter 19, Volume I) assesses the cumulative effects of the Proposed Development in conjunction with other projects. There will be overlap of 3 months between construction of the Proposed Development and the construction of the submitted development OCGT (ref: ABP-313538-22). Thus, there is the potential for short-term, temporary effects associated with major accidents or disasters to occur. However, provided that standard and good practice mitigation is implemented through their respective CEMPs (refer to oCEMP – EIAR Appendix 5A, EIAR Volume II) the cumulative risk can be effectively managed and there would not be a significant impact. As such, there would not be any additional cumulative impacts during construction. The Proposed Development and Tynagh Power Station will both be managed by experienced operating personnel to ensure communication and cooperation in activities thus reducing risk and the potential for accidents. Risk assessment reviews will be conducted to capture any potential cumulative effects or impacts from Proposed Development, the submitted development OCGT (ref: ABP-313538-22) and the existing Tynagh Power Station site operating adjacent to each other. As such there would not be any additional cumulative impacts during the construction phase of the Proposed Development.

5.13.3 In addition to Chapter 18 of the EIAR a COMAH land use planning assessment of the Proposed Development has been prepared by Byrne Ó Cléirigh. The purpose of the assessment is to examine the development in the context of the Health and Safety Authority's COMAH land use planning guidance. The report concludes that the Proposed Development would satisfy the risk-based criteria that are set out in the HSA's land use planning guidance.

## 5.14 Appropriate Assessment

5.14.1 As noted above, a Habitats Regulations Assessment (HRA) Screening for Appropriate Assessment has been prepared on behalf of the Applicant to inform the competent authority when determining whether the Proposed Development will have likely significant effects on any European sites, considering the Proposed Development alone and in-combination other plans and projects (refer to Appendix 9D, EIAR Volume II).

- 5.14.2 The need for an Appropriate Assessment can only be excluded if, on the basis of objective scientific information and in light of the conservation objectives of relevant sites, the Proposed Development, either individually or in-combination with other plans or projects, could not have likely significant effects on any European site.
- 5.14.3 The submitted Screening Report finds that no significant effects are likely to any European site, either alone or in-combination with other plans and projects. No source-pathway-receptor links have been identified to any of the qualifying interests of the European sites in the vicinity or mobile qualifying interests from sites further afield.
- 5.14.4 Accordingly, the submitted Screening Report concludes, in view of best scientific knowledge and on the basis of objective information, that the Proposed Development, whether individually or in-combination, beyond reasonable scientific doubt is not likely to have significant effects on any European site, and therefore that there is no requirement to proceed to the next step of Appropriate Assessment.

## 5.15 Other Effects and Mitigation

- 5.15.1 The Proposed Development has been subject to a comprehensive EIA which has assessed all potential impacts. The EIAR concludes that the Proposed Development would have a limited number of significant effects:
- Biodiversity – Significant Adverse effects (at Local geographic significance) during construction phase as a result of the risk to breeding bird habitat, damage or injury or mortality to breeding birds. EIAR Chapter 9 proposes mitigation measures to reduce these effects to Not Significant levels.
  - Landscape and visual – temporary construction stage effects range from Moderate to Significant Adverse for areas in close proximity to the construction site (up to approximately 500m from the Site) and from Not Significant to Slight Adverse in the wider study area (beyond approximately 500m). EIAR Chapter 10 proposes mitigation measures to reduce the construction stage effects.
  - Landscape and visual – the operation stage effects are summarised as follows: Moderate Neutral at the Site; Moderate Adverse within 500m of the Site; Slight to Moderate Adverse within 3km of the Site and Not Significant Adverse within 3 to 5km of the Site. At operation stage the visual effects range from Slight to Moderate Adverse. EIAR Chapter 10 outlines mitigation measures to reduce the operation stage effects.
  - Traffic - temporary construction phase effects range minor to moderate as a result of high construction traffic flow on LP4310 Gurty Madden to Tynagh Road, increase in traffic flows on the local highway network and staff car parking provision. EIAR Chapter 14 proposes mitigation measures to reduce these effects to Not Significant levels.

