PLANNING REPORT

Prepared on behalf of SSE Generation Ireland Ltd, to accompany a Planning Application for a tenyear permission for a proposed 170MW (electrical output) Open Cycle Gas Turbine (OCGT) Power Plant, at Carranstown and Caulstown, Platin, Duleek, Co. Meath

> Submitted to: Meath County Council





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TABLE OF CONTENTS

1	1 PREAMBLE					
2	2 ENVIRONMENTAL REPORT SUMMARY					
3	LAN	D USE PLANNING RISK ASSESSMENT SUMMARY	4			
4	INTE	BODUCTION	5			
			-			
5	BAC	KGROUND TO THIS PLANNING APPLICATION	5			
	5.1	SSE PLC AND SSE GENERATION IRELAND LTD IN IRELAND	5			
	5.2	STRATEGIC CONTEXT OF PLATIN OCGT FOR IRELAND	6			
	5.3	PROJECT RESPONSE	10			
	5.4	ТНЕ PROJECT ТЕАМ	10			
	5.5	PRE-PLANNING CONSULTATION	11			
	5.6	PUBLIC ENGAGEMENT	12			
6	DES	CRIPTION OF PROPOSED DEVELOPMENT	13			
	6.1	PLANNING CONTEXT	13			
	6.2	SITE LOCATION AND CONTEXT	13			
	6.3	Main Features	16			
	6.4	TECHNOLOGY	18			
	6.5	SUMMARY OF POWER GENERATION PROCESS / DESCRIPTION OF THE PLANT OPERATION	18			
	6.6	HVO STORAGE AND TRANSFER	19			
	6.7	ELECTRICAL SYSTEMS AND GRID CONNECTION	21			
	6.8	WATER SUPPLY AND TREATMENT	22			
	6.9	WASTE WATER TREATMENT	23			
	6.10	PLANT OPERATION	23			
	6.11	OTHER RELEVANT STATUTORY REQUIREMENTS	24			
	6.12	PROJECT JUSTIFICATION	24			
7	PLA	NNING HISTORY OF SITE & SURROUNDS	27			
	71	PARENT PERMISSION	27			
	7.2	Amendment Permission				
	7.3	PLANNING REG REF SA100263	28			
	74	PLANNING REG REE I B 19/0031 & REG REE PL 305028 19	29			
	7.5	Surrounding Area	30			
8	PLA	NNING CONSIDERATIONS	35			
	8.1	INTRODUCTION	35			
9	ACC	OMPANYING DOCUMENTS	55			
	91	COMPLIANCE WITH STATUTORY REQUIREMENTS	55			
	9.2		56			
10			50			
10			59			
AF	PENDI	(A - COMMUNITY ENGAGEMENT AND COMMUNITY BENEFIT	61			
AF	PENDI)	(B – PHOTO LOCATION MAP AND VIEWS OF PROPOSED DEVELOPMENT	63			

1 PREAMBLE

AOS Planning, in conjunction with Project Management Group (PM Group) have been commissioned by SSE Generation Ireland Ltd (hereafter referred to as SSE) to prepare planning and environmental reports for a Planning application for a Proposed 170MW (electrical output) Open Cycle Gas Turbine (OCGT) Power Plant at Carranstown and Caulstown, Platin, Duleek, County Meath (hereafter referred to as the Proposed Development).

The overall Development comprises two separate developments at this location (the Site). This report pertains to the OCGT Power (Peaker) Plant generation component (Proposed Development) which is now seeking consent from Meath County Council (MCC). While the second component is for a 110kV substation which comprises a 4 bay Air Insulated Switchgear (AIS) 110kV Transmission Substation component, and was previously consented as a separate Strategic Infrastructure Development (SID) by An Bord Pleanála (Planning Ref. Number ABP-303678-19), as per the requirements of Sections 182A and 182B of the Planning and Development Act, 2000, as amended (the PDA).

This Planning Report, prepared by AOS Planning, identifies, and considers the existing policy support for the Proposed Development in the context of relevant national, regional, and local planning strategy, plans and policy documents, and provides an assessment of the potential impact of the Proposed Development in respect of relevant planning policies and objectives.

2 Environmental Report Summary

The Proposed Development has been assessed in the context of mandatory thresholds for Environmental Impact Assessment (EIA) as set out in Schedule 5 Parts 1 and 2 of the Planning and Development Regulations, 2001, as amended (the Planning Regulations). It is considered that the Proposed Development does not exceed the thresholds or meet the classes of development as defined in Schedule 5 of the Planning Regulations. Further assessment has been completed considering the criteria for sub-threshold EIA as set out in Schedule 7 of the same Planning Regulations. It is concluded that an Environmental Impact Assessment Report (EIAR) is not required as part of the planning application. This assessment is documented in the EIA Screening Report (PM Group Report no **IE0312377-22-RP-0017)** included with this application.

However, in line with best practice, an Environmental Report (PM Group Report no **IE0312377-22-RP-0016**) has been prepared to address appropriate and relevant environmental matters and issues, in accordance with the principles of good practice when preparing the application, and to address any potential environmental concerns of Meath County Council and any other interested parties.

The Environmental Report describes the Proposed Development and the potential impacts on relevant surrounding environmental media. These are examined in separate sections, including Population and Human Health; Landscape and Visual; Traffic and Transportation; Land and Soils; Biodiversity; Noise and Vibration; Water and Wastewater; Air Quality; Waste Management; Material Assets; Archaeology, Architecture and Cultural Heritage and Climate.

2.1 Appropriate Assessment Summary

Following an examination, analysis and evaluation of all the relevant information and in view of best scientific knowledge, and applying the precautionary principle, the Appropriate Assessment Screening (Scott Cawley Report **no IE0312377-94-0008 SSE Platin AA Screening**) concluded that there is the possibility for significant effects on the following European sites, in the absence of mitigation either arising from the project alone or in combination with other plans and projects, as a result of habitat degradation as a result of air quality and hydrological impacts: River Boyne and River Blackwater SAC (002299), River Boyne and River Blackwater SPA (004232), Boyne Estuary SPA (004080), Boyne Coast and Estuary SAC (001957), River Nanny Estuary and Shore SPA (004158).

Therefore, it is the professional opinion of the authors of this report that the application for consent for the proposed development does require a Stage Two Appropriate Assessment in respect of the above listed European sites and the preparation of a Natura Impact Statement (NIS).

2.2 Natura Impact Statement

It is the professional opinion of the authors of the NIS (Scott Cawley Report **no IE0312377-94-0008 SSE Platin_NIS**) has examined and analysed, in light of the best scientific knowledge, with respect to those European sites within the zone of influence of the proposed development, the potential impact sources and pathways, the manner in which these could potentially impact on the European sites' QIs/SCOs and whether the predicted impacts would adversely affect the integrity of River Boyne and River Blackwater SAC, River Boyne and River Blackwater SPA, Boyne Coast and Estuary SAC, Boyne Estuary SPA, River Nanny Estuary and Shore SPA. There are no other European sites at risk of effects from the proposed development.

3 Land Use Planning Risk Assessment Summary

It is the professional opinion of the authors of the Land Use Planning Risk (Byrne Ó Cléirigh, Report no **544-23X0154 R3**) that the Proposed Development qualifies as a lower tier establishment under the scope of the S.I. No. 209/2015 Chemicals Act (Control of Major Accident Hazards Involving Dangerous Substances) Regulations, 2015 (the COMAH Regulations) due to the quantities of Hydrotreated Vegetable Oil (HVO) stored at the Site, which will be in excess of the lower tier thresholds from Schedule 1 of The COMAH Regulations.

There are no developments on Site or off site which are presented with a level of individual risk which exceeds the HSA's LUP criteria, as set out in the LUP guidance. Appendix 2 of the LUP Guidance sets out the approach in more detail but, in outline, the criteria are as follows:

- Sensitivity Level 1: People at work; car parks.
- Sensitivity Level 2: Developments for use by the general public.
- Sensitivity Level 3: Developments for use by vulnerable people.
- Sensitivity Level 4: Very large and sensitive developments.

There are no developments on site or off site which are presented with a level of individual risk which exceeds the HSA's LUP criteria, as set out in the HSA's *Guidance on Technical Land Use Planning Advice for Planning Authorities and COMAH Establishment Operators.*

The levels of societal risk presented by the activities on Site are also in accordance with the HSA's criteria. Aggregating the risks to all persons exposed to risks from the development, the EV is calculated be much less than the threshold for broadly acceptable risk. Referring to the guidance, in cases like this, the HSA's approach is not to advise against the development,

but the HSA would advise of this risk so that the planning authority could take it into account in the planning decision.

4 INTRODUCTION

The Proposed Development aims to provide strategic, sustainable electricity generation infrastructure and capacity, which the country requires for 'the proper functioning of society and the economy'¹. The development of new conventional generation has been identified as a 'national priority' by Government²ⁱ. The nature of OCGT (Peaker) plants, and the integrated design of this Proposed Development will allow for operational flexibility in order that it can cater for high demand and respond quickly to fluctuations on the electricity grid with high efficiency to assist with electricity security of supply in the transition to Net Zero. The planning and environmental reports detail the key planning and environmental issues that have been considered by the Project Team in the preparation of this planning application.

5 BACKGROUND TO THIS PLANNING APPLICATION

5.1 SSE plc and SSE Generation Ireland Ltd in Ireland

SSE Generation Ireland Ltd is an SSE Thermal Generation Holdings Limited company, wholly owned by SSE plc. SSE plc's purpose is to provide energy needed today while building a better world of energy for tomorrow. SSE plc is a leading generator of renewable electricity in the UK and Ireland and one of the largest electricity network companies in the UK. SSE plc develops, owns, and operates low carbon infrastructure to support the zero-carbon transition. This includes onshore and offshore wind, hydro power, electricity transmission and distribution grids, and efficient conventional generation, alongside providing energy products and services for businesses and homes. SSE plc plans to invest up to \pounds 40bn over the next decade, to deliver cleaner, secure, and more affordable energy.

SSE plc is UK listed, is accredited under real Living Wage and Fair Tax Mark and in Ireland holds the Business Working Responsibly mark. SSE plc entered the Irish market in 2008 through the acquisition of Airtricity and has expanded through organic growth and a number of acquisitions, now employing almost 1,000 people on the island of Ireland and a key participant in the all-island Single Electricity Market.

SSE's activities in Ireland include:

- SSE Renewables owns 784MW of onshore wind capacity across 22 windfarms on the island, and operates a total of over 1,000MW. This includes Galway Wind Park, Ireland's largest and best performing onshore wind farm (co-owned with Greencoat Renewables). SSE Renewables is currently constructing additional onshore wind capacity in Ireland, and is actively developing solar and battery projects, as well as additional onshore and offshore wind projects
- SSE Airtricity supplies electricity and gas to over 700,00 home and business customers across the island and delivers home energy upgrades through our one stop shop, the Generation Green Home Upgrade, which aims to deliver 50,000 home energy upgrades by the end of the decade.
- SSE Generation Ireland Ltd is an SSE Thermal Generation Holdings Limited company, wholly owned by SSE plc. SSE Thermal operates an industry-leading fleet of flexible generation and energy storage assets, with over 600 direct employees across Ireland

¹ Government of Ireland, Policy Statement on Security of Supply, November 2021 <u>205779 2cead2c2-e83b-4e15-bd02-a90804e0674a.pdf</u> ² <u>*Ibid*</u>

and the UK. SSE Thermal believes flexible and efficient thermal energy will play a critical role in the transition to a net zero future, complementing renewable generation and maintaining security of supply.

In terms of thermal power generation assets, SSE Generation Ireland Ltd operates an industryleading fleet of flexible generation assets in Ireland:

- 1. 620MW Tarbert Power Station (oil) is situated on the Shannon Estuary in Tarbert, Co. Kerry. The station comprises two 60MW and two 250MW oil-fired turbines. The existing units are required to cease generation by the end of 2023 in line with the station's Industrial Emissions Licence.
- 2. Great Island Power Station is a 464MW Combined Cycle Gas Turbine (CCGT) (gas), located on the shores of Waterford Harbour at Great Island, Co. Wexford. The gas-fired station entered commercial operation in 2015, replacing the former oil-fired station at the site. It is now one of the cleanest and most-efficient power stations on the island of Ireland, generating enough electricity to power half a million Irish homes.
- 3. Rhode Power Station is a 104MW OCGT plant (gas/oil) situated at Rhode, Co. Offaly, in the heart of the Bog of Allen. It commenced commercial operation in 2004.
- 4. Tawnaghmore Power Station is a 104MW OCGT (gas/oil) plant situated south of Killala in Co. Mayo. It commenced commercial operation in 2003.

SSE's vision is to become the leading provider of flexible thermal energy in a net-zero world, and therefore has an important role in accelerating the transition to net zero. SSE Generation Ireland Limited are looking at opportunities to decarbonise and enable the transition to net zero across the SSE thermal assets in Ireland.

5.2 Strategic context of Platin OCGT for Ireland

This Proposed Development is a critical power generation asset required to address Ireland's security of supply shortfall, while delivering on policies to reduce carbon emissions from the electricity sector as a whole.

From a policy point of view, Platin OCGT provides capacity, flexibility, fuel diversity and reduces the carbon emission profile of thermal generation, all of which deliver on Ireland's energy policy.

This is demonstrated through the award of a *Reliability Obligation* capacity market contract for the Proposed Development as part of the Single Electricity Market. These capacity auctions are a key element of the all-island wholesale electricity market and are designed to deliver a reliable electricity supply.

The importance of new flexible generation is core to Government, regulator and system operator policies and can be seen within key energy policy documents, including:

- 1. Government of Ireland, *Policy Statement on Security of Electricity Supply* (November 2021)
- 2. Commission for the Regulation of Utilities, *Security of Electricity Supply Programme of Actions Update*, February 2023
- 3. EirGrid and SONI, *Ireland Capacity Outlook 2022-2031*, October 2022
- 4. Government of Ireland, *National Energy Security Framework*, April 2022
- 5. Government of Ireland, *Climate Action Plan 2023,* December 2022
- 6. Government of Ireland, *Sectoral Emissions Ceilings,* September 2022
- 7. Department of Communications, Energy and Natural Resources, *Ireland's Transition to a Low Carbon Energy Future 2015-2030*, 2015

5.2.1 Government of Ireland, Policy Statement on Security of Electricity Supply (November 2021)

The Policy Statement on Security of Electricity Supply (Policy Statement) highlights the key challenges to ensuring security of electricity supply such as having adequate electricity generation capacity, storage, grid infrastructure, interconnection, and system services to meet both average and peak demand. It is recognised that security of energy supply needs to maintained while transitioning to the target of up-to 80% of electricity consumption from renewable sources by 2030, with overall target of Net Zero Emissions for Ireland by 2050.

