

Inspector's Report ABP-305028-19

Development	208MW(electrical output) open cycle gas turbine power plant and associated site works
Location	Carranstown & Caulstown, Platin, Duleek, County Meath
Planning Authority	Meath County Council
Planning Authority Reg. Ref.	LB190031
Applicant(s)	SSE Generation Ireland Ltd.
Type of Application	Permission
Planning Authority Decision	Grant
Type of Appeal	Third Party
Appellant(s)	Bob & Anthea Cameron
	Colm McCloskey
	Paul Monahan
	Joe Kavanagh
Observer(s)	Donore Environmental and Heritage
	Group
	Cllr Sharon Keogan & Duleek &

District Environmental Group Stephen Kavanagh Cllr James Byrne Regina Doherty TD Cllr Darren O'Rourke & Matt Carthy MEP John Woods Cllr Paddy Meade Helen McEntee TD

Date of Site Inspection

Inspector

31st October, 2019

Kevin Moore

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1.0 Site Location and Description

1.1. The 10.72 hectare site is located in the townlands of Carranstown and Caulstown at Platin in County Meath. The site is approximately 4km north-east of the village of Duleek and 4km south-west of the town of Drogheda. The site is located to the east of Regional Road R152 and is in agricultural use. There is a mix of industrial type developments in the immediate vicinity. Indaver's waste to energy facility is located to the north-west on the opposite side of the regional road. A commercial vehicle test centre and vehicle service station are located immediately adjoining the site to the north along with a small number of detached houses on both sides of the regional road. Irish Cement Ltd. works and quarry is located a short distance further north of this. Residential development is otherwise scattered in this rural location with frontages on to the regional road.

2.0 **Proposed Development**

- 2.1. The proposed development would comprise a 208MW (electrical output) open cycle gas turbine (OCGT) power plant and would include the following:
 - a) 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 2 no. turbines with a common generator, all on a concrete plinth of 615m²;
 - b) Each unit having two exhaust stacks (15m in height), one for each turbine;
 - c) A water treatment plant comprising:
 - a 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 315m² deionized (treated water) water storage tank (max. volume of 4900m³) c.16m high
 - a hydrochloric acid tank (5m³) c.3m high
 - a sodium hydroxide tank (2.5m³) c.2m high
 - a waste water storage tank (40m³) c.2.5m high

- a 25m² Firewater Module measuring 5m wide x 5m long x 5m high
- a foul water pump station
- d) 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 2,350m² concrete bund;
- e) 3 no. waste storage containers, each 80m² (c.3m wide x 26m long x 4m high);
- f) A diesel generator with floor area of $32m^2$ (c.4m wide x 8m long x 4m high);
- g) 2 no. transformers each 160m² and each measuring c. 8m wide x 10m long x 9m high;
- h) An 830m² office and ancillary services building (c.20m wide x 47m long x 6m high);
- i) A 570m² switchgear (MV) building (c.13m wide x 54m long x 5m high);
- j) All other miscellaneous and ancillary site works, including 12 no. car parking spaces and 3 no. loading bays, widened and upgraded entrance from the R152, two lowered site platform areas, an internal circulation road, hard and soft landscaping, a temporary construction compound, and palisade fencing;
- k) New road markings, including a deceleration lane approaching the site on the R152.

The 4 no. OCGT units are currently in operation and generating electricity for the national grid at Rhode, County Offaly and Tawnaghmore, County Mayo. It is proposed that these existing units would be relocated to Platin. The two OCGT units at Rhode would be moved first and the two units at Tawneymore would be relocated as the second phase. They would be delivered by road in modular units.

The plant would comprise a distillate fuel oil-fired power generating facility, i.e. the principal activity would involve the combustion of distillate in a power turbine that would drive a generator for electricity production. The generated electricity would be fed to a transformer where the voltage would be stepped up for transmission from a local substation into the national grid.

Fuel would be delivered to the site by road in tankers. Up to 13 deliveries per day (for fuel and water treatment chemicals) are envisaged at the typical rate of

fuel/chemical usage for a 4 hour operational day, with deliveries normally being on week days during normal working hours. The plant would operate when demand is highest or when a shortage of supply exists on the grid. It is designed to allow for flexible operation so that it can cater for high demand and respond quickly to fluctuations on the electricity grid with high frequency. The plant would generally be run under automatic control from a remote location.