- 5.15.2 Where significant residual impacts remain mitigation has been provided. Measures to reduce the effects of the Proposed Development have been incorporated into the specification, siting and design as detailed in EIAR Chapter 5 and further mitigation measures are set out in the EIAR, the CTMP (refer to Appendix 14E, EIAR Volume II), and the oCEMP (refer to Appendix 5A, EIAR Volume II).
- 5.15.3 In summary, after further mitigation has been taken into account, EIAR Chapter 20 finds that the Proposed Development will not have significant adverse residual effects with the exception of landscape and visual impacts. These effects are identified in EIAR Chapter 20 and summarised below:
- Landscape and visual – at construction stage residual temporary landscape effects range from Slight Adverse to Moderate Adverse for areas within 500m of the Site and from Not Significant to Slight Adverse for areas beyond approximately 500m.
  - Landscape and visual – at operation stage residual landscape effects within 250m of the Site will be Moderate Adverse and will range from Slight Adverse to Moderate Adverse for areas beyond 500m. Residual visual effects range from Slight Adverse to Moderate Adverse.
- 5.15.4 The residual effects will need to be weighed against the considerable benefits of the Proposed Development (outlined in Section 1.0 and Section 7.0), most notably addressing forecast electricity capacity shortfalls, and supporting the transition to a renewable-based generation system.

## **6.0 Planning Assessment**

### **6.1 Compliance with National policy**

#### ***Project Ireland 2040 – National Planning Framework***

- 6.1.1 The Proposed Development will support the transition towards low carbon energy supply and increased renewable generation in line with the aims of the NPF. The proposed OCGT peaking plant will complement intermittent renewable sources of power (such as wind) by rapidly generating power for short periods of time when there is insufficient capacity to meet demand.
- 6.1.2 The Proposed Development will help to reinforce the transmission network to facilitate growth of a more renewables focused energy supply, as envisaged in NPF National Strategic Outcome 8 (Transition to Sustainable Energy)
- 6.1.3 The Proposed Development will provide resilience to Ireland’s electricity grid and improve security of supply. In this respect it is in keeping with the key ‘security of supply’ principle for Energy Policy that is outlined in the NPF.
- 6.1.4 Furthermore, in accordance with Policy Objective 54 of the NPF, the Proposed Development will support national targets for climate policy mitigation objectives. By supporting renewable energy generation, the Proposed Development will contribute to the Climate Action Plan’s aim for at least 80% of electricity supply to be generated from renewables by 2030 in Ireland.
- 6.1.5 The Proposed Development will also support the transition to a low carbon economy as envisaged in ‘The Energy Vision 2050’ White Paper by helping to replace the generation capacity of older power stations which use carbon-intensive fuels such as peat and coal. The proposed OCGT peaking plant will run on lower carbon natural gas<sup>53</sup>.
- 6.1.6 Finally, the Proposed Development is consistent with National Policy Objective 52 of the NPF, which seeks to ensure that development occurs within environmental limits, having regard to the requirements of all relevant environmental legislation. The comprehensive EIAR submitted with the planning application demonstrates that the Proposed Development will have no significant residual effects on the environment with the exception of landscape and visual effects as identified in Section 5 of this Statement.

#### ***National Development Plan 2018-2027***

- 6.1.7 The Proposed Development will contribute to the creation of a long-term, sustainable and competitive energy sector in Ireland in accordance with the overarching aim of the NDP for the energy sector.

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<sup>53</sup> Except in the event of emergency scenarios when back up distillate fuel may need to be used

- 6.1.8 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.
- 6.1.9 As a responsive gas-fired power generator, the Proposed Development supports Strategic Investment Priority no. 4, to deliver circa 2 GW of new conventional (mainly gas-fired) electricity generation capacity by 2030 to support the operation of a predominantly wind and solar electricity system and provide security of supply.

***Policy Statement on Security of Electricity Supply (2021)***

- 6.1.10 The Proposed Development will contribute to a national priority and support the continued security of electricity supply at a national level.
- 6.1.11 The Proposed Development provides quick response electricity generation capability which will help to maintain security of supply while supporting Ireland in its transition to a low carbon economy in line with the Government’s Policy Statement.

***Climate Action Plan***

- 6.1.12 The Proposed Development will contribute to realising the need for “*rapid delivery of flexible gas generation*”, “*at scale and in a timeframe to replace emissions from coal and oil generation before the second budget period*”, which is highlighted in the latest Climate Action Plan (CAP23).
- 6.1.13 It will assist in meeting one of the key measures for the energy sector that is included in the Plan, i.e. the delivery of at least 2GW of new flexible gas-fired generation.