The Policy Statement highlights that 'Electricity is vital for the proper functioning of society and the economy' and that maintaining security of supply is a national priority. Ensuring adequate generation capacity is recognised as a challenge to electricity security of supply, and **flexible conventional generation is stated to be necessary to support a renewables-led system**. It is set out that this generation **should progressively decarbonise** in order to achieve net zero emissions. The Policy Statement recognises the **need for significant investment in additional flexible conventional electricity generation**, electricity grid infrastructure, interconnection, and storage in order to ensure security of electricity supply.

The Policy Statement provides 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'.

5.2.2 EirGrid and SONI, Ireland Capacity Outlook 2022-2031, October 2022³

This document provides the most up to date Generation Capacity Statement for both Ireland and Northern Ireland and is a vehicle for signalling future needs and requirements to the energy market'. It forecasts capacity deficits in Ireland for the entire 10-year outlook, but provides that 'in later years the deficits are expected to reduce as new capacity comes forward through the SEM capacity auctions.

The report identifies that **new capacity is needed, and cleaner flexible conventional plant (which is 'renewable gas ready) is necessary** to support renewable targets, particularly for periods of low wind and solar generation, and to deliver on Ireland's carbon budget. Demand growth is an additional driver for new capacity.

The report concludes that the measures contained in the CRU's Programme of Work (discussed below) help to bring the generation adequacy position back to the standard set by the CRU.

5.2.3 Commission for the Regulation of Utilities, Security of Electricity Supply Programme of Actions Update, February 2023

On 29 September 2021, the Commission for Regulation of Utilities (CRU) published a programme of work to increase generation capacity to provide additional stability and resilience to the Irish energy system over the following four or five years. A first update on this was published in July 2022, and a second in February 2023. The programme of work was in response to EirGrid's identification of a potential capacity shortfall, if no action was taken, from 2021 to 2026.

³ <u>EirGrid SONI Ireland Capacity Outlook 2022-2031.pdf (eirgridgroup.com)</u> AOS Planning

The Programme includes the **delivery, through the all-island capacity auctions, of over 2,000 MW of enduring flexible gas fired generation capacity by 2030**, to provide for growing demand, replace retiring generators and support additional penetration of renewables in order to meet our 2030 policy goals, and the development of a policy statement to underpin this capacity.

5.2.4 Government of Ireland, National Energy Security Framework, April 2022⁴

In April 2022, the Government published the National Energy Security Framework. The Framework provides a policy response to Ireland's energy security needs in the context of the war in Ukraine. The Framework highlights that the review of Ireland's electricity and natural gas security of supply is a key priority, with the Department of Environment, Climate and Communications to review the **diversification of fossil fuel supplies and electricity security of supply**. To inform this review, DECC carried out a consultation in September 2022. The outcome of this review is anticipated in 2023.

5.2.5 Government of Ireland, *Climate Action Plan 2023*, December 2022⁵

Climate Action Plan 2023 (CAP23) implements the carbon budgets and sectoral emissions ceilings. Furthermore, CAP23 provides a roadmap for taking decisive action to halve Ireland's emissions by 2030 and ultimately reach net zero by 2050.

The Plan sets out several measures needed to decarbonise the electricity sector. Successful integration of renewables into the power grid is key to achieving this.

CAP23 recognises that the scale of the challenge for the electricity sector is immense. The Plan sets a range of targets across the electricity sector including:

- Accelerate the delivery of onshore wind, offshore wind, and solar through a competitive framework to reach 80% of electricity demand from renewable energy by 2030.
- Deliver in the order of 2 GW of new flexible gas-fired power generation and lower carbon thermal generation;
- Phase out and end the use of coal and peat in electricity generation;
- System operators to transform the flexibility of the electricity system through changes to policies, standards, services, and tools, funded and incentivised through regulatory price controls;
- As an urgent priority, establish the investment framework and competitive market arrangements needed to deliver zero carbon system services;
- Delivery of at least three new transmission grid connections or interconnectors;
- Explore further interconnection potential, including hybrid interconnectors.

The Table below sets out the Key performance Indicators (KPIs) to deliver abatement in the Electricity Sector:

⁶ gov.ie - Climate Action Plan 2023 (www.gov.ie)

⁴<u>www.gov.ie/en/publication/a4757-policy-statement-on-security-of-electricty-supply/</u> ⁵<u>gov.ie - National Energy Security Framework (www.gov.ie)</u>

Theme	2025 KPI	2025 abatement (vs 2018) MtCO2eq.	2030 KPI	2030 abatement (vs 2018) MtCO ² eq.	2031-2035 measures
Accelerate Renewable Energy Generation	50% renewable electricity share of demand 6 GW onshore wind capacity Up to 5 GW solar PV capacity including at least 1 GW of non-new grid solar		 80% renewable electricity share of demand 9 GW onshore wind capacity At least 5 GW offshore wind capacity 8 GW solar PV capacity including 2.5 GW of non- new grid solar Green Hydrogen in production from surplus renewable electricity 	8.7	Roadmap for a net-zero power system Green Hydrogen Production via 2 GW Offshore Wind
Accelerate Flexibility	Level of renewables at any one time on grid: 85% Dispatch down (excluding oversupply) of renewables below 7% Minimise oversupply Required long term storage (4 hour plus) in place	1.3	Level of renewables at any one time on grid: 95-100% Dispatch down (excluding oversupply) of renewables below 7% Minimise oversupply Required Long term storage (4 hour plus) in place At least 2 GW of new flexible gas fired generation Zero Emission gas fired generation from biomethane and hydrogen commencing by 2030		Long Duration Storage technologies Increased zero emission gas generation to enable a net zero power system
Demand Management	Demand Side Flexibility 15-20% Zero carbon demand growth	0.86	Demand Side Flexibility 20-30% Zero carbon Demand growth	0.86	Roadmap for a net-zero power system Green Hydrogen Production via 2 GW Offshore Wind

Table 5-1 Statement in Electricity (Source: Table 12.5, CAP23)

5.2.6 Government of Ireland, Sectoral Emissions Ceilings, September 2022⁶

The *Climate and Low Carbon Development Act 2015* provides for legally binding carbon budgets for overall emissions in Ireland; it also provides for the Minister for Environment, Climate and Communications to propose sectoral emissions ceilings to deliver that overall budget, to be

⁷ gov.ie - Sectoral Emissions Ceilings (www.gov.ie) AOS Planning

approved by Government. The sectoral ceiling for electricity requires a **~40% reduction in** emissions by 2025 and a **~70% reduction by 2030** (both versus 2018 baseline).

5.2.7 Department of Communications, Energy and Natural Resources, Ireland's Transition to a Low Carbon Energy Future 2015-2030, 2015

Ireland's renewable energy targets and carbon emissions targets have increased since the publication of this White Paper. The paper recognises that 'An uninterrupted supply of energy is vital to the functioning of society and the economy.' The paper talks about the need to move to lower emissions fuels, and 'ultimately away from fossil fuels altogether'. With respect to security of supply, the paper encourages the diversification of energy supplies, to avoid over-dependency on any particular fuel, supplier, route, or region.

5.3 Project Response

It is evident that the Proposed Development is aligned with the strategic policy framework above, as it provides:

- Capacity to address the security of supply deficit faced by Ireland in the coming years; namely the need for 2GW of flexible generation capacity.
- Flexibility to increase the levels of renewables which can be supported on the system, and to respond to peaks in demand, system stress events and difficult operational periods.
- Fuel Diversity, in that Ireland's system is predominantly reliant on wind power and gas generation. Biofuels represent a diversification as supported by policy.
- Reduced Carbon Emissions: Through the use of biofuels, which is a lower carbon alternative to gas or distillate, and the potential of the units to be converted to Hydrogen when a Hydrogen economy develops; the Proposed Development contributes to Ireland's carbon emissions targets, and achievement of the Electricity Sector's Emissions Ceiling.

The Proposed Development has been awarded a Reliability Obligation (RO) Contract in the latest Capacity Remuneration Mechanism (CRM) T-4 auction, for delivery in 2026/27 Capacity Year. This RO contract forms part of the Commission for Regulation of Utilities (CRU) published Security of Electricity Supply - Programme of Actions.

The Proposed Development represents a c. \in 160m investment by SSE and will create approximately 40-60 jobs during construction. This project will contribute to ensuring the government target is reached and emissions are reduced.

5.4 The Project Team

The reports have been prepared by specialist consultants as follows:

REPORT	SPECIALIST CONSULTANT
1.Planning Report	AOS Planning
2.Planning Documentation	AOS Planning
3.Land Use Planning Risk Assessment (COMAH/	Byrne Ó Cléirigh Consulting
Seveso)	
4. Environmental Report	PM Group
5.Planning Drawings	AECOM
6. Natura Impact Statement	Scott Cawley

5.5 Pre-Planning Consultation

Pre-planning consultation meetings have taken place with officials of Meath County Council on 2nd May 2023. At these meetings, the Project Team provided the Meath Planning Department with an overview of the Proposed Development. Arising from these meetings, the Meath Planning Department advised that An Bord Pleanála (ABP) previously refused grant of planning on the basis of high Greenhouse gas (GHG) emissions from use of distillate oil, therefore the Proposed Development would need to justify the chosen the fuel type. In addition, Meath Planning Department advised that the justification for the environmental assessment approach should be clearly set out, and also advised that a visual assessment should be undertaken

Historical pre-application meetings in relation to the previously refused distillate oil fuelled OCGT Generating Plant at this site has taken place with An Bord Pleanála (ABP Ref. PL17. 302052) and Meath County Council (Reg Ref LB19/0031) have helped to inform the Proposed Development.

With regard to the fuel type, it is proposed to use Hydrotreated Vegetable Oil (HVO) which is a biofuel. HVO sourced for the Proposed Development will originate from 100% waste feedstocks, the raw materials for which are grown on a seasonal basis so there is no long-term "carbon debt" resulting in lower net greenhouse gases than traditional fossil fuel. Supplied HVO will comply with the Directive (EU) 2018/2001 of the European Parliament and of the Council of 11 December 2018 on the promotion of the use of energy from renewable sources (recast) which provides specific sustainability criteria and the carbon intensity of individual biofuels, including an assessment of the feedstocks used and the emissions from its production, processing, and supply, and will be certified accordingly by a third party.

Chapter 14 of Environmental Report includes a detailed GHG emissions assessment and concludes that the likely impact of the Proposed Development will be not be significant. Use of HVO results in lower net GHG emissions compared to other fuel types such as natural gas or distillate oil. Use of HVO, as a fuel, results in lower net GHG emissions; using natural gas for 1800 hours per year would result in direct GHG emissions in the order of 173,214 tonnes CO2eq despite having lower transport embodied carbon as there is a gas pipeline adjacent to the project site. Use of distillate oil in the previous 2019 application was calculated at 267,368 tonnes CO2eq direct emissions for a 208MW plant operating for 1500 hours. These calculations for natural gas and distillate oil are inclusive of transportation emissions and exclude the embodied carbon emissions from processing and refinement

The Proposed Development has been assessed in the context of mandatory thresholds for EIA (see PM Group EIA Screening report, document reference IE0312377-22-RP-0017) as set out in Schedule 5 Parts 1 and 2 of the Planning and Development Regulations. It is considered that the Proposed Development does not exceed the thresholds or meet the classes of development as defined in Part 1. As the development is within a class of development in Part 2 of Schedule 5 but falls below the relevant threshold, further assessment has been completed considering the criteria for sub-threshold EIA as set out in Schedule 7 of the same regulations. It is concluded that an EIAR is not required as part of the planning application, however it is noted that Meath County Council is the competent authority for making such a determination. However, in line with best practice, this non-statutory Environmental Report for the Proposed

However, in line with best practice, this non-statutory Environmental Report for the Proposed Development has been prepared to:

- Provide information on the project stakeholders;
- Explain the need for the proposed development;
- Describe the legislation regulating the proposed development;
- Address potential environmental concerns, so far as is practicable, associated with the construction and operation of the proposed development.

With regard to the visual assessment for the similar 60MW development proposal (Reg.Ref. SA100263) granted in 2010 and 208MW application (Reg Ref LB19/0031) granted in 2019 by Meath County Council, photographs from Knowth, Dowth and Newgrange were requested by the Planning Authority to be included as part of the Visual Assessment of the Proposed Development. These viewpoints were again specifically requested by MCC and have been used in order to better facilitate any comparative assessment and in order to assess the potential impacts on views scheduled for protection by the Meath County Development Plan, in particular those in the vicinity of the Brú na Bóinne UNESCO World Heritage Site.

Previous consultations with Irish Water have confirmed that there is sufficient capacity for the to be connected to public water and wastewater services. The Proposed Development will therefore include connection to public water and wastewater provision supplied by Irish Water.

All of the previous consultations and advice from the Planning Authority have been taken into consideration for this planning application as detailed in Planning Report and the Environmental Reports.

5.6 Public Engagement

SSE held a community engagement evening in the Sage and Stone Coffee Shop, Newlanes, Duleek on Thursday 11th May 2023 in order to provide information about the Proposed Development for the 170MW OCGT (Peaker) Plant at Platin.

The event was pre-promoted in local press as well as via a newsletter circulated to local residences and sent electronically to local political stakeholders.

Approximately 50 members of the public attended the community engagement evening, including two local politicians and a local environmental group, among others. A wide range of questions were asked by the public. The Project Team and expert consultants were available to address any queries raised. Questions asked covered topics such as emissions, community benefit, noise, traffic, fuel type and supply chain.

SSE has taken these queries and concerns into account and is in close contact with the community on a regular basis. Further details with regard to public engagement is included in **Appendix A** of the planning application documentation.

The dedicated website for the Proposed Development has been set up and can be found at the following link.: <u>Platin Power Station | SSE Thermal</u>

6 DESCRIPTION OF PROPOSED DEVELOPMENT

Chapter 2 of the Environmental Report accompanying this Planning Report and the planning application, provides a comprehensive and detailed description of the Proposed Development and its component parts. The section below however, provides a brief overview of the Proposed Development.