Two 10.5kV/110kV step-up transformers would be required on the site. Each transformer would be connected to two generating units. The transformers would step up the voltage of power generated by the units to 110kV for export to the national grid. Electricity would be exported to the national grid via the 110kV line currently traversing the site.

The proposed development would be connected to the public water and wastewater system.

The proposal relates to a development which comprises, or is for the purposes of, an activity requiring an Industrial Emissions Directive (IED) licence.

The site would qualify as a lower tier Seveso establishment under the scope of the Chemicals Act (Control of Major Accident Hazards Involving Dangerous Substances) Regulations 2015, i.e. the COMAH Regulations due to the quantities of Class III oil product stored at the site, which would be in excess of the lower tier thresholds from Schedule 1 of the Regulations.

The proposed development is planned to connect to a new 110kV substation to be located adjacent and to the south-west of the proposed OCGT power plant. This new substation and alterations to an existing 110kV line is the subject of a Strategic Infrastructure Development application to the Board under ABP Ref. 303678-19.

The application included the submission of a Planning Report, an Environmental Impact Assessment Screening, an Environmental Report, a Land Use Assessment Report, and a Natura Impact Statement (NIS). The application also included letters from the Commission for Regulation of Utilities relating to protecting electricity supply in the Dublin region, from Eirgrid on the purpose for the development, and from Meath County Council, as the body with control over the lands for the proposed development, allowing the making of the planning application. Details of public consultation engagement and community gain were outlined.

3.0 Planning Authority Decision

3.1. Decision

On 5th July 2019, Meath County Council decided to grant permission for the proposed development subject to 29 conditions.

3.2. Planning Authority Reports

3.2.1. Planning Reports

The Planner noted the site's planning history, planning policy, third party submissions, and reports received. The key planning considerations were seen to be appropriate assessment, environmental impact assessment, the need for the project, planning policy, the design and visual impact, transportation, environment, heritage and fire safety. A request for further information was recommended based on the requests set out in the reports received and considerations on visual impact. The applicant was also requested to re-evaluate its NIS and to address the requirement for EIA in light of the request

3.2.2. Other Technical Reports

The Water Services Engineer sought further information in relation to attenuation, retention separators, and feasibility and acceptability of water service requirements and waste water discharge to Irish Water.

The Assistant Chief Fire Officer noted that a Fire Safety Certificate application is required.

The Transportation Engineer requested further information on the volume of soil to be imported to the site and the associated volume of HGVs delivering it, liaising with TII regarding the location of proposal relative to route options for the Leinster Orbital Route, and the payment of a €20,000 levy as a contribution towards road repair and strengthening works.

The Environment Section noted the applicant references a letter from the CRU to Eirgrid and SSE directing them to enter into a contract and move existing

infrastructure to Duleek but that this refers to 'existing generating plant' and does not specifically detail where this should come from and the type of generating plant. It was submitted that, while there may be a need to supplement power supply, the proposal utilises fossil fuels and will not contribute to reducing greenhouse gases, creating a low carbon economy, and is not in line with the Council's draft Climate Action Strategy. It was noted that the applicant had not explored alternative renewable fuels or lower greenhouse gas producing fuels. Further information was requested on this. It was further noted that the applicant had not examined the greenhouse gas emissions from the proposal and where the distillate oil will be sourced. It was submitted that the HGV journeys will also contribute to greenhouse gas production. Further information was requested on these details.

3.3. Prescribed Bodies

The Health and Safety Authority did not advise against the granting of planning permission in the context of major accident hazards.

The Health Service Executive refers to several sections of the applicant's Environmental Report. It was requested that the applicant clarify that there would be no perceptible odour from the operation. It was concluded that the applicant did not outline any plans for the longer term operation or decommissioning of the plant and that the long term operation and continued production of greenhouse gases may not be in line with the policy document "Ireland's Transition to a Low Carbon Energy Future" and with Ireland's long term climate change strategy. It was also submitted that noise levels should be monitored closely when the plant is in operation to verify the effectiveness of mitigation and it was noted that the applicant's Environmental Report did not detail any public complaints procedure.