***The Eirgrid/SONI Ireland Capacity Outlook 2022 - 2031***

- 6.1.14 The Proposed Development will help address the predicted capacity deficits during the years up to 2031 and will be part of a balanced portfolio of new capacity. It will assist in achieving the requirement, identified in the latest Capacity Outlook, for “over 2000MW of enduring flexible gas-fired generation capacity” to be delivered by 2030<sup>54</sup>.

**6.2 Compliance with regional policy**

***Regional Spatial and Economic Strategy***

- 6.2.1 The Proposed Development will both directly and indirectly support the growth and resilience of the Region. It will provide greater resilience to Ireland’s electricity grid

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<sup>54</sup> Eirgrid/SONI (2022), Ireland Capacity Outlook 2022 – 2031 (Page 6)

and thus will indirectly support the wider economic growth ambitions of the Region which rely on secure energy supply.

- 6.2.2 The Proposed Development will strengthen the grid for all electricity users, and in doing so will improve the security and quality of supply. The RSES notes that improving security of supply is particularly important if the Region is to attract high technology industries that depend on a reliable, high quality electricity supply.
- 6.2.3 The Proposed Development supports the ambition outlined in the RSES to develop the grid in the Region to enable the transmission system to safely accommodate more diverse power flows from renewable generation and to facilitate future growth in electricity demand.
- 6.2.4 The proposal is also in keeping with RPO 8.1 which supports the development of a safe, secure and reliable electricity network and the transition towards a low carbon economy centred on energy efficiency. As outlined above, the Proposed Development will facilitate the transition towards a low carbon energy sector by supporting an increasing amount of renewable generation sources and replacing older, more carbon intensive power plants.
- 6.2.5 The proposal is also in compliance with RPO 8.4 which supports the development of new electricity transmission infrastructure to ensure that future energy needs can be delivered in a sustainable manner and that capacity is available at local and regional scale to meet future needs. The Proposed Development would make greater use of existing electricity transmission infrastructure by increasing the amount of electricity exported to the grid.

### 6.3 Compliance with local policy

#### ***Galway County Council – County Development Plan 2022-2028***

##### Chapter 7 Infrastructure, Utilities and Environmental Protection

- 6.3.1 The Proposed Development would contribute to the achievement of the overarching aim of Chapter 7 of the CDP, i.e.:

*To support and encourage investment and improvement in utilities, water, wastewater, electricity and gas infrastructure and support the development and enhancement of digital infrastructure.*

- 6.3.2 It will also contribute to meeting the following aims of the CDP that are specific to electricity and grid infrastructure:
- *EG2: Support the provision and extension of electricity and gas transmission networks within the county which are critical to the economic development of the*

*County subject to environmental quality, landscape, wildlife, habitats or residential amenity; and*

- *EG3: Support 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.*

6.3.2 The proposal would help deliver high quality electricity infrastructure in a sustainable manner, recognising that this is of critical importance with regard to the future development of the county.

#### Chapter 14 Climate Change, Energy and Renewable Energy

6.3.3 The proposed development would support renewable generation technologies, enhance the security of supply and diversify sources of supply.

6.3.4 The Proposed Development complies with Strategic Aims of Chapter 14 of the CDP, which supports International, National and County initiatives for limiting emissions of greenhouse gases through the development of renewable energy sources where such development does not have a negative impact on the surrounding environment. In this regard, the Proposed Development will contribute towards the national objective to achieve 80% renewable electricity by 2030, and the submitted EIAR demonstrates that the Proposed Development will have no significant residual effects on the environment (with the exception of landscape and visual effects), as identified in Section 5 of this Statement.

6.3.5 The Proposed Development contributes to the expansion of natural gas infrastructure and generation capacity for Galway in accordance with the aims of Policy EG3 contained in ch. 14 of the CDP (*'To facilitate the delivery and expansion of the Natural Gas and Synthetic Gas infrastructure for storage, transmission and energy generation throughout the County for both domestic and business/industry use and to have regard to the location of existing gas infrastructure pipeline in the assessment of planning applications'*).

6.3.6 The Proposed Development also very clearly accords with Policy EG1 of ch. 14, *'To support the development of the gas network and associated generating capacity in order to sustainably support and augment renewable electrical energy generated County Galway'*.