6.1 Planning Context

The Proposed Development was previously granted permission for a 400MW Combined Cycle Gas Turbine (CCGT) generating plant in 1999 by both the MCC (Reg Ref 99/2490) and ABP (Reg Ref PL17.118993). This permission was amended in 2004 and again approved by both the MCC (Reg Ref SA30213) and ABP (Reg Ref PL17.204321). In 2010, Meath County Council granted permission (Ref. SA100263) for a 60MW OCGT generating plant. More recently, in 2019 the MCC approved (Reg Ref LB19/0031) a 208MW OCGT generating plant which was then refused by the Board (Reg Ref PL19.305028) on the basis that the plant's 208MW OCGT primary source of fuel would "add to the current unsustainable levels of greenhouse gas emissions arising from *electricity generation within the State*", and as such would be contrary to national, regional, and local policy. However, the Board did note in its Direction, published on 10/12/2019, that "the use of the subject site for electricity generation would be fully consistent with the proper *planning and sustainable of the area*". Therefore, the use of the Site for electricity generation is clearly acceptable and consistent with policy. The primary fuel source of the Proposed Development on this Site is the main planning issue of contention. This is reflected further in the Board's Direction, published on 10/12/2019, where it is stated that "a proposal entailing the use of natural gas, or other fuel source and where distillate oil is not required or would perform a contingency function only, is warranted".

The Proposed Development has been planned having regard to the appropriate national, regional, and county development plans and associated policies and objectives, namely:

- 1. 'Project Ireland 2040- National Planning Framework'
- 2. 'Project Ireland 2040- National Development Plan 2021 2030'
- 3. Regional Spatial and Economic Strategy (RSES) 2019-2031
- 4. Meath County Development Plan 2021 2027.

6.2 Site Location and Context

The Subject Site is located in the townlands of Carranstown and Caulstown at Platin in Co. Meath, approximately 4km north-east of the village of Duleek, and 4km south-west of Drogheda, as indicated in *Figure 6.1*. Duleek Business Park is situated c.2.1km to the south-west of the Site.

The c.10.5hectares (ha) Site lies on the south side of the R152 road, and is currently in agricultural use. The surrounding rural area is characterised as a 'cluster' of heavy industry – with the specific rural area undergoing significant change. Existing developments/ land uses include a number of industrial developments such as the adjacent cement works and quarry (Irish Cement Ltd.) which are located along the R152 road, the Car Service Station next to the Site and a number of other light industrial/ warehouse uses including 3 no. car repair/ motor factor workshops which are situated to the immediate north on the same side of the R152. The Indaver Ireland Waste to Energy facility is also within close proximity of the Site, to the north-west on the opposite side of the R152.

The Planning History of the Indaver Site for the period 2015-2023, is summarised as follows:

- **ABP-307433-20:** Permission granted by ABP on 30 March 2022 for Strategic Infrastructure Development (SID) for an increase in annual total waste for treatment from currently permitted 235,000 tonnes to 250,000 tonnes, increase in annual amount of hazardous waste from currently permitted 10,000 tonnes to 25,000 tonnes, development of a aqueous waste tank farm, hydrogen generation unit, bottom ash storage building, development of a single storage warehouse, new concrete yard, weather canopy, demolition and rebuilding of an existing single storey modular office and ancillary site works.
- **ABP-302447-18**: Permission granted by ABP on 3 April 2019 for Strategic Infrastructure Development (SID) for alterations to the terms of PA0026 to allow annual tonnage of waste accepted for treatment at the facility to be increased from 220,000 TPA to 235,000 TPA on a permanent basis.
- **FS16072**: Permission was granted by Meath County Council on 12 April 2018 for a single-storey modular office building of stated area of 387m2.
- **PM 0007**: Permission granted by ABP on 4th February 2013 for Strategic Infrastructure Development (SID) for f a pre-treatment process plant (a solidification plant) to facilitate the pre-treatment of flue gas and boiler ash residues.

The Highfield Solar farm is also located within close proximity of the site, to the west on far side of Duleek and on opposite side of the road.

The planning history of the Solar farm is summarised as follows:

- **PL17.248146:** Permission granted by ABP on 8 March 2019 for Construction of solar farm to include 2 electrical substations, transformer, inverter station and storage modules, solar panels, access roads and associated site works.
- **LB/160898**: Permission granted by Meath Council on for Construction of solar farm to include 2 electrical substations, transformer, inverter station and storage modules, solar panels, access roads and associated site works.

The accompanying substation and associated 110kV and MV infrastructure which was the subject of a separate planning application and granted permission later in 2019 (MCC Reg Ref. LB16.0898, ABP Reg Ref. PL17 .303568).



Figure 6-1 Site Location – Source: Open Street Map OpenStreetMap

The Platin Substation is located 400m to the north-west of the Site, whilst the Navan – Drogheda railway line which runs in a generally north/ south- west direction, is located c.350m to the north-west.

The UNESCO World Heritage Site at Brú na Bóinne lies c.4km northwest of the Subject Site (to the north of the River Boyne), with footpath access from the visitor centre located to the south of the River. The Battle of the Boyne Visitor's Centre at Oldbridge, also lies c.4.5km to the north of the Site. The application Site lies within the wider area that forms part of the Boyne Valley Scenic Drive (see Figure 6.2 below), although the drive itself does not use public roads in the immediate vicinity of the Site.



Figure 6-2 Boyne Valley Scenic Drive. Source: www.discoverboynevalley.ie

6.3 Main Features

The Proposed Development will comprise a 170MW (electrical output) Open Cycle Gas Turbine (OCGT) Power Plant. The Proposed Development will comprise an electricity generating plant which will use Hydrotreated Vegetable Oil (HVO) as fuel and will be connected to a previously permitted 110kV substation and associated site works and improved access from the R152. The development comprises the following elements:

Three gas turbine buildings (each 990m2) each housing 1 no. turbine, 1 no. generator and auxiliary equipment with a total of 269 MWth (thermal output) generating capacity all on concrete plinths.

The power plant will have three exhaust stacks (25m in height), one exhaust stack per OCGT.

Therefore, each OCGT will comprise a standalone Large Combustion Plant. The power plant may need to utilise, selective catalytic reduction (SCR) (c.18m high, 4.5 width, 14m length) for NOx abatement.

The Proposed Development will comprise the following elements:

- a) Three gas turbine buildings (each 990m2) each housing 1 no. turbine, 1 no. generator and auxiliary equipment with a total of 269 MWth generating capacity all on concrete plinths.
- b) The power plant will have three exhaust stacks (25m in height), one exhaust stack per OCGT. Therefore, each OCGT will comprise a standalone Large Combustion Plant. The

power plant may need to utilise, selective catalytic reduction (SCR) (18m high, 4.5 width, 14m length) for nitrogen oxides abatement.

c) Water treatment plant comprising:

- a 275m2 Deionising Building (6m high x 11m wide x 25m long)
- a raw water treatment tank of 2,262m3 (12.8m high)
- a deionised water tank (max. volume of 3,925m3). 15.4m high
- a processed water tank of 450m3 (9m high)
- 1 no. 20m2 firefighting water tank of 45m3 (.2m high)
- 1 no. 25m2 firewater module (4m high x 5m wide x 5m long)
- 1 no. 41m2 sanitary foul water cesspool tank of 79m3 located underground (1.98m high x 2.5m wide x 16m long)
- a bulk chemical storage area (4.75m wide x 7.75m long)
- d) 2 no. HVO tank (max. storage of 2300 m3 of HVO per tank), 13m high with a diameter of 15m and associated fuel pumping and filtering equipment and pipework, within a 43.5m L x 45.5m W x 1.5m Bund capacity is 2970m3.
- e) 1 ammonia tank –1.8m high x 3.5m length with bund 2.5 m x 5 m with a height of 1.5 m.
- f) 1 no. fuel polishing system (3m high x 6m wide x 24m long).
- g) 2 no. 110 kV transformers each 160m2, and each measuring (5m high x 10m wide x 15m long). 3 no. Lightning Masts (18m in height) and kiosks, cable gantry connection to the adjoining consented 110 kV Substation.
- h) A 520m2 services building (6m high x 13m wide x 40m long).
- i) A 160m2 Switchgear (MV) building (5m high x 6.1m wide x 26.3m long).
- j) All other miscellaneous and ancillary site works, including: 12 no. Car parking spaces and 1 No. fuel unloading bay, one lowered site platform area, new internal roads and hard and soft landscaping including material berms (1.2m to 2m high), a temporary construction compound, temporary security building, and associated fencing.
- k) New road markings, including deceleration lane approaching the site, on the R152.

The proposed development will include connection to public water mains which will be supplied by Uisce Éireann. There is no sewer connection required as foul and process waste will be collected in a sealed tank and emptied by a specialist waste service provider.

The Proposed Development will connect to a previously consented 110 kV substation (ABP-303678-19) which will be located adjacent and to the south-west of the proposed OCGT Power Plant.

In addition to the OCGT Generating Plant, the Proposed Development will include the provision of a water treatment plant on Site which includes a deionising building. Deionisation of the water will take place on site using an ion exchange plant in the Deionisation Building. This process is in widespread industrial use for water purification. The ion exchange process is based on the principles of chemical adsorption whereby synthetic solid resin beads are used to attract ions in solution and to exchange these for ions such as hydrogen and hydroxyl ions. The adsorption sites on the resin heads are progressively occupied by target ions so that the ion removal efficiency of the resin is reduced.

There will also be sanitary foul waste water generated from the site office building which will be stored in a 79m3 underground tank pending collection by an appropriately licensed waste services provider for treatment off site. The anticipated volume of sanitary foul waste water to be produced is c. 1m3 per day – therefore a maximum of 1 tanker per month would be required to collect this waste. Proposed Site Operations are described in more detail in Section 2.2 of the Environmental Report.

The application relates to a development which is for the purposes of an activity requiring an Industrial Emissions Directive (IED) licence, and a separate application for an IED licence will be made to the EPA to the Environment Protection Agency (EPA).

This is a Site which the Chemical Act (COMAH) Regulations 2015 (S.I. 209 of 2015) applies.

6.4 Technology

The Proposed Development consists of three OCGTs units; each unit comprising a combustion turbine driving a common generator and having a rated electrical output of c 57 MW. Each unit has one exhaust stack (25m in height), for the combustion turbine. Each unit also has a control and switchgear enclosure which contains electrical switchgear at 11KV and 400VAC level for controlling the unit as well as a protection systems and control system / Human Machine Interface (HMI) for operating the units.

The Proposed Development will be subject to an Industrial Emissions Directive (IED) Licence.

6.5 Summary of Power Generation Process / Description of the Plant Operation

The following provides a summary of the main processes and operation of the Proposed Development. Full details on the activities from the Proposed Development can be seen in Chapter 2 of the Environmental Report accompanying this planning application.

Normal operation of the OCGT plant will be as a peaking plant, i.e., it will be used to cater for peaks in national electricity demand. Electricity demand is at its highest during the evening peak from around 6pm during the winter months, particularly between November and February. However, this plant will be on standby for use at any time throughout the year, as it may be required to cover electricity supply shortages or maintenance outages of other plant. Plants of this type are commonly in use throughout the world to support peak demand.

Operation over extended periods is not foreseen. The number of individual units in operation at any one time will depend on the size of the peak load experienced. Units will be brought on load progressively as required. It is envisaged that each combustion turbine will typically operate for about 1,800 hours each year.

The major components of each combustion turbine consist of an air compressor, a combustion chamber, a turbine, and an electricity generator coupled together.

Water injection will be the primary method for nitrogen oxide (NO_x) suppression. This involves the injection of demineralised water from the water treatment plant into the combustion chamber. This reduces the combustion temperature and so reduces the formation of thermally-produced NO_x . During some operational conditions e.g., during low load aqueous ammonia will also be used to control NOx known as Selective Catalytic Reduction (SCR).

SCR uses injected ammonia vapour and catalyst material to reduce NO and NO2 in the flue gas to N2 and H2O. Tempering air fans provide ambient air to lower the flue gas to an appropriate reaction temperature. The system consists of reagent storage, a reagent preparation unit, an ammonia injection grid, and an SCR catalyst.

Combustion air is drawn through air filters and into the compressor (LPC) where it is compressed and delivered to the combustion chamber. In the event of over pressurisation of the air in the compressors, the air will vent safely to atmosphere via a dedicated relief vent. The compressed air is mixed with a controlled amount of the fuel and water mixture, and is then heated to a high temperature by the direct combustion of the fuel. The heat produced causes an expansion of the gases.

These exhaust gases are expanded back to atmospheric pressure across the gas turbine producing motive power. A part of the power output is used to drive the compressors, and the excess of power is used to drive the electrical generator which produces electricity. The exhaust gases from the gas turbine will be at a high temperature of circa 450 $^{\circ}$ C, and will be discharged to atmosphere through a 25m high stack.

The plant will be designed for largely automatic control from a central control room, with the majority of plant functions being initiated and monitored from the here. The operating characteristics of the plant are inherently flexible (e.g., fast starting plant and ramp-rate etc.), and the control system is designed to provide for flexible operation.

6.6 HVO Storage and Transfer

HVO will be delivered by road tanker. There will be one fuel unloading point onsite. This area will be appropriately bunded in accordance with best practice (Storage and Transfer of Materials for Scheduled Activities, EPA Guidance Note, 2013) to 110% of the storage tank capacity. The HVO will be stored in two aboveground oil storage tanks with a maximum volume of fuel stored onsite of 4,600m3. The tanks will incorporate a vent which will be fitted with an oil vapour trap.

The HVO undergoes polishing in the fuel polishing skid on Site. This fuel polishing system is required to maintain the HVO within specification acceptable to the

generation units. The system operates by extracting fuel oil from the tank sump, passing it through a series of filters to remove particulates and water before returning it to the tank. The separated water and particulates are stored in a separate small plastic tank for off-site disposal as required.

⁸.<u>https://www.epa.ie/publications/licensing--permitting/industrial/ied/materials-storage-guidance.php</u> (accessed June 2023)

6.7 Electrical Systems and Grid Connection

Two 11kV/110kV step-up transformers will be required on the Site. One of the transformers will be a dual winding transformer connected to two generating units, while the second transformer will be connected to the other generating unit. These transformers will step up the voltage of power generated by the units to 110kV for export to the national grid. These transformers will be appropriately bunded to the required capacity as per best practice.

The electricity will be exported to the national grid via the 110kV line currently traversing the Site at the 110kV substation.

Each generating unit has a control and switchgear enclosure which contains the electrical switchgear at 11kV and 400VAC level for controlling the unit as well as a protection systems and control system / HMI for operating the units.

There will also be a separate balance of plant electrical switchgear building which will contain the 11kV and low voltage (LV) electrical supplies for the Site. This will also contain the control, protection and metering panels for each generating unit and a supervisory control and data acquisition (SCADA) system for remote operation of the units.

The Proposed Development also includes an electrical switchgear (MV) building and two transformers proposed onsite. A Site office/administration building and a workshop are also proposed.

The transformers will connect to the on-site switchyard, a fenced compound that will contain electrical switchgear and circuit breakers. The switchyard compound and all equipment within the compound will be owned by ESB and EirGrid will ensure the maintenance of same. This will loop into the adjacent substation as permitted by the Board in 2019 (ABP Reg Ref 303678-19). The previously permitted AIS substation comprised of the following:

- (a)The construction of a four bay Air Insulated Switchgear (AIS) 110kV transmission substation in a compound area (approximately 15,673 m2), under the existing Corduff Platin 110 kV overhead line and the looping into the proposed substation of said overhead line;
- (b) A Substation Control Building with floor area of 375 m2, measuring 25 metres by
- 15 metres and 6 metres high;
- (c) The removal of a 500-metre length of the 110kV overhead line and the diversion of this line by means of underground cables along the western and northern boundaries of the Site;
- (d) The installation of two number line to cable interface masts (LCIM) approximately 16 metres in height in the north-east and south-west corners of the Site to convert the overhead line into an underground cable;
- (e) All other Site and ancillary works, including widened and upgraded entrance from the R152, internal road, temporary construction compound, landscaping, palisade fencing, and the erection of seven number 18-metre-high lightning protection monopoles;
- (f) New road markings, including deceleration lane approaching the Site on the R152.

The permitted Substation permission (Reg Ref 303678-19) also includes the following temporary works to assist in the programmed diversion of the overhead line to facilitate construction works:

(g)Restringing of the Overhead Lines (OHL) between the existing 110kV pole set and new LCIM at the south-western side of the Site. At the north-eastern side of the Site, restringing of the OHL conductor between the existing angle mast and the new LCIM. The addition of a new underground 110kV cable and fibre optic cable (circa. 500 metre) between the new LCIMs along the northern and western side of the Site.

(h) Removal of 2 no. 110kV pole sets and the removal of the 3 no. spans of OHL conductor.

(i) Temporary works for the diversion will include erecting temporary stays on the 110kV pole set to the south west of the Site, and the temporary rerouting of the fibre optic cable from the existing 110kV angle mast to the north-east of the Site to the 110kV pole set to the south-west of the Site via 12 number 38kV wood poles located along the eastern and southern boundary of the Site.

The electricity generated will be exported to the national grid via the existing 110kV line currently traversing the Site as altered by the grant of planning permission of the Board for the adjacent substation (Reg Ref PL17.303678), and is required on the following basis:

- 1. With the increase of wind power on the grid the Proposed Development will provide additional stability to the electricity supply in the region and help to balance the overall electricity transmission network;
- 2. The OCGT plant will be designed for flexible operation and rapid response to load changes on the grid which is a key requirement in the coming years to support the fluctuating supply associated with the significant increase in wind power generation capacity.

6.8 Water Supply and Treatment

The principal water usage requirements of the OCGT plant can be summarised as follows:

- 1. Potable water
- 2. Water for injection to control NO_x formation during the combustion process
- 3. Water for fire-fighting purposes.

Water will be supplied from Irish Water mains supply. The proposal for the supply of water to the Site has been confirmed to be available by Irish Water.

The water treatment plant will produce deionised water for use in a water injection abatement system within the OCGT units to minimise nitrogen oxide (NOx) air emissions during fuel combustion. Deionisation of water will be produced using ion exchange plant. This process is in widespread industrial use for water purification, and is further outlined in the Environmental Report.

6.9 Waste Water Treatment

Matters relating to wastewater, and associated with the Proposed Development, are outlined in Chapter 9 of the Environmental Report which accompanies this planning application.

The Proposed Development will not include a direct waste water connection to any public sewer. Waste water produced at the Site will be managed as follows;

- 1. **Process Waste Water:** The operation of the proposed OCGT generating plant requires water to control pollutant emissions to atmosphere from the combustion process. The formation of NOx is controlled by injection of water into the combustor which reduces the peak flame temperature which will in turn reduce the formation of NOx. Water for the process will be potable water supplied from Irish Water. Before water can be used to control NOx levels, it must be treated for the removal of natural salts in a Water Treatment Plant (WTP). Waste water from the WTP will contain dissolved salts removed from the potable water supply. This waste water stream is neutralised and stored onsite in a 450m3 processed water storage tank. The amount of waste water produced will depend on the operational hours of the Proposed Development which will be governed by electricity demand.
- 2. **Foul Waste Water:** Foul water produced is anticipated to be less than 1m3 per day from the Services building sinks/toilets and will be stored in a separate c. 79m3 underground tank (subject to detailed design) pending collection by an appropriately licensed waste collector for treatment off-Site. With 1m3 of waste being produced each day it is estimated a maximum of 1 tanker per month should be adequate to remove the foul waste water from the Site.

All waste water storage tanks will be supplied by a specialist manufacturer and installed with a concrete surround to the manufacturer's specification. The waste will be transported by a specialist waste contractor to a suitable licensed waste facility for treatment.

6.10 Plant Operation

A complete control and instrumentation system will be provided to achieve effective control and monitoring of the plant operation both onsite from a central control room (CCR), and from a remote location. From Monday to Friday, it is envisaged that up to 4 people will be on Site carrying out routine management, security, and maintenance with personnel "on call" as required.

6.11 Decommissioning

The operation lifetime of the Proposed Development is expected to be 20 years. The impacts expected and mitigation measures required in the decommissioning phase are expected to be similar to those of the construction phase. Decommissioning of the proposed development would be subject to grant of approval by Meath County Council. A designated Decommissioning Management Plan will be developed which will outline the mitigation measures required, which will be similar to those outlined in the Construction Environmental Management Plan and will be submitted to MCC Council for approval.

6.12 Other Relevant Statutory Requirements

The Proposed Development is subject to various other consents, permits and licences. A brief outline of these is provided as follows:

6.12.1.1 Industrial Emissions Directive Licence [IED License]

The operation of the previously approved permission (Reg Ref PL17.204321) was subject to obtaining an Integrated Pollution Prevention Control License [IPPC] from the EPA. This licence was granted in September 2004 based on a power output of 400MW.

The Industrial Emissions Directive (Directive 2010/75/EU) ((IED) is the successor of the IPPC Directive and the main EU instrument regulating pollutant emissions from industrial installations. The IED will be applied for and also as the original license has never been acted upon and has now expired.

6.12.1.2 Greenhouse Gas Emissions Permit

SSE will be required to obtain a permit from the EPA for GHG emissions. This will be done once planning permission has been obtained. This permit provides authorisation to the holder to carry out named activities which result in emissions of carbon dioxide from certain emission points. It also includes requirements that must be met with regard to such emissions, including reporting and monitoring requirements.

6.12.1.3 Connection Agreement to the National Electricity Grid

Early discussions with EirGrid have confirmed the feasibility of connecting the Proposed Development to the transmission grid. A formal application will be made in due course.

6.12.1.4 Generator Licence from the CRU

To connect to the electricity network, a generator who wishes to connect must hold an Authorisation to Construct or Reconstruct a Generating Station and a Generator Licence. The CRU is responsible for assessing these permits. SSE will apply for same post planning consent.

6.13 Project Justification

6.13.1 Project Context

Electricity demand in Ireland is forecast to increase significantly due to the expected expansion of many large energy users.

It is necessary to have a mix of base load and flexible energy generation plant to provide a stable transmission system to meet the high levels of energy demand in Ireland.

The 2021 - 2030 National Energy and Climate Plan for Ireland sets a target to increase electricity generated from renewable sources to 70%. In June 2019, the Minister of Communications,

Climate Action and Environment committed to raise the amount of electricity generated from renewable sources to 70% by 2030 with no generation from peat and coal in the Climate Action Plan 2023.

The Government of Ireland, Policy Statement on Security of Electricity Supply was published in November, 2021 and states that 'the development of new conventional generation (including gasfired 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 Meath County Council Climate Action Strategy 2019-2024 published in September,2019 to address both adaptation and mitigation of climate change. Areas of focus to deliver the plan include 'Planning' and 'Clean Energy'. Under 'Planning' the strategy recognises the need to use planning policy to promote clean energy and energy efficiency. Under 'Clean Energy' the strategy recognises the need to increase renewable energy usage.

The Meath County Council Climate Change Strategy is linked to the County Development Plan and is intended to cover the period from 2021-2027. Key targets include:

- Reducing CO2 emissions of the county by at least 40% by 2030.
- Increasing our resilience by adapting to the impacts of climate change

Wind energy is the main source of renewable electricity generated in Ireland, making up 28% of all electricity in Ireland in 2021, second only to natural gas. As of September 2022, the total installed wind capacity in Ireland as 4,417 MW.

6.13.2 Project Need

The proposed OCGT Generating Plant is an integral part of the drive to increase the use of renewable energy in Ireland, in particular wind energy.

Electricity supply must always operate to meet demand, though this can vary considerably. The minimum requirement is called the 'base load'. Increased demand can occur quite quickly, so the grid also needs to include some power sources that can supply at very short notice. Such sources are sometimes called 'peaking power plants'. These generally run only when there is a high or 'peak' demand for electricity.

The proposed OCGT Generating Plant is a peaking plant that needs a fuel that provides the flexibility and speed of delivery that meets this need. It will only be operated when user demand in the region cannot be supported by the combination of base load plants and renewable energy sources.

This type of plant is increasingly needed to address the issue of the 'intermittency' of renewable sources such as wind and solar, by meeting the critical need to adapt quickly and flexibly to changing inputs from renewables, especially during periods of high demand. This facilitates the types of stable electrical system needs by an advanced economy.

As an OCGT Generating Plant its purpose is to support the production of renewable wind energy by providing an alternative energy supply that can react quickly to the electricity grid during periods of low wind energy availability and high user demand. Unlike base load plants it can be turned on and off within minutes so it is only operational during these periods.

6.13.3 Previous Planning Application

A previous planning application for a peaking plant on this site was refused by An Bord Pleanála on the grounds of the types of fuel employed [Planning Reference Planning Register Reference Number: LB/190031/ ABP Reg Ref. PL 305028.19]. The Board ruled that that the Proposed Development in, on account of its reliance on the use of distillate oil, would conflict with national obligations relating to greenhouse gas emissions set out under the EU Renewable Energy Directive, would be contrary to national policy relating to the need for decarbonisation of the electricity sector, would not be supportive of the relevant provisions of the Meath County Development Plan 2013-2019, and through the specific use of distillate oil, would constitute an unsustainable approach in relation to the provision of energy infrastructure to address intermittency in renewable power generation.

6.13.4 Proposed Lowest Available Emitting Option

The transition to net-zero will be renewables-led, but "on-demand" low-carbon flexible generation is required as back-up to support the system when it is not windy or sunny.

To provide the lowest available emitting option required to implement national policy, the applicant has complied with the Board's direction for of 'the use of natural gas, or other fuel source'. To do this they have chosen the lowest available emitting option that will deliver reliable and consistent with lower CO2 equivalent emissions compared to other fuel types such as natural gas or distillate oil.

This plant will only operate when there is additional demand on the electricity grid, so fuel consumption is lower than a conventional power station. This is expected to occur during peak energy usage hours in morning and evening, in autumn, winter and spring.

Operational hours are anticipated to be 4-6 hours per day during high demand periods (e.g., winter months). It is anticipated that each of the turbines will operate for between 500 and 1,800 hours each per year, with higher operating times during winter months.

6.13.5 Fuel Type: Hydrotreated Vegetable Oil (HVO)

The proposed station in Platin will run on Hydrotreated Vegetable Oil (HVO), which is a type of biofuel that is produced by processing waste oils to create a fossil-free alternative to distillate-oil in accordance with EU sustainability standards.

HVO Biofuel is fossil free as it is derived from vegetable crops which have been converted to fuel. It is not excavated from the earth like fossil fuels such as coal, natural gas or petroleum.

6.13.6 Justification for Selection of Fuel Type

HVO Biofuel is low carbon in comparison to traditional fossil fuels and has a lower CO2 equivalent emissions compared to other fuel types such as natural gas or distillate oil. See also Section 5.3

HVO biofuel emissions are lower because it is sourced from waste vegetable oil that would otherwise be disposed of as a waste product. It is primarily comprised of used cooking oil. It would not involve any food displacement and has a lower greenhouse gas emissions profile across its lifetime when compared to alternatives such as diesel combustion.

HVO derived from a secondary source is lower carbon than biofuel that is derived from virgin crops, which have been grown for the purpose of biofuel generation only and consequently have higher embodied carbon in the supply chain.

Based on the greenhouse gas (GHG) emissions assessment further detailed in Chapter 14, the likely impact of the Proposed Development will be not be significant. Use of HVO as a fuel, results in lower net GHG emissions; using natural gas for 1800 hours per year would result in GHG emissions in the order of 173,214 tonnes CO2eq despite having lower transport embodied carbon as there is a gas pipeline adjacent to the project site. Comparatively, use of HVO for 1800 hours per year would result in direct GHG emissions in the order of 1,218 tonnes CO2eq.

Thus, the use of HVO as a fuel type is a step beyond the Board's recommendation to use natural gas in its 2019 determination of the site. SSE have complied with the Board's determination of 'the use of natural gas, or other fuel source' and chosen the lowest available emitting option that will deliver reliable and consistent performance.

The Government's Climate Action Plan 2023 makes no fewer than 17 references to biofuels and notes their important role as a transitionary fuel. In the Climate Action Plan 2023 particular emphasis is placed on their role in reducing transport emissions a transitional measure for the medium-term reduction of GHG emissions.

The Proposed Development complies with national government policies as contained in Project Ireland 2040 (NDP, NSS) and the CAP 2023. The Plan has outlined several key measures for the energy sector including:

- Contribute to a reduction in annual sectoral emissions to 3 Mt CO2eq by 2030 (75% reduction from 2018 levels);

- Accelerate and increase the deployment of renewable energy to replace fossil fuels. This includes increasing the delivery of onshore wind, offshore wind, and solar to achieve 80% of electricity demand from renewable energy by 2030;

- Target 6 GW of onshore wind and up to 5 GW of solar by 2025;

- Target 9 GW onshore wind, 8 GW solar, and at least 5 GW of offshore wind by 2030 (and an additional 2 GW offshore wind for green hydrogen production);

- Deliver and accelerate a flexible system to support renewables, with a minimum of 2 GW of new flexible gas-fired power generation by 2030;

- Manage electricity demand growth. Deliver a Demand Side Strategy to ensure 20-30% demand side flexibility by 2030; and

- Achieve further emissions reduction through the electrification of other sectors, such as transport and heating.

7 PLANNING HISTORY OF SITE & SURROUNDS

There have been five previous planning applications made in the recent past relating to the development of a power generation station on the Site – one was refused with a subsequent amended proposal being granted permission, another was refused and is the subject of this planning application. There is thus a precedent of three previous grants of permission for such a Peaking Plant at this Site and further detail of these is provided below.

7.1 Parent Permission

Under *Meath County Council Register Reference 99/2490*, full planning permission was granted for the development of a 400MW electricity generation plant subject to a number of conditions. This decision was appealed by third parties to An

Bord Pleanála *ABP Register Ref: PL17.118993* with the Board upholding MCC's decision to grant.

Under that final grant of permission, SSE and Marathon Ireland were granted full planning permission in *September 2000* for a development comprising:

- a 33,000m² 400MW gas fired combined cycle gas turbine (CCGT) electricity generating plant.
- a turbine building in the centre of the Site measuring 76m in length by 33m in width by 22.5m height.
- 7m diameter stack would be the highest structure on the Site at 49.9m.
- A two-storey administrative block totalling 2,000m² in area.
- One row of 15m high hybrid water cooling towers containing 6 cells located in the eastern portion of the Site.
- A water treatment building 18m in height.
- Two raw water storage tanks, one de-mineralized water tank and two distillate storage tanks, each with a capacity of 4,500m³, measuring 18m in diameter and 18m in height.

7.2 Amendment Permission

Under *Meath County Council Register Reference SA30213*, alterations to the previously approved generating plant were granted permission. Again, following a third-party appeal to An Bord Pleanála *ABP Register Ref PL17.204321*, the decision to grant was upheld.

Under that permission, SSE were granted full planning permission in *January 2004* by the Board for a development comprising of alterations to a previously approved (as per planning register reference Meath County Council 99/2490 and An Bord Pleanála appeal number PL 17.118993) but un-built development consisting of 400 MW electricity generating plant and associated structures, plant, and equipment at the Subject Site.

The principal alterations that were the subject of the amendment permission application included:

- 1. the replacement of the approved water-cooling system with an air-cooled condenser (approximate dimensions 70 metres by 70 metres by 34.5 metres high); and
- 2. increase in the size of the approved surface water attenuation pond (by approximately 530m²); and
- 3. the relocation of some associated equipment and structures including the approved pumphouse.

In 2003 the Commission for Energy Regulation (CER) (now known as the Commission for Regulation of Utilities (CRU)) – the Irish Energy Market Regulator – identified the requirement for new generation capacity in Ireland from 2005-2006 onwards. A capacity competition for between 300 MW and 531 MW of new capacity was run in 2003. Tynagh Energy Limited and Aughinish Alumina were the only two projects awarded preferred bidder status in November 2003 and removed the need for a CCGT plant of 400MW in County Meath. For this reason, the above projects did not proceed.

7.3 Planning Reg Ref SA100263

In 2010, an application for permission to develop a 60MW OCGT power generation plant was applied for. It consisted of the following:

- 1. a 663m² gas turbine building [approx. 17m wide x 41m length x 7m high] housing a fully enclosed and roofed turbo generator annexed with a similarly enclosed maintenance bay
- 2. associated exhaust gas stack [approx. 20m high x 2.8m diameter] and other associated stacks and vents [not exceeding 13m in height]
- 3. an associated air filter [approx. 15.5m high x 6.8m wide x 7.67m length]
- 4. a compound adjacent to the gas turbine building containing a main and an auxiliary transformer and a firewater module
- 5. a 316m² office and ancillary services building [approx. 11m wide x 31m length x 5m high]
- 6. 2 no. 750m³ volume fuel oil tanks with concrete bund [approx. 7.5m high]
- 7. 2 no. 560m³ volume raw and treated water storage tanks [approx. 7.5m high]
- 8. a new foul sewer pipe connecting to the Duleek sewer system and a new water pipe
- 9. 6 no. car parking spaces and misc. site works including an upgraded and relocated access from the R152 and internal circulation road and hard and soft landscaping.

Planning permission for the above project was not implemented due to the economic downturn which resulted in reduced commercial viability.

7.4 Planning Reg Ref LB 19/0031 & Reg Ref. PL 305028.19

In 2019, MCC approved an application for a 208MW (electrical output) OCGT generating plant at this Site (Reg Ref LB19/0031). This was then appealed to the Board by a third party and the decision of Meath County Council was overturned (Reg Ref PL17.305028) on the basis that a more climate-friendly primary source of fuel was both viable and achievable. The development itself consisted of the following:

- 1. 4 no. containerised peaker plant units (each 248m² and c. 8m wide x 31m long x 3.5m high), each housing a fully enclosed and roofed turbo generator comprising of 2 no. turbines with a common generator, all on a concrete plinth of 615m²;
- 2. Each unit has two exhaust stacks (15m in height) one for each turbine Water treatment plant comprising:

275m² Water Treatment (Demineralisation) Building (6m high x 11m wide x 25m long)

a 120m² raw water treatment tank of 1000m³ (c. 10m high)

a $315m^2$ deionized (treated water) water storage tank (max. volume of $4900m^3$) c. 16m high

hydrochloric acid tank (5m³) c.3m high

sodium hydroxide tank (2.5m³) c.2m high

waste water storage tank (40m³) (c. 2.5m high)

 $25m^2$ Firewater Module measuring 5m wide x 5m length x 5m high Foul water pump station (slab area of $121m^2$)

- 3. 2 no. Fuel storage tanks to each hold a maximum volume of 4,900m³ per tank (each c.16m high), and associated fuel pumping and filtering equipment and pipework, all within a 2350m² concrete bund
- 4. 3 no. Waste Storage Containers, each 80m² (c. 3m wide x 26m length x 4m high)
- 5. Diesel Generator with floor area of $32m^2$ (c. 4m wide x 8m length x 4m high)

- 6. 2 no. transformers each 160m², and each measuring c. 8m wide x 10m length x 9m high
- 7. an $830m^2$ Office and ancillary services building (c. 20 wide x 47 length x 6m high)
- 8. a 570m² Switchgear (MV) building (c. 13 wide x 54 length x 5m high)
- 9. all other miscellaneous and ancillary site works, including: 12 no. Car parking spaces and 3 no. unloading bays, widened, and upgraded entrance from the R152, two lowered site platform areas, and internal circulation road and hard and soft landscaping, a temporary construction compound, and palisade fencing.
- 10. New road markings, including deceleration lane approaching the site, on the R152.

Despite overturning the decision of Meath County Council to permit this application, ABP (the Board) noted, in its Direction and Order dated the 18th December, 2019, that the use of the site for electricity generation is fully consistent with the proper planning and sustainability of the area; Effectively rendering the principle of development of an OCGT Generating Plant acceptable at this site.

7.5 Surrounding Area

In addition to the above on-site applications, a review of all relevant planning applications for development in the vicinity of the Subject Site was also conducted using Meath County Council's online planning enquiry system. Outline details of relevant planning applications are set out in Table 7.1 below:

APPLICANT	BRIEF DESCRIPTION OF APPLICATION	REG. NO.	DECISION DATE
EirGrid	The Proposed Development will consist of an uprate of the existing Gorman to Platin 110 kV Overhead line (OHL) (19.76 km long and comprising 109no, supporting structures between the existing Gorman substation in the townland of Causetown, Co. Meath and the existing Platin 110kV substation in the townland of Platin, Co. Meath). The proposed project is located within the townlands of Graigs, Ardmulchan, Dollardstown, Dunmoe, Carranstown, Platin, Haystown and Carnuff, Stackallan, Harmanstown, Causetown, Garballagh, Commons, Downestown, Gillinstown, Longford, Rathdrinagh, Painestown, Thurstianstown, Knockcommon, Drumman, Laugher, Newtown and Platin.	MCC Case Reference 23458	Decision pending June 2023
EirGrid	The Proposed Development will consist of an uprate of the existing Drybridge to Platin 110 kV Overhead line (OHL) {approximately 5.6 km long and comprising 33no. structures (excluding LCIM 13a and LCIM 14 which are consented under separate planning application) and 2no. gantries between the existing Drybridge 110 kV substation in the townland of Tullyallen, Co. Louth and the existing Platin 110kV substation in the townland of Platin, Co. Meath).	MCC Case Reference 221718	Granted by Meath County Council in February 2023
Highfield Solar	Council to amend the lifetime of the approved development (Planning ref: LB/160898) which comprises consent for the development of a solar farm on a site of approximately 131.37 hectares at Garballagh, Thomastown, Gillinstown, Duleek, Co Meath. Permission was sought to amend the operational lifespan of the consented development from 25 years to 35 years.	IMCC Case Reference 22972	Granted by Meath County Council in May 2023. The Proposed Development connects directly to the Drybridge- Baltrasna 110kV line by way of a looped in/out connection, and therefore will have no impact/connection to the

Table 7-1 Planning History of Surrounding Area

			proposed OCG1
			Generating Plant or
			approved 110kV
			Substation at the SSE
			site.
Baann Distille	re Construction of a whickov maturation warehouse	MCC Case	Cranted by Meath County
Boann Disuile	ry construction of a whiskey induiduon wateriouse		Granted by Meaul County
Limited	racility. The Proposed Development includes the	22/80	council in September
	construction of 1 no. warehouse building of c. 3246	22700	2022.
	sq.m for whiskey maturation and a machinery shec		
	with solar photovoltaic (PV) panels on both buildings		
	The development also fire water retention pond,	,	
	sewerage treatment unit and associated		
	infrastructure, a new vehicular access to the Platir		
	Road (R152), car parking, hard and soft landscaping		
	and all associated site development works.		
Irish Ceme	nt Permission for extension of 811 50sam gross floor	MCC Case	Granted by Meath County
l imited	area to an existing bulk materials storage shed and	Reference	Council in February
Linneu	ancillary site works. The maximum beight of the	212417	2022
	extension will be circa 14m which is the same beight		20221
	as the existing building. The 1 868sam development	-	
	is located within the existing Compart Works at Platin	-	
	County Mosth The application relates to Distin		
	County Meduli. The application relates to Platin		
	Cement Works, which is subject to an industria		
Tunia Duanaut	ETHISSIONS LICENSE (IE LICENSE NO. POUSO-60).	MCC Application	Cranted by Meath County
runis Propert	lesi ne Proposed Development consists of the following:		Granied by Meath County
	construction of a two storey (with mezzanine levels	21003	Council III June 2021
	at both storeys) data storage facility building with a		
	maximum overall neight of C. 25 metres, containing		
	data nalis, associated electrical and mechanical Plan	•	
	Rooms, a loading bay, maintenance and storage		
	space, office administration areas, screened plant,	,	
	and solar panels at roof level, all within a building		
	with a total gross floor area (FGA) of c. 28,566 sq.m.		
	The proposed data storage facility building will be		
	located to the north of the data storage facility	/	
	building previously permitted under Reg. Ref:		
	LB/191735 and to the south of the gas insulated		
	switchgear substation compound proposed under Ar		
	Bord Pleanala Ref: 308628-20.		
Paul Kavana	ghFor a development comprising: (i) part-demolition	MCC Case	Granted by Meath County
Test Centre Ltd	(totalling 390sq.m) of existing 9/2.5 sq.m Test	Reference	Council in June 2021.
	Centre; (ii) construction of 1 no. single storey building	LB201/1/	
	(totalling 639sq.m) comprising of a new testing area		
	with ancillary staff and customer facilities; (iii)		
	provision of 24 no. new car parking spaces, 5 no. LCV		
	parking spaces and 5 no. HGV parking spaces; and		
	(iv) all ancillary works necessary to facilitate the		
	development including drainage and site works.		
Irish Cement	20-year permission for a 13.5-hectare extension to	MCC Case	Granted by An Bord
Limited	existing Overburden Management Facility The	Reference	Pleanála in July 2021
	application is accompanied by an Environmenta	LB201629,	
	Impact Assessment Report (EIAR). The application	ABP Case	
	requires an Industrial Emissions Directive (IED)	Reference	
	Licence and the facility operates pursuant to an	PL17.309308	
	existing IED Licence (EPA Ref No. P0030-05.		
Irish Cement	Pre-Application Consultation with the Board	ABP:	Decision: Is not a Strat
l imited	Proposed overhurden management facility	PL17_301963	Infrastructure
Linicu		,	Development
			11/12/2018
Indaver Ireland I	td Single storey maintenance store with metronice	ES16071	Granted by APD in Anil
		1 3100/1	
Indaver Ireland I	td Single storey modular office building (380 7cam)	FS16072	Granted by ARD in April
		. 5100/2	2018.

Indaver Ireland Ltd	12.15 m high, single storey extension (includes 2 no. Maintenance access platforms) to North(rear) of	FS18022	Granted by ABP in June, 2018.
	existing facility		
Trich Comont	10 year normination to facilitate further reals compare of		Cranted by ABD in April
Limited	fossil fuels and allow for the introduction of alternative raw materials in the manufacturing of cement	PL17.PA0050	2018.
Paul Kavanagh Test Centre Ltd	Development consists of the following: Building 1: Retention permission for a 1m wide external corridor to rear elevation, 4no. Exit doors and a 2.4sqm porch to the front of building together with permission for minor alterations to rear elevation. Building 2; Retention permission for extension of motor factors building including for tyre store and fitting area. Total floor area to be retained = 399sqm. Together with permission for alterations to front elevation, consisting of the provision of a new exit door. Building 3; Retention of new storage & workshop building. Total area to be retained 315sqm. Retention permission is also being sought for an extension to the existing car parking area together with permission for alterations to the internal site traffic management arrangements as well as the traffic management arrangements to the R152 boundary	LB171311	Granted by Meath County Council in January 2018
Highfield Solar	Permission to build a solar farm on a site which was split into two sites to the northeast and southwest of the Downestown Road at Garballagh, Thomastown, Gillinstown and Downestown, Duleek, Co. Meath.	MCC Case Reference 22/262 LB160898, ABP Case Reference PL17248146	Meath County Council granted permission. The decision was subsequently appealed. ABP granted permission for the larger western solar array in the townland of Garballagh, Thomastown and Gillinstown, and refused permission for the smaller eastern solar array in the townland of Downestown. This development is located approximately 4.9km to the south-west of the subject site.
Peter Curran	To construct an agricultural shed/grain store and all site works	LB170032	30/06/2017
Irish Cement Limited	Pre-Application Consultation with the Board: Proposed Development to allow further replacement of fossil fuels with alternative fuels and use of alternative raw materials at existing cement works	ABP: PL17.PC0221	Decision: Is considered as a SID. 05/05/2017
Donal O'Kane & Elizabeth Molony	The development will consist of the following: 1. Construction of 2 no. single storey extensions to rear of existing dwelling. 2. Construction of new bay window to side of existing dwelling. 3. Renovations to existing dwelling. 4. Construction of new car port. 5. Existing septic tank to be decommissioned and new proprietary waste water treatment system and percolation area installed. 6. All associated site works	LB161251	17/02/2017

Board O Management: Mount Hanover National School	Development consists of the demolition of existing prefabs and the construction of a new detached (GP) General Purpose Room, a new site entrance and associated car parking and all associated site works	LB150726	07/10/2015
Irish Cement Limited	Development will consist of the installation of a Flue Dust Portland Cement Silo at Kiln 3. The development will include the provision of a silo of circa 40m in height and 12m in diameter, together with filter, access gantries, bucket elevator and truck loading facility all on an application site of circa 0.75 hectares located within Platin Cement Works. This application relates to an activity for which an Industrial Emissions Licence applies under the Environmental Protection Acts 1992 as amended. (IE Licence Register Number P0030-04) (Screening for Appropriate Assessment)	LB150375	09/07/2015
Irish Cement Limited	The development will consist of the installation of a waste heat recovery facility on Kiln 3 of the cement works. The development will include the fitting of 2 heat exchangers to Kiln 3 and the provision of cooling towers, a turbine/generator building and associated ancillary plant all on an application site of circa 3.0 hectares located within Platin Cement Works. This application relates to an activity for which an Industrial Emissions Licence applies under the Environmental Protection Acts 1992 as amended (IE Licence Register Number P0030-04). (An Appropriate Assessment Report has been submitted with this application)	LB150279	01/07/2015

Irish Cement Limited,	The development will consist of the installation of plant and associated structures, including a storage bay, intake hopper, conveyors, a 24.2m high stack and an electrical switch room all for the drying of granulated blast-furnace slag on an application site of circa 0.48 hectares located within Platin Cement Works (report for Screening for Appropriate Assessment submitted)	LB140962	12/02/2015
Irish Cement Limited,	development will consist of the demolition of the previously decommissioned Kiln 1, its associated preheater tower, and related structures on an application site of circa 0.63 hectares located within Platin Cement Works. This application relates to an activity for which an Industrial Emissions Licence applies under the Environmental Protection Acts 1992 as amended (IE Licence Register Number P0030-04) (Screening for Appropriate Assessment submitted)	LB140961	03/02/2015
Irish Cement Limited	Extension of existing quarry with an increase in extraction area by 40.5 ha. to a depth of 20 metres below OD and the demolition of 3 no. uninhabited dwellings, farmhouse, and agricultural buildings.	MCC: SA/130769 ABP: PL17.243795	16/01/2015
John McGuinness	To construct (1) Refrigerated Potato Store. (2) Grading, Packing and distribution store. (3) Covered bunded Diesel storage facility. (4) Spray storage shed and all associated site works. Significant further information/revised plans submitted on this application	SA121094	01/11/2013
Gerry Curran	To construct an agricultural shed/grain store and all site works. Significant further information/revised plans submitted on this application	SA130012	13/06/2013
Irish Cement Ltd.,	variation to existing planning permission SA/803066 at Platin Cement Works, Duleek, County Meath. The existing permission allows for the co-firing, with traditional fuels of up to 90,000 tonnes per annum of solid recovered fuels, 40,000 tonnes per annum of meat and bone meal and 30,000 tonnes per annum of chipped used tyres. The co-firing of these 3 alternative fuels is subject to a maximum permitted total of 120,000 tonnes per annum for all alternative fuels used in combination. The proposed application seeks to allow for the co-firing of up to 120,000 tonnes per annum of solid recovered fuels. No change is proposed to the existing permitted maximum total of 120,000 tonnes per annum for all alternative fuels used. Likewise, no change is proposed to the existing permitted maximum quantities of 40,000 tonnes per annum for meat and bone meal or 30,000 tonnes per annum for chipped used tyres. No new buildings, structures, or other works are proposed. No changes to existing buildings, structures or processes are proposed. No processing of alternative fuels will take place on site and no residues will arise from their use. The application area extends to 0.602 hectares. This application relates to an activity for which an Integrated Pollution Prevention Control Licence applies under the Environmental Protection Acts 1992 to 2011 (IPPC Licence Register Number P0030- 04)	SA120301	11/07/2012
Thomas McGuinness (Jnr)	a change of site layout from that previously granted under SA/101350 and as described the development will consist of (1) Domestic Garage (2) One and a half storey style residence, Oakstown BAF sewerage	SA110616	27/09/2011
	treatment system and percolation area.		

J.P. Collins	Retention of a constructed dwelling house and access lane to same, revised site boundaries and site layout including completion of all works. Permission sought for wastewater treatment unit and percolation area to serve dwelling and all associated site works	SA110340	12/07/2011
David McGuiness (Carranstown Landscape)	Construction of 3 number polytunnels (total area 270m sq), for landscape business, Storage shed (total area 230m sq) ancillary to landscaping business, including staff accommodation, surfaced yard, staff car parking, utilizing the existing adjacent site entrance, wastewater treatment system and percolation area and all associated site works	SA100876	25/10/2010
John McGuinness	Construction of a two-storey dwelling house, detached domestic garage including proprietary wastewater treatment plant and percolation area new site entrance and all associated site works	SA100518	10/08/2010
Indaver Ireland	Construction of proposed main process building and alteration to the previously approved tipping hall and administration block of the waste to energy plant project	FS9117	14/05/2010
Indaver Ireland	Construction of proposed pump house building	FS10003	19/02/2010
Indaver Ireland	Construction of proposed ESB substation building	FS10004	19/02/2010
Indaver Ireland	Construction of proposed gate house building	FS10005	19/02/2010
Indaver Ireland	Increase in annual total waste for treatment from currently permitted 235,000 tonnes to 250,000 tonnes, increase in annual amount of hazardous	ABP Case Reference PA17.307433	30/03/2022

8 PLANNING CONSIDERATIONS

8.1 Introduction

The Proposed Development has been reviewed for compliance with National, Regional and Local Planning policies. The Meath County Development Plan 2021 - 2027 is the prevailing County Development Plan (CDP) for the area wherein the Proposed Development is located.

8.1.1 Compliance with Meath CDP Planning Policies

8.1.1.1 Zoning and Existing Land Use

The Site is located within the administrative area of Meath County Council and is subject to the Meath County Development Plan, 2021-2027 (CDP). The site is located on the northern boundary where the CDP Landscape Character Area 8. LCA 6 - Central Lowlands meets the LCA 7 - coastal plain. It is classified as having a Medium Landscape Sensitivity. This unit is described, inter alia as having 'Medium potential capacity to accommodate overhead cables, substations, and communication masts due to the complexity of the area, which has a variety of land uses and a robust landscape structure.

Physical Landscape Character Policy 01 of the Appendix 5 of the CDP seeks to recognise, protect, and enhance the unique sense of place provided by every landscape character area and to promote appreciation of landscape character through local design initiatives such as advertising and publication of information in the public (e.g., this Landscape Character Assessment). Whilst the Site is located outside of the buffer zone around the Brú na Bóinne world Heritage Site as indicated on Map 8.1 of the CDP, it is visible from the Brú na Bóinne World Heritage Site. *Heritage Policy 06 of the CDP seeks to protect the Outstanding Universal Value of the UNESCO World Heritage Site of Brú na Bóinne in accordance with the relevant guidelines and national legislation,*

so that its integrity, authenticity, and significance are not adversely affected by inappropriate development or change.

Notwithstanding the above, and as can be noted from section 7 of this Planning report, the Site is however located in an area that has been subject to a number of decisions to permit the clustering of large-scale industrial activities.

As previously advised, there is an existing cement works in the area which has been noted by An Bord Pleanála Inspector (reference Inspector's Report PA17.307433 re development of a Waste to Energy facility by Indaver Ireland) as comprising approximately 20 hectares of *'heavy industrial facilities'* and which is classed as constituting a *'significant heavy industrial land use'*. It is noted that there are extremely tall structures on that Site – namely several storage bins averaging 40m in height; and two emission stacks in excess of 100m tall.

The previously consented electricity substation is also located to the south of the Irish Cement factory, and is served by overhead powerlines (110kV) – served by powerlines from the south, east and north.

Immediately west of the cement factory, lies a large limestone quarry. Extensive areas of rock have been quarried from this area, with the overall quarry area estimated at 30 hectares.

The Indaver Ireland Waste to Energy facility is also situated within proximity of the proposal Site. Permitted by both Meath County Council and An Bord Pleanála following third party appeals, this facility comprises a significant industrial land use in the area consisting of a significant number of buildings, industrial plant and a 65m high stack. In the granting of permission for this facility (ABP Ref.307433-20), An Bord Pleanála had regard to the established nature and character of the surrounding area. Specifically, under reason (e) the Board cited that due to "the location of the Proposed Development in an area where there is an established and permitted industrial land-use pattern", the development was acceptable.

Subsequent permissions/ changes to both the Indaver facility and Irish Cement Plant have occurred since 2018 and these are detailed in the Table 7-1 above.

It can be concluded that both the County Council and the Board have acknowledged that a power generating station at this site location is appropriate and is therefore a de facto approved land use. In addition, a number of recent planning grants in the area (including Indaver) have further developed the idea that this location is a 'cluster' of industrial type activities and these new developments, have referred to the previous permissions on this site in their planning documentation, associated EISs and IPPCs (See Section 7 above).

It is submitted therefore that the context for this site, and the subject application, is for the development of an infrastructural / industrial activity in an unzoned area which has been developed as a de facto land use industrial area, characterised by heavy industrial activities. It is submitted that the appropriate clustering of these activities is wholly compatible with good land use planning practice and policy, and is supported by strong planning precedent.

8.1.2 Meath CDP Sectoral Policies

8.1.2.1 Economic Development Policy

Chapter 4 of the CDP sets out the Economic Development Strategy for the county. Within the context of the Meath CDP, statements included within section 4.10 (Green Economy), are considered noteworthy. These include:

"The Council recognises the significant role the 'Green Economy' has to play in the competitiveness of the County and the country as a whole.20 The growing international emphasis on reducing greenhouse gas emissions and improving resource efficiency presents a major opportunity for indigenous enterprises to grow and export innovative products and services.

The geographical location of the County adjacent to the national Gateway and the proximity of the routes, through which significant energy transmission networks (electricity and gas) traverse, present potential for future economic development in the County."

In addition to the above statements, this section of the CDP also includes a number of associated policies, some of which are applicable to the Proposed Development and are identified as follows:

ED POL 26 Meath County Council shall positively consider and assess development proposals for the expansion of existing authorised industrial or business enterprises in the countryside where the resultant development does not negatively impact on the character and amenity of the surrounding area. In all instances, it should be demonstrated that the proposal would not generate traffic of a type and amount inappropriate for the standard of the access roads. This policy shall not apply to the National Road Network.

The Proposed Development site is located adjacent to heavily industrialised lands containing a large-scale cement works factory, a waste to energy facility, and existing transmission infrastructure. The proposal is of a significantly smaller scale than that of the existing industrial development within the surrounding environs of the subject site and will therefore will not detract from the character and amenity of the surrounding area (this is discussed more detail within Section 6.2 of this Planning Report).

The Proposed Development itself does not necessarily entail renewable energy development. However, it does in fact facilitate the functionality of the use of energy from renewable sources, such as that of wind, through the prompt production of supplementary energy required at times when downfalls occur in energy production from renewables, and therefore ensures that such 'renewable' generation can be viably utilised on the national grid.

The proposed peaker plant represents a significant contributor in enabling security of supply within the electrical transmission network, and will therefore support the maintenance and growth of economic development in the local and wider region.

An Environmental Report has been prepared for the Proposed Development and accompanies this application. This report assesses topics, such as traffic, population and human health. biodiversity etc. in relation to the subject proposal.

8.1.2.2 Energy Infrastructure Policy

Chapter 6 of the CDP discusses the topic of Infrastructure. Policy INF Policy 43 Section 6.15 (Renewable Energy) of the CDP confirms that it is the policy of Meath County Council: -

"To promote sustainable energy sources, locally based renewable energy alternatives, where such development does not have a negative impact on the surrounding environment (including water quality), landscape, biodiversity, natural and built heritage, residential or local amenities."

This chapter of the CDP also outlines policies and objectives for the sustainable development of energy infrastructure in County Meath, which can be seen to be relevant to the Proposed Development and are inserted below:

<u>Policies</u>

INF POL 35 To seek a reduction in greenhouse gases through energy efficiency and the development of renewable energy sources utilising the natural resources of the County in an environmentally acceptable manner consistent with best practice and planning principles.

INF POL 36 To support the implementation of the National Climate Change Strategy and to facilitate measures which seek to reduce emissions of greenhouse gases.

INF POL 41 To encourage the development of wind energy, in accordance with Government policy and having regard to the Landscape Character Assessment of the County and the Wind Energy Development Guidelines (2006) or any revisions thereof.

INF POL 42 To support the identification, in conjunction with EMRA, of Strategic Energy Zones, areas suitable to accommodate large energy generating projects within the Eastern and Midlands Regional area.

<u>Objectives</u>

INF OBJ 39 To support Ireland's renewable energy commitments outlined in national policy by facilitating the development and exploitation of renewable energy sources such as solar, wind, geothermal, hydro and bio-energy at suitable locations within the County where such development does not have a negative impact on the surrounding environment (including water quality), landscape, biodiversity or local amenities so as to provide for further residential and enterprise development within the county.

INF OBJ 40 To seek to reduce reliance on fossil fuels in the County by reducing the energy demand of existing buildings, in particular residential dwellings

INF OBJ 41 To promote the generation and supply of low carbon and renewable energy alternatives, having regard to the opportunities offered by the settlement hierarchy of the County and the built environment.

Project Response:

The Proposed Development will support and reinforce the existing electricity network which spans across a wide area in the eastern region and which includes a number of large settlements identified for economic growth. It will also provide for security of supply of electricity in the wider area.

As already previously highlighted, whilst the Proposed Development itself does not necessarily entail renewable energy development, it does in fact facilitate the functionality of the use of energy from renewable sources, such as that of wind, through the prompt production of supplementary energy required at times when downfalls occur in energy production from renewables, and therefore ensures that such 'renewable' generation can be viably utilised on the national grid.

The Environmental Report which has been prepared for the proposal assesses both traffic and potential flood risk relating to the Proposed Development.

In terms of protected sites, a Natura Impact Statement (NIS) has been prepared for the proposal and accompanies this application. This concludes that there will be no adverse impact on the integrity of the any European sites.

The subject site and the associated landscaping context are discussed in detail within chapter 4 of the Environmental Report

8.1.2.3 Climate Change Strategy

In addition to economic and energy related policy, Chapter 10 of the CDP sets out Meath County Council's Climate Change Strategy and the following the policies are also deemed to be applicable to the Proposed Development:

- 1. To promote sustainable land use planning measures which facilitate transportation efficiency, economic returns on transport investment, minimisation of environmental impacts and a general shift towards the greater use of public transportation throughout the County. (MOV POL 3).
- 2. To require the use of sustainable drainage systems (SuDS) to minimise and limit the extent of hard surfacing and paving and require the use of sustainable drainage techniques where appropriate, for new development or for extensions to existing developments, in order to reduce the potential impact of existing and predicted flooding risks. (INF OBJ 25)

Project Response:

In terms of Climate change, Chapter 14 of the Environmental Report concludes that through design and required mitigation measures, the proposed development will withstand the potential forecasted impacts of climate change.

8.1.2.4 Duleek Written Statement

The Duleek Written Statement (part of the County Development Plan) recognises that *There is a notable business and industrial base operating within Duleek Business Park, on the eastern environs of the town, benefitting from proximity to the Drogheda Environs on the M1/E1 International Corridor. There are a number of other significant employers located outside of the town boundary, in the Carranstown/Platin area off the Drogheda Road (R152), which provides significant employment to Duleek and the surrounding area.'* In the context of the Proposed Development, the location was chosen primarily due to its proximity to the M1 Motorway (Dublin-Belfast Corridor).

Furthermore, the Duleek Written Statement references the significant volumes of traffic through Duleek town centre. In the context of the Proposed Development, the traffic associated with its operation, is minimal -13 no. HGVs visiting the site per day, and only when the plant is running at capacity which will only be at certain times of the year. In addition, traffic was a matter highlighted at the public information event, and

SSE have committed that it will be written into any supplier contract that fuel deliveries to the Site will not go through Duleek, but will approach/ leave the site from/ towards the north/ M1 direction.

Project Response:

In terms of traffic, the estimated amount of traffic to be generated during the construction and operational phases of the development is not considered significant and therefore the development is not predicted to have any significant adverse impact on traffic levels on the surrounding road network.

Flooding is considered in Section 9.2 of the Environmental Report and it is noted that southern edge of the site is approx. 1.4km north of the River Nanny and at an elevation approx. 15m above the ground level at the river and is therefore not subject to Fluvial flooding from this source. The OPW flood mapping allows for climate change- the site has no flood risk in this model.

Slight pluvial flooding occurs along part of the eastern boundary of the site. Notwithstanding this, no past flood event, comprising either a single flood event or recurring flood event, has been recorded on the site according to the OPW Flood Maps website (http://www.floodinfo.ie/map/floodmaps/). In addition to this, the various components of the Proposed Development are situated outside the area subject to pluvial flooding which is located to the eastern boundary of the site.

8.1.2.5 Archaeological, Architectural and Cultural Heritage Policy

County Meath contains a vast amount of cultural heritage consisting largely of archaeological and architectural features, some of which are of international significance. Chapter 8 of the CDP is therefore also considered applicable to the Proposed Development. With regard to the protection and maintenance of such features, the CDP outlines the following policies and objectives:

HER POL 2: To protect all sites and features of archaeological interest discovered subsequent to the publication of the Record of Monument and Places, in situ (or at a minimum preservation by record) having regard to the advice and recommendations of the National Monuments Service of the Department of Culture, Heritage and the Gaeltacht and The Framework and Principles for the Protection of the Archaeological Heritage (1999).

HER POL 6: To protect the Outstanding Universal Value of the UNESCO World Heritage Site of Brú na Bóinne in accordance with the relevant guidelines and national legislation, so that its integrity, authenticity and significance are not adversely affected by inappropriate development or change.

HER POL 5: To seek guidance from the National Museum of Ireland where an unrecorded archaeological object is discovered, or the National Monuments Service in the case of an unrecorded archaeological site. HER POL 27: To protect, conserve and enhance the County's biodiversity where appropriate.

Archaeological Heritage Objectives:

HER OBJ 2: To ensure that development in the vicinity of a Recorded Monument or Zone of Archaeological Potential is sited and designed in a sensitive manner with a view to minimal detraction from the monument or its setting.

HER OBJ 3: To protect important archaeological landscapes from inappropriate development.

HER OBJ 11: To protect the ridgelines which frame views within and from the UNESCO World Heritage Site of Brú na Bóinne from inappropriate or visually intrusive development.

Architectural and Cultural Heritage Policies:

HER POL 14: To protect and conserve the architectural heritage of the County and seek to prevent the demolition or inappropriate alteration of Protected Structures

Architectural Heritage Objectives:

HER OBJ 15: To review and update the Record of Protected Structures on an on-going basis and to make additions and deletions as appropriate.

Archaeological, Architectural and Cultural Heritage has been assessed relating to the proposed development, which is outlined in Chapter 13 of the Environmental Report. An Archaeological Impact Assessment was undertaken by qualified Consultant Archaeologist.

Given the existence of an embanked enclosure (ME027-078) in the northwest corner of the land owned by SSE and the exposure of a number of features of potential archaeological significance during the test excavation undertaken at these lands in 2019, the adjacent Proposed Development lands are considered as being of high archaeological potential. The greatest potential impacts on archaeological heritage will arise therefore during ground works at the initial construction phase as this type of disturbance using heavy plant machinery is inherently destructive to archaeological sites that have no surface expression.

Chapter 13 of the Environmental Report recommends Pre-Construction Mitigation, Operational Phase Mitigation to safeguard the archaeological heritage of the study area.

In terms of Architectural and Cultural heritage, There are no protected structures (RPS) within the study area and the National Inventory of Architectural Heritage (NIAH) does not list any upstanding buildings or structures for the lands. There will therefore be no direct impact on any known architectural and cultural heritage sites.

8.1.2.6 Landscape and Visual Assessment

The landscape and the visual impact of the proposed development has been assessed within chapter 4 of the Environmental Report accompanying this planning application. The assessment outlines the location of the proposal in the context of the Landscape Character Areas identified within the Meath County Council Landscape Character Assessment, and also highlights relevant landscape policy and objectives from the Meath County Development Plan 2021-2027. These provisions are therefore not repeated in this Planning Report.

HER POL 6

To protect the Outstanding Universal Value of the UNESCO World Heritage Site of Brú na Bóinne in accordance with the relevant guidelines and national legislation, so that its integrity, authenticity and significance are not adversely affected by inappropriate development or change.

HER POL 52

To protect and enhance the quality, character, and distinctiveness of the landscapes of the County in accordance with national policy and guidelines and the recommendations of the Meath Landscape Character Assessment (2007) in Appendix 5, to ensure that new development meets high standards of siting and design.

HER POL 53

To discourage proposals necessitating the removal of extensive amount of trees, hedgerows and historic walls or other distinctive boundary treatments.

The Meath County Development Plan 2021-2027 (CDP) contains the following objectives that are relevant to this assessment:

HER OBJ 48

To support the aims and objectives of the European Landscape Convention by implementing the relevant objectives and actions of the National Landscape Strategy 2015-2025 and any revisions thereof.

HER OBJ 49

To ensure that the management of development will have regard to the value of the landscape, its character, importance, sensitivity, and capacity to absorb change as outlined in Appendix 5 Meath Landscape Character Assessment and its recommendations.

HER OBJ 50

To require landscape and visual impact assessments prepared by suitably qualified professionals be submitted with planning applications for development which may have significant impact on landscape character areas of medium or high sensitivity.

HER OBJ 56

To preserve the views and prospects listed in Appendix 10, in Volume 2 and on Map 8.6 and to protect these views from inappropriate development which would interfere unduly with the character and visual amenity of the landscape.

The LVIA concludes that no designated or significant landscape resources will be affected. **Locally**, the development will be perceived as an intensification of an established pattern of non-agricultural use and development.

In the **wider landscape**, the Proposed Development will give rise to no impacts or imperceptible impacts on the wider landscape. There will no visibility from any of the protected Views and no visibility from any of the sites or view points within the Brú na Bóinne complex.

With regard to **protected structures**, the LVIA concludes that there will be no significant effects visual impacts from or towards the protected structures. No part of the development will be visible from the Core Area of the UNESCO designated World Heritage Site, Archaeological Ensemble of the Bend of the Boyne, (Brú na Bóinne). The adjacent site of archaeological potential is subterranean and its context and setting will not be materially affects.

The proposed development site is located in an area that was noted as being a heavily industrialised area and thus will be part of a cluster of similar activities within the Landscape.

The visual impact can be mitigated through the location of the main buildings and structures, the selection of uniform colours and the provision of perimeter landscape screening are the principal measures utilized to limit the landscape effects of the proposed development.

The LVIA concludes that the Proposed Development in conjunction with the previously consented 110 kV substation will further extend the intensification of development and urbanisation of the metropolitan urbanised fringe between the outskirts of Drogheda and Duleek.

The photomontages in Appendix B and Chapter 4 of the Environmental Report demonstrate how the landscape in this area is unlikely to change with the addition of the Proposed Development due to it being significantly smaller in scale than existing and approved developments.

8.1.2.7 Built and Natural Heritage

County Meath contains a significant amount of built and natural heritage. However, the Proposed Development is not located in an area that has been identified for either of these features in the CDP. *Figure 8.1* below illustrates the Natural Heritage Areas in the vicinity of the Site. As can be seen however, they are not related in any way to the Subject Site.



Figure 8-1 Natural Heritage Areas (Map 8.3) –Source Meath County Development Plan



Figure 8-2 Architectural Conservation Areas (Map 8.2) – Source Meath County Development Plan

The *Figure 8.2* above, identifies the location of the Architectural Conservation Areas (ACAs) in County Meath. As can be seen there are no ACAs in the vicinity of the Site.

Appendix 6 of the CDP, provides a full Record of Protected Structures (RPS). The RPS recognises the status of Protected Structures as sites of architectural merit and all are afforded legal protection. Appendix 6 of the CDP and Chapter 13 of the Environmental Report both confirm that there are no protected structures either within or in the general environs of the proposed development site.

Figure 8.3 below illustrates that there are no Registered Monuments in the vicinity of the Proposed Development. Notwithstanding this, based on the recent drought and photo images of previously unknown archaeological features which were evident within the wider area of the Site, and illustrated in various news items, SSE adopted the approach of undertaking a full archaeological desk-top assessment. Whilst this returned no result, feedback from the public information event generated information which SSE followed up on, and which resulted in the confirmation of a previously unrecorded archaeological enclosure through a recent LIDAR (Light detection and radar) imagery taken of the Site. This image shows an existing archaeological

enclosure footprint located to the west of the Site which can be seen on the Figures below. This feature is also discussed in Chapter 13 of the Environmental Report.



Figure 8-3 Recorded archaeological sites in the environs of the Proposed Development (proposed site boundary outlined in red)⁷.

⁷ Image taken from Historic Environment Viewer, National Monuments Service, Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs, Powered by ESRI Ireland, Annotated by Margaret McCarthy.



Figure 8-4 LiDAR image showing substantial embanked enclosure extending into the northwest side of the lands for Proposed Development (courtesy of Dr Stephen Davis).



Figure 8-5 Location of Archaeological Enclosure in relation to the Proposed Development

The Proposed Development will not affect any Protected Structure nor is it located within the vicinity of any Architectural Conservation Area or Natural Heritage Area.

Therefore, the Proposed Development is unlikely to have any impact on the Natural or Built heritage of County Meath.

In terms of Registered Monuments, as previously stated, a geophysical survey combined with LiDAR (Light detection and radar) technology has shown that the eastern half of an embanked enclosure of presumed prehistoric date survives in the north-west corner of the Proposed Development site. The Department of Culture, Heritage and the Gaeltacht was previously notified of the results of the geophysical survey and the monument has been registered as an Embanked Enclosure (ME027-078). The Archaeology, Architecture and Cultural Heritage chapter of the Environmental Report undertaken for the Proposed Development outlines a number of mitigation measures for the protection of this feature, including avoidance of the feature and the establishment of a 25m buffer zone around the enclosure. An archaeologist shall be present to establish the buffer zone around the embanked enclosure in advance of site preparation works

8.1.2.8 Brú na Bóinne

The Brú na Bóinne World Heritage Site is located in Meath. It is one of only three such sites in Ireland. The Council have developed policies and objectives to ensure the protection of this World Heritage Site. A Map has been produced by Meath County Council to establish a 'Core Area' and a 'Buffer Zone'.

Figure 8-6 below is a copy of the Meath County Council 'Map 8.1 Brú na Bóinne World Heritage Site'. As can be seen the subject proposal is outside of both the Core Area and the Buffer Zone. The Core Area is outlined in Yellow and the Buffer Zone is outlined in Red.

To further assist MCC, photomontages have been prepared to illustrate the visual impact of the Proposed Development from the general Brú na Bóinne area. The relevant photos (Newgrange, Knowth and Dowth) and the associated locations are shown in Appendix B. As can be seen from the photomontages attached as **Appendix B** the subject proposal will not have any impact on Newgrange, Knowth and Dowth as the proposal will be screened from existing vegetation and structures, also due to location of the Site within the landscape.



Figure 8-6 Brú na Bóinne Core and Buffer zones (Map 8.1) – Source Meath County Council

The subject proposal will not affect the Brú na Bóinne site as it is outside the Core Area and the Buffer Zone. The existing Irish Cement stacks at 131m and the Indaver stack at 65m will continue to be the dominant features in the skyline. The photomontages in Landscape and Visual Impact Assessment (LVIA) illustrate the subject proposals stack/s in context – it is significantly smaller than the Irish Cement and Indaver Stacks. It will not have any negative impact on the Brú na Bóinne site. The relevant photos in **Appendix B** confirm that the subject proposal will have no impact on the World Heritage Site.

8.1.3 Compliance with the Regional Spatial and Economic Strategy

The Regional Spatial and Economic Strategy (RSES) for the Eastern and Midland Regional Assembly, was adopted on 28th June, 2019. The strategy identifies a number of elements including pressures and opportunities, and regional assets, and sets out appropriate policy through Regional Policy Objectives. It also provides a framework for investment in order to better manage economic development and spatial planning in the region.

Section 10.3 of the RSES relates to 'Energy', and states the following regarding energy security:

"A secure and resilient supply of energy is critical to a well-functioning region, being relied upon for heating, cooling, and to fuel transport, power industry, and generate electricity. With projected increases in population and economic growth, the demand for energy is set to increase in the coming years".

In addition to the above statement, the RSES also provides 'Regional Policy Objectives', the following of which are regarded as being applicable to the Proposed Development, these are:

RPO 10.20: Support and facilitate the development of enhanced electricity and gas supplies, and associated networks, to serve the existing and future needs of the Region and facilitate new transmission infrastructure projects that might be brought forward in the lifetime of this Strategy including the delivery of the necessary integration of transmission network requirements to facilitate linkages of renewable energy proposals to the electricity transmission grid in a sustainable and timely manner subject to appropriate environmental assessment and the planning process.

RPO 10.22: Support the reinforcement and strengthening of the electricity transmission and distribution network to facilitate planned growth and transmission/ distribution of a renewable energy focused generation across the major demand centres to support an island population of 8 million people, including:

The Proposed Development represents a direct realisation of the CRU mitigation measures required to address the security of supply of electricity in the region. It will assist in achieving security in supply in the existing electricity network through the prompt generation of additional supplementary energy required at times when downfalls occur in energy production from other sources. It can therefore be seen that the Proposed Development complies with National and Regional Policy Objectives, and provisions of the Draft RSES for the Midland and Eastern Region.

8.1.4 Compliance with the National Planning Framework (NPF)

The NPF is the Government's plan to accommodate the predicted population increase that will be living and working in Ireland by the year 2040.

As the NPF is a strategic development framework, it sets out a long-term context for the physical development of Ireland and related economic, social, and environmental aspects within a national, European, and international context. The framework will be supported by sectoral, regional, and local level policy.

Furthermore, the NPF sets out the role of the planning system in facilitating mitigation of and adaptation to climate change and ensuring that sustainable infrastructure networks build resilience to climate change.

In this regard, National Strategic Outcome 8 is dedicated to achieving transition to a Low Carbon and Climate Resilient Society. This objective is key for shaping investment choices over the coming decades in line with the National Mitigation Plan and the National Adaptation Framework noting that new energy systems and transmission grids will be necessary for a more distributed, renewable energy focused system, harnessing both the considerable onshore and off-shore potential from energy sources such as wind, wave and solar and connecting the richest sources of that energy to the major sources of demand.

In relation to energy, the NPF identifies that '*Ireland is advancing its development as a circular economy*' and continues to state that '*further developing the circular economy will require greater efficiency with raw materials, energy, water, space and food*'.

With respect to the strengthening of the electricity network, the NPF provides the following policy:

"National Policy Objective 47 In co-operation with relevant Departments in Northern Ireland, strengthen all-island energy infrastructure and interconnection capacity, including distribution and transmission networks to enhance security of electricity supply".

Project Response:

It is submitted that the Proposed Development is wholly in compliance with the NPF aims and objectives regarding strengthening key infrastructure, such as energy generation.

8.1.5 Compliance with the National Development Plan 2018-2027

The National Development Plan (the 'Plan') outlines investment priorities which will support the NPF. It will guide planning and investment decisions at a national, regional, and local level over two decades in order to accommodate an expected increase in population of over 1 million people. The Plan reveals the Government's commitment to fulfilling Ireland's infrastructure and investment requirements over the next ten years, through a total estimated investment of €116 billion.

The Plan touches on Ireland '*transitioning to a Low-Carbon and Climate-Resilient Society*' and identifies actions to achieve this, including:

"the creation of sustainable green jobs, sustainable food production, **deepening** our energy security, and making the environment healthier."

In addition to the above measure, the National Development Plan also states that "a range of major commercial state sector energy projects will be undertaken over the period of the plan. SOEs are expected to invest in excess of $\in 13$ billion in energy related investments, with a particular focus on investment in regulated energy network infrastructure to provide smart reliable electricity networks to support security of electricity supply...".

Project Response:

The Proposed Development is being developed by a private company, but will comply fully with the aims of the NDP. The Proposed Development is also being progressed at the request of the Regulator (CRU) and EirGrid, as it will provide additional security of electricity supply, as well as additional power to the grid at peak times thereby lessening the chance of any reduction in supply or power outages. It will therefore serve to enhance confidence in the country's ability to maintain a secure supply of power in the future and complements development of renewable energy to meet Government targets.

Furthermore, the Proposed Development has been awarded a Capacity Market Remuneration Reliability Obligation (RO) in the latest Capacity Remuneration Mechanism (CRM) T-4 auction and is required to be available to provide essential capacity to support electrical system security of supply.

9 ACCOMPANYING DOCUMENTS

9.1 Compliance with Statutory Requirements

This planning application has been prepared and is submitted in full compliance with the prevailing PDA and Planning Regulations as amended. It is furthermore supported by an accompanying Environmental Report which provides an assessment of potential environmental impacts and provides appropriate mitigation measures, and a NIS which demonstrates that there will be no adverse impact on the integrity of any European Sites from the Proposed Development.

9.2 Documents Accompanying this Application

Documents submitted via Local Government online Planning Portal (as outlined in the Cover Letter) in support of the planning application include:

- 1. Completed Online Application Form
- 2. Electronic Fund Transfer for €20,536 (Application Fee see Section 6.3 for basis of calculation)
- 3. Drawing Schedule
- 4. Planning Drawings (Total 29 Drawings)
- 5. Letters of Consent Platin Power Ltd Letter of Consent & Agent Letter of Consent
- 6. Statutory Public Notices:
 - 1. Newspaper Notice
 - 2. Site Notice

- 7. Planning Application Report
- 8. EIA Screening Assessment
- 9. Environmental Report
- 10. Appropriate Assessment Screening Report
- 11. Natura Impact Statement
- 12. Construction and Environmental Management Plan
- 13. Land Use Assessment Report (Comah/Seveso)
- 14. Basis for Fee Calculation

Class	Amount of Fee	Description	Total
Class 4 The provision of buildings other than buildings coming within 1,2 or 3.	€80 for each building, or €3.60 for each square metre of gross floor space to be provided whichever is the greater	Other Buildings 3-off Gas Turbine Enclosure = 990m² x 3 = 2,970m² Deioninsed Building = 275m² Offices and Ancillary Services Building = 520m² Switchgear (MV) building = 156m² Firewater Module = 25m² Total Area : = ~3,950m² Fees are €80 for each building, or €3.60 for each square metre of gross floor space to be provided whichever is the greater Total Fee = 3,950m² x €3.60 =	€14,206
Class 8 The provision on in over the land or under land of plant or machinery, or of tanks or other structures (other than buildings) for storage purposes	€200 or €50 for each 0.1 hectare of site area, whichever is the greater	 €14,206 Provisions of plant or other structures for storage purposes Firefighting water tank = 20m² Tank contained within 49 m² bund 3-off SCR, Stack and aux. equipment external to Gas Turbine Enclosure = 660m²x3 = 1980m² Raw water tank = 177 m² Deionized (treated) water storage tank = 255m² Ammonia tank = 7m² 	

		 Chemical storage bund = 36 m² 2-off 2,300m³ HVO Fuel storage tanks = 177 m² x 2 = 354m² Tanks contained within 2,020m² bund 2-off transformers (these are compounds and not buildings) = 160m² x 2 = 320m² Sanitary Tank = 41 m² Processed Water Tank = 52 m² Fuel Polishing System = 144 m² <i>Cumulative area of all is 3,386m² (i.e., 0.3386 Ha). Fees are €200 or €50 for each 0.1ha of site area, whichever is the greater</i> – i.e., €50 x (each 0.1Ha of 510 EFUR) CE 275	€5,275
Class13 Development not coming within any of the foregoing	€80 or €10 for each 0.1 hectare of site area whichever is the greater	 0.1Ha of 10.55Ha) - €5,275 Development not coming within any of the foregoing classes – including: Parking; misc. site works, including landscaping/ platforms, 10.55Ha/ 105500m²) 	€1,055
classes		Fees are €80 or €10 for each 0.1ha of site area, whichever is the greater - i.e., €10 x (each 0.1Ha of 10.55Ha) - €1,055	

10 CONCLUSION

The application is for the Proposed Development of a 170MW Open Cycle Gas Turbine Power Plant. It is accompanied by a Planning Report, an Environmental Report, a Land Use Planning Risk Assessment (COMAH/ Seveso) and a Natura Impact Statement. The Planning Report has outlined the planning and policy context of the Proposed Development, and provided responses to the planning matters and issues likely to be associated with the development proposal.

It is evident from the Policy Statement on Security of Electricity Supply (Policy Statement) 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.

As has also been outlined, the nearby area is characterised by industrial type activities, and the land use as a Power Generation Plant has been previously approved by both the MCC and An Bord Pleanála. As can be seen from section 5 of this Planning Report, the Site has been subject to three previous applications relating to electricity generation and associated development, all of which were granted permission. The surrounding area of the site contains a variety of industrial and energy type/ related consented uses, including that of a waste to energy facility, and a large- scale cement production facility.

It is submitted, that the Proposed Development has been demonstrated to be fully in compliance with all plans, policies, and objectives at a National, Regional and County level, and that all relevant planning matters are appropriately addressed. All policy documents recognise the importance of electricity infrastructure to the future economic growth of the country. This proposal seeks to enhance the adequacy of power supply particularly at peak times and thus meets the aims and objectives of all policy documents.

Methods for the supply of water, discharge of emissions, road and traffic safety, landscape and visual impacts, and the discharge of waste, have been fully and appropriately addressed, and connection to public water has been agreed in principle with the water services section of Meath County Council, and Irish Water.

The Proposed Development will not impact on the World Heritage Site of Brú na Bóinne. It is outside the Core Area and the Buffer zone. The Proposed Development avoids and takes full account of any adjacent built or natural heritage. The existing Irish Cement Stacks of 131m and the Indaver stack under construction of 65m will continue to be the dominant feature on the skyline.

It is submitted that the application is in compliance with the plans, policies, and objectives for the area, and is therefore in accordance with the proper planning and sustainable development of the area and should accordingly be granted permission.

Appendix A Community Engagement and Community Benefit

Community Engagement

Overview

Community engagement has been shaped by dialogue with a wide range of stakeholders, including local political stakeholders and the wider community surrounding the site of the Proposed Development. The principles behind our engagement were the same for all groups – i.e., to engage in open, honest, and meaningful discussion and consider all feedback, suggestions and information brought to the Project Team.

Community Liaison Officer

A Community Liaison Officer (CLO) for the Proposed Development was appointed in February 2023.

Engagement with Political Stakeholders

Throughout the spring and early summer, local political stakeholders received several updates regarding the Proposed Development. While the Proposed Development lies within Meath County, it lies at the confluence of several different constituencies, 2 at national level (Meath East and Louth) and 3 at local authority level (Laytown-Bettystown, Ashbourne, Drogheda Urban). Therefore, SSE noted that it was appropriate to keep all political representatives in these areas informed regarding the Proposed Development.

Meetings were offered with several local political stakeholders with virtual engagements taking place with two political representatives.

Newsletter and Community Engagement Evening

A newsletter giving a high-level overview of the project was circulated in the vicinity of the Proposed Development on May 3rd 2023. That newsletter also served to advertise an SSE community engagement evening which took place on May 11th in the Sage and Stone Coffee Shop, outside Duleek. Political representatives were also given advanced notice of the community engagement evening.

In addition to the newsletter, the community engagement evening was advertised in three local publications, including:

- The Drogheda Leader,
- Duleek & District News, and;
- The Meath Chronicle.

The key aim of the community engagement evening was to keep nearby residents, community groups and political stakeholders informed regarding the Proposed Development, provide these stakeholders with an opportunity to meet the Project Team and allow them to provide feedback on the project verbally in-person and via a feedback form. Pull up banners were present on the night, providing a high-level overview of the project.

The event was attended by a mix of political stakeholders, landowners and nearby residents, individuals from local sporting and environmental organisations and other interested parties. Attendees were able to refer to information on pull-up banners and engage with relevant members of the Project Team and expert consultants for follow-up queries. Feedback forms were provided on the night and those in attendance were strongly encouraged to fill out these forms or take them away and send their feedback directly, via email, to the CLO.

Community Benefit

Evident during the community engagement evening, from discussions with members of the local community and key stakeholders, and via feedback received in the feedback forms submitted to the CLO, is the desire among the local community to see a community benefit proposal linked to the Proposed Development.

SSE is committed to the provision of a community benefit proposal linked to the Proposed Development and will work collaboratively with the local community and key local stakeholders, through consultation, to understand the principles around which any community commitment should be aligned with.

The project's dedicated CLO will engage with communities, stakeholders and those who may be impacted by the project to establish a transparent process. SSE will ensure that any community commitment contributes to the social, environmental, and economic well-being of local communities over the construction and operational phases of the Proposed Development.

Appendix B –Photo Location Map and Views of Proposed Development



Viewpoint locations selected for the Platin OCGT project

VP 1 from R152



VP 7 from Knowth Approach



VP 8 from Newgrange Environs



VP 9 from Dowth Environs