Irish Water requested the applicant to provide confirmation from Irish Water that the delivery of 5m3/hour of water to the proposed development is feasible and that the wastewater discharge proposal is also acceptable to Irish Water.

Transport Infrastructure Ireland (TII) submitted that the proposal lies within the constraints study area for the Leinster Orbital Route. While acknowledging the site's planning history, it was submitted that the relationship of the site to the proposed route appeared not to have been assessed in the application. It was considered that

the matter should be addressed by the applicant in consultation with the local authority.

The Department of Culture, Heritage and the Gaeltacht requested the preparation of an archaeological impact assessment by way of further information.

3.4. Third Party Observations

Objections to the proposal were received from Stephen Kavanagh, Joe Kavanagh, Cllr Sharon Keoghan, Duleek and District Environmental Group, Carranstown Residents Group, Anthea Cameron, Colm McCloskey, Cllr Paddy Meade, Paul Monahan, Darren Ryan, Donore Environmental & Heritage Group, and Bob Cameron. The grounds of the appeals and the observations made to the Board reflect the range of principal planning concerns raised.

A request for further information was requested on 12th March 2019 as recommended by the Planner. A response to this request was received on 24th May 2019.

Following the receipt of further information additional third party submissions were received from Stephen Kavanagh and Joe Kavanagh.

The following reports were received by the planning authority:

TII submitted that its advice remained the same as that previously.

Irish Water had no objection to the proposal.

The Water Services Engineer set out the water services requirements should permission be granted.

The Architectural Conservation Officer considered protected views had not been addressed. He was also of the opinion that the rural area in which the development is proposed to be located is overdeveloped industrially and the addition of the proposed would only add to that. A condition relating to archaeology was recommended if approval was being considered. The Department of Culture, Heritage and the Gaeltacht noted the archaeological impact assessment and set out its requirements in the event planning permission was granted.

The Environment Engineer noted the publication of the Climate Action Plan to Tackle Climate Breakdown in March 2019 and actions in relation to electricity in particular. Acknowledging the need for energy, it was considered that the proposal using fossil fuel was in direct opposition to the ambitions of the Climate Action Plan 2019. A refusal of permission was recommended.

The Transportation Engineer had no objection to the proposal subject to the payment of a special levy towards road repair and strengthening works.

The Planner noted the third party submissions and reports received. In reference to the Environment Section report, it was countered that in the absence of appropriate Section 28 Planning Guidelines in relation to climate change the compliance of Ireland in relation to carbon emissions is the responsibility of the relevant Government agency. It was submitted that it was pertinent to have regard to the letter from the Commission of Regulation of Utilities. The proposal to relocate OCGT units from Offaly and Mayo was also noted. It was contended that, on that basis, there may not be a net national increase in emissions as a result of the development. Regarding the visual impact, it was noted that this would be acceptable and no protected views would be impacted. The responses to the further information request were considered acceptable. A grant of permission subject to conditions was recommended.

4.0 **Planning History**

ABP Ref. PL 17.118993 (P.A. Ref. 99/2490)

Permission was granted by the Board for a 400MW Combined Cycle Gas Turbine (CCGT) power generation plant.

ABP Ref. PL 17.204321 (P.A. Ref. SA30213)

Permission was granted by the Board for amendments to the above referenced development that essentially involved the replacement of the water cooling towers and pump house with an air cooled condenser system.

P.A. SA100263

Permission was granted by the planning authority for a 60MW open cycle gas turbine power generation plant.

5.0 Local Policy Context

5.1. Meath County Development Plan 2013-2019

Economic Development Strategy

Renewable Energy

In Section 4.4.2 of the Plan, in reference to the requirement to prepare a Thematic Spatial Strategy for Industrial Development, it is stated:

"The requirement to prepare a Thematic Spatial Strategy for Industrial Development (Objective TRANS OBJ 22 refers) is also considered relevant with regard to meeting the specific needs of renewable energy and general energy related infrastructure projects. As part of the preparation of this Thematic Spatial Strategy, there is particular merit in examining significant landholdings associated with quarrying and extractive industries to develop energy related infrastructure projects. The existing example to support such a clustering argument is Carranstown and Caulstown, Duleek adjacent to Irish Cement operation at Platin – Indaver 70MW waste to energy facility and the permitted Scottish and Southern Energy Plc 60MW open cycle gas turbine power generation plant. The accommodation of such energy related infrastructure projects which tend to absorb large areas of land and cannot be facilitated within traditional industrial zonings in towns around the county is worthy of further detailed consideration."

Energy

The Plan states in Section 8.1.1:

In relation to power generation, Meath is well placed to encourage and facilitate the development of power generation facilities in the county, for a variety of reasons, namely:

- the county's proximity to Dublin;
- the passage of a number of gas mains and trunk elements of the national grid through Meath; and
- the availability of sites.

Policies include:

EC POL 1

To facilitate energy infrastructure provision, including the development of renewable energy sources at suitable locations, so as to provide for the further physical and economic development of Meath.

EC POL 11

To support and facilitate the development of enhanced electricity and gas supplies, and associated networks, to serve the existing and future needs of the County.

Transportation

Objectives include:

TRAN OBJ 21: To co-operate with the NRA, NTA and other Local Authorities in clarifying and finalising the route of the Leinster Outer Orbital Route (linking Drogheda, Navan, Trim and Naas) proposed in the 'Regional Planning Guidelines for the Greater Dublin Area' and the NTA's draft Transport Strategy. This is particularly important in the vicinity of proposed major junctions along the route in order to protect the identified corridor from development intrusion.

Development Management Guidelines and Standards

All Renewable Energy Developments

In the assessment of individual proposals, Meath County Council will take the following into account:

- the proper planning and sustainable development of the area;
- the environmental and social impacts of the proposed development, including residential amenity and human health;
- impact of the development on the landscape;
- impact on public rights of way and walking routes;
- connection to the National Grid (where applicable);
- mitigation features, where impacts are inevitable, and;
- protected or designated areas NHAs, SPAs and SACs, areas of archaeological potential and scenic importance, proximity to structures that are listed for protection, national monuments, etc.

6.0 The Appeals

6.1. Appeal by Bob and Anthea Cameron

The grounds of appeal by the appellants, who are residents of Platin Road, may be synopsised as follows:

- The Open Cycle Gas Turbine Power Plant is to run on diesel oil and not on natural gas. Ireland is the worst performing country with regard to reducing our carbon footprint and this is going backwards.
- The proposal will produce harmful emissions. The proximity to Indaver and Irish Cement will result in higher emissions in the area and the harmful effects they have.

- The Platin Road is destroyed with all the trucks on it. This will add to it, with disruption for 18 months during construction and on a constant basis with diesel/fuel deliveries.
- There are constant issues with household water supplies. The infrastructure and capacity for additional demand to serve the proposal is not there and will deplete availability in the area.
- This is an historical location where industrial development is being pursued on a Neolithic site. To build here is ignorant of this fact.
- There are other alternatives but this is the cheapest option.

6.2. Appeal by Colm McCloskey

The grounds of appeal may be synopsised as follows:

- The Open Cycle Gas Turbine Power Plant is to run on diesel oil and not on natural gas. Ireland is the worst performing country with regard to reducing our carbon footprint and this is going backwards.
- The proposal will produce harmful emissions. The proximity to Indaver and Irish Cement will result in higher emissions in the area and the harmful effects they have.
- The Platin Road is destroyed with all the trucks on it. This will add to it, with disruption for 18 months during construction and on a constant basis with diesel/fuel deliveries.
- The capacity for additional water demand is not available due to old infrastructure.
- The site has been included in the archaeological survey map and should be deemed inappropriate next to or near this site. It should be conserved.

6.3. Appeal by Paul Monahan

The grounds of appeal may be synopsised as follows:

- The Open Cycle Gas Turbine Power Plant is to run on diesel oil and not on natural gas. Ireland is the worst performing country with regard to reducing our carbon footprint and this is going backwards.
- The site has been included in the archaeological survey map and should be deemed inappropriate next to or near this site. It should be conserved.
- The proposal will produce harmful emissions. The proximity to Indaver and Irish Cement will result in higher emissions in the area and the harmful effects they have.
- The area is already very busy, dirty and extremely dangerous. There will be heavier traffic during construction and increased traffic for fuel deliveries on a constant basis will result.
- The capacity for additional water demand is not available due to old infrastructure.

6.4. Appeal by Joe Kavanagh

The grounds of the appeal may be synopsised as follows:

- The planning authority has failed to carry out a proper screening for Environmental Impact Assessment.
- The planning authority's considerations on Appropriate Assessment is not an Appropriate Assessment.

The appeal includes the submission to the planning authority.

6.5. Applicant Response

The applicant's response to the appeals may be synopsised as follows:

Introduction

• The proposed development is similar to other such developments proposed and granted on the site and it is consistent with the established uses for industrial purposes in the immediate surroundings of the site.

Proper Planning and Sustainable Development

• The proposal complies with relevant policies, objectives and development standards.

Contrary to Meath County Development Plan

• The proposal complies with relevant policies, objectives and development standards.

<u>Chimneys</u>

 There are 8 no. 15m high peaker plant exhaust stacks. These will not be all visible at any one particular time due to site topography and screening proposed. There will be a very slight and highly localised residual impact caused by the introduction of non-agricultural uses.

Use of Diesel

- The liquid fuel is a low-sulphur distillate fuel oil.
- The use of natural gas or biogas would pose significant geographical, technical, design and time challenges which would not meet the need and objectives of the proposed development.
- The use of natural gas, liquid biofuel or solid biomass and the associated project delivery impacts are not warranted from an environmental point of view as the use of distillate oil is not predicted to have a significant impact on the environment when mitigation is implemented.
- Air emissions will not lead to exceedances of air quality standard limits.
- The proposed OCGT units are existing units to be relocated.

<u>Health</u>

 The potential impacts have been addressed in the Environmental report, in particular air and noise emissions. Irish Cement was also discussed in both the noise and air assessment reports. Cumulative assessment has been done.

Traffic/Transportation

 Construction activity is of a temporary nature. Traffic in this phase will result in an increase of only 3.4-3.5% on existing traffic levels during morning and evening peaks. During the operational phase, the increase over existing traffic levels will be only 2.1-2.2%. The maximum number of HGV deliveries per day will be 13 and will only occur during the winter. No negative effect on the surrounding road network is expected.

<u>Water</u>

 There will not be a continuous demand on the water network. Irish Water has confirmed supply capacity exceeds the proposed demand. It has confirmed an appropriate volume of water to abstract from the network and this exceeds the amount of water required. A flow control valve will be installed which will ensure that the stipulated flow rate is not exceeded. The water storage tank will allow the plant to continue operating if the mains supply is not available.

Heritage/Historic Area

 The proposal has evolved to exclude the existing archaeological feature on the lands. A 'Preservation in situ' exclusion zone of 25m has been developed. Pre-construction test-trenching has been undertaken. Pre-construction site investigation works have been supervised. There will be no impact on the Brú na Bóinne world heritage site and there will be no cumulative impacts on the monuments, their context and setting from a landscape and visual perspective. During construction all topsoil removal will be supervised by an archaeologist and the archaeologist will be empowered to have the works ceased if required.

Need for EIA

 The Board is in a position to determine that there is no real likelihood of significant effects on the environment arising from the proposed development and as such EIA is not required.

Appropriate Assessment

 A Natura Impact Statement was submitted as part of the planning application and a revised NIS was submitted in response to the planning authority's request for further information. The competent authority, i.e. the Board, is enabled to ascertain that the proposed development would not adversely affect the integrity of any European sites concerned.

6.6. Planning Authority Response

The planning authority submitted that the proposed development was considered by it to be consistent with the policies and objectives in the Meath County Development Plan and refers the Board to the Planner's report. The Board is asked to uphold the planning authority's decision.

6.7. Observations

Observation from Donore Environmental and Heritage Group

The Observer raised concerns relating to misuse of treated water, use of diesel as a fuel being contrary to the Climate Action Plan, the volume of CO_2 emissions, the remote nature of the operation, emissions and impact on human health, use of outdated plant and the option of gas as an alternative fuel, repeating past mistakes in decision-making, methane emissions, overdevelopment of industry in the area, carbon crime and the destruction of the natural environment.

Observation from Cllr Sharon Keoghan

The Observer raised concerns relating to the capacity of the public water supply, use of diesel as fuel, transport impacts, health impact, climate change impacts, archaeological impact, limited employment effect, the failure to refuse permission based on the planning authority's Environment Section's recommendation, and the lack of Environmental Impact Assessment.

Observation from Stephen Kavanagh

The Observer raised concerns relating to visual impact, loss of privacy, noise, and traffic impacts.

Observation from Cllr Stephen McKee

The Observer raised concerns relating to the use of diesel oil as a fuel, impact on mains water supply, and impact on the archaeological monument on the site.

Observation from Cllr James Byrne

The Observer raised concerns relating to use of diesel as a fuel, the public health risk, and the need to reduce carbon emissions.

Observation from Regina Doherty TD

The Observer raised concerns relating to the use of diesel oil as a fuel, impact on mains water supply, and the archaeological impact.

Observation from Cllr Darren O'Rourke and Matt McCarthy MEP

The Observers raised concerns relating to use of old technology and fossil fuel, overintensity of heavy industry in the area, impact on water, the impact on European sites, visual impact, safety concerns with oil storage, health risks, traffic, odour, noise, waste, archaeological impact, planning authority failure to carry out a proper screening for EIA, inadequate AA, and ecological impact.

Observation by John Woods

The Observer raised concerns relating to use of diesel as fuel, pollution arising, health concerns, poor road infrastructure, and poor monitoring provisions.

Observation from Cllr Paddy Meade

The Observer raised concerns relating to site selection due to poor road network, unreliable water supply, grid connection, nature and extent of development in the area, and financial incentivisation, use of a dirty fuel and associated emissions, the use of outdated plant, and the need for a regional EPA office at this location.

Observation from Helen McEntee TD

The Observer raised concerns relating to archaeological impact, intensification of waste-related activity in the area, and the need for an EPA monitoring station.

6.8. Further Responses

In response to the observations, the applicant submitted:

Site Selection

- The site is suitably placed to enable the support of the existing network and maintain a secure supply to the areas of increased demand within the region.
- The proposal will assist in addressing an issue to the immediate north of Platin that is subject to increasing fault levels.
- There is a Level 2 capacity constraint (generation scarcity) in the region which includes the Corduff 220/110kV node. The Platin 110kV substation connects directly to the Corduff node. There is sufficient capacity on the Platin-Corduff 110kV OHL to connect the proposed 208MW peaker plant.
- The site was previously consented for a CCGT and a peaker plant.

Use of Diesel Fuel

- The Climate Action Plan 2019 references an early and complete phase-out of coal and peat-fired electricity generation but the statement does not include gas and distillate oil generating plant. This Plan also notes that systems will need to be put in place to manage intermittent sources of power, especially from wind.
- The proposal is a fast-acting, flexible OCGT plant that will deliver on climate change targets by facilitating more wind generation and providing additional system and fuel benefits for the power system in Ireland.
- The proposal has been the subject of discussion by EirGrid with the Energy Regulator, who has asked that EirGrid consider its progression with urgency.

Previous Proposed Gas Plant

- The previous permissions were in respect of similar generating plants which, whilst gas powered, also included similar distillate oil storage on site and the ability to be distillate fuel powered in the event of a gas supply disruption.
- There is currently no suitable gas connection point available to the site. Creation of a new connection point to the pipeline across the north of the site would be technically challenging and would require additional consent processes entailing additional delay and time-consuming design, specification and procurement processes for the new above-ground installation.

Use of Term OCGT

 This is an OCGT plant. Such plants can also be referred to as Peaker / Peaking plants.

NIS Conclusion

• Clarity is provided on the conclusions of the AA screening and the NIS.

Impact on Residential Amenity

- The reduction in ground levels and the distance between the nearest dwelling and nearest storage tank and the closest OCGT unit will ensure that no part of the proposal would constitute an overbearing element. Soil will be used for berms and these will be landscaped.
- As there would be no overlooking, it is not anticipated that the neighbouring dwelling would be subject to any loss of privacy.

Traffic Impact

- The number of car/HGV movements to and from the development would result in a less than 5% increase on current traffic volumes and is not a significant traffic increase.
- Fuel/deliveries will not go through Duleek but via the M1.

Use of Old Technology

• The proposed OCGT units are existing units being relocated. They are of the aero-derivative type, i.e. they are highly flexible in terms of start-up time.

Whilst not as efficient as CCGT, they exhibit comparable or higher efficiencies than coal and oil-fired steam plant. For use of short duration demand, CCGT overall fuel consumption would be similar or higher for the same volume of electrical output once start-up and shutdown consumption is taken into account.

- The use of existing units is considered to be an efficient use of existing national grid resources.
- The need and objectives of the proposal necessitate the use of the existing units as well as the type of unit and is supported through the letters of support and consent.

Emissions

- The proposal would be subject to an IPC licence from the EPA.
- The applicant has provided full details on likely air emissions. All the maximum predicted cumulative Ground Level Concentrations (GLCs) are below the relevant Air Quality Standards (AQS) limit values. These show that atmospheric emissions would have no significant impact on ambient air quality.
- There would be no other environmental emissions that could have a significant ecological impact. Also, an Environmental Co-ordinator would be designated to the site.

Contribution to CO₂ Emissions

 As the units are existing units that are being relocated, there would be no net increase in emissions over and above existing emissions within the energy sector and can, thus, be considered largely carbon neutral. It is noted that additional operational hours are a possibility.

Parking

• Up to 5 people would be on site and other personnel would be on call as required. The proposal for 12 parking spaces is considered prudent.

7.0 Environmental Impact Assessment Screening

7.1 Introduction

- 7.1.1 The applicant's Screening Report has concluded that the scale and nature of the project are not considered to present a risk of significant environmental impact during the construction and operational phases and that an EIA is not required to be carried out and an EIAR is not required to be submitted with either of the development proposals or associated planning applications relating to ABP Refs. 303678 and 305028.
- 7.1.2 It is noted that there are two separate planning applications for the overall project on the site. The proposed 110kV substation and diversion of the existing overhead 110kV line into the substation qualify as a type of development which requires the lodgement of an application for approval to the Board for strategic electricity development under section 182A and 182B of the Planning and Development Act. The OCGT generating plant is subject to a planning application under section 32 of the Act. The decision of the planning authority, Meath County Council, is now subject of an appeal to the Board.

7.2 Mandatory EIA – Schedule 5 Part 1

7.2.1 The classes of development which require a mandatory EIA are defined in Article 93 and Schedule 5 of the Planning and Development Regulations. The proposed development does not fall within the classes of development which require a mandatory EIA.

7.3 Sub-Threshold EIA – Schedule Part 2

7.3.1 The following development classes are noted:

<u>Class 3(a)</u>

Industrial installations for the production of electricity, steam and hot water not included in Part 1 of this Schedule with a heat output of 300 megawatts or more

The plant consists of 208MW electrical output power generation plant and is below the threshold limit.

Class 3(b)

Industrial installations for carrying gas, steam and hot water with a potential heat output of 300 megawatts nor more, or transmission of electrical energy by overhead cables not included in Part 1 of this Schedule, where the voltage would be 200 kilovolts or more

The proposal is a 208MW (electrical output) OCGT generating plant and does not fall under this activity class. Generators would be driven by open cycle gas turbines. 208MW of electricity would be produced, which falls below the Class 3(b) limit. Electrical output would be transmitted via an existing 110 kilovolt system. No new overhead cables would be installed and the voltage of all cables would be 110kV.

Class 10(b)(iv)

Urban development which would involve an area greater than 2 hectares in the case of a business district, 10 hectares in the case of other parts of a built-up area and 20 hectares elsewhere

The overall site is 10.7 hectares in area. It is not within a 'built-up area' or 'business district'. If it was perceived to be 'elsewhere', it is very substantially below the threshold.

7.4 Assessment of Environmental Significance

Characteristics of the Proposed Development

- The site is located in an area that is increasingly industrialised in character and would form part of a cluster of a range of industrial-type activities.
- The development would not have any significant cumulative impact with adjacent industrial activities and any known planned additional proposals for these industries.
- There is no reason to suggest that the proposed development would have a detrimental impact on the natural resources of the area. While the site would comprise agricultural land used for tillage, the impact could not reasonably be construed as significant in the wider agricultural context of this area.

- There would be no known significant effect on geology, hydrogeology or surface waters arising from the project.
- The site is used for barley production and contains no habitat, flora or fauna of conservation significance.
- The main source of waste associated with the project would be at the construction phase. This would be of a non-hazardous nature