#### **6.4 Development Benefits**

6.4.1 The Proposed Development is urgently needed to provide resilience to Ireland's electricity grid and address forecast electricity capacity shortfalls. The proposed OCGT plant will support the increased roll out of renewable generation technologies and replace generating capacity lost through the planned retirement of more carbon intensive conventional power stations. It will provide a range of benefits, including:

- 350MW additional generation capacity to meet increasing electricity demand and address forecast capacity shortfalls;
- A new source of backup power to complement renewable generation technologies and strengthen the electricity grid in the Galway area;
- Support the Country in its transition to a renewable-based generation system and towards achieving net-zero emissions by 2050;
- Significant private sector capital investment in the regional economy;
- Up to 200 construction jobs as well as supply chain opportunities for local businesses;
- Efficient use of vacant land adjoining an existing CCGT Power Station, benefitting from existing supply and transmission infrastructure; and
- Supports economic development objectives which rely on secure energy supply.

## **6.5 Assessment Conclusions**

- 6.5.1 The policy assessment undertaken demonstrates that the Proposed Development will be consistent with and contribute towards the achievement of proper planning and the sustainable development of the area in which it is located.
- 6.5.2 The Proposed Development will contribute to the achievement of national targets as outlined in the National Development Plan and Climate Action Plan to increase the share of renewable energy generation to 80% and to deliver circa 2 GW of new conventional (mainly gas fired) generation capacity by 2030. It will help to facilitate the transition to a low-carbon economy by supporting the transition to a more diverse renewable-based power generation system. The reserve power provided by the proposed OCGT will support intermittent renewable generation technologies while improving the security of electricity supply.
- 6.5.3 It will provide a wide range of other benefits, notably addressing electricity capacity shortfalls forecast by EirGrid while making greater use of existing gas and electricity supply and transmission infrastructure.

## 7.0 Conclusion

- 7.1 This application seeks permission for a new 350 MW OCGT plant and associated infrastructure on land to the north of Tynagh Power Station, Derryfrench, Tynagh, Loughrea, Co. Galway. The Proposed OCGT will be primarily fuelled by natural gas and will operate as a 'peaking plant'. The OCGT will be capable of starting up rapidly to provide backup power generation when there is a gap between renewable power generation and demand. It will help to facilitate the continued expansion of Ireland's renewable generation capacity while enhancing security of supply.
- 7.2 The Site of the Proposed Development benefits from its adjacency to existing electricity and gas supply and transmission infrastructure serving the existing Tynagh CCGT Power Station. The Proposed Development will make greater use of this existing infrastructure within an existing Power Station environment. As such, the Site is ideally suited to this form of development.
- 7.3 The need for the Proposed Development is clearly established, as detailed in Section 3 of this Statement. The National Development Plan (2021-2030) (NDP) is clear that maintaining security of energy supply is a key national priority for the coming decade and beyond. This has been further underlined by the Government's 'Policy Statement on Security of Electricity Supply', published in November 2021, and Eirgrid's 'Ireland Capacity Outlook 2022 – 2031', published in October 2022. The latest Climate Action Plan ('CAP23') also emphasises the need for urgent delivery of new gas-fired generation capacity. The Proposed Development will contribute to meeting the increasingly urgent requirement for new flexible gas-fired generation to be delivered rapidly and at scale.
- 7.4 The Proposed Development has been subject to an EIA and the headline findings of the EIAR are summarised in Section 5 of this Statement. It would have limited Environmental Impact as evidenced in the EIAR, which concludes that the Proposed Development will have no significant residual effects on the environment, with the exception of slight to moderate landscape and visual effects.
- 7.5 The Proposed Development will provide a range of benefits, including:
- 350MW additional generation capacity to meet increasing electricity demand and address forecast capacity shortfalls;
  - A new source of backup power to complement renewable generation technologies and strengthen the electricity grid in the Galway area;
  - Support the Country in its transition to a renewable-based generation system and towards achieving net-zero emissions by 2050;
  - Significant private sector capital investment in the regional economy;
  - Up to 200 construction jobs as well as supply chain opportunities for local businesses;

- Efficient use of vacant land adjoining an existing Power Station, benefitting from existing supply and transmission infrastructure; and
- Supports economic development objectives which rely on secure energy supply.

7.6 Considering the urgent need for the Proposed Development, its significant benefits, its compliance with planning policy and its limited environmental impact, it is respectfully requested that planning permission is granted for this much needed development without delay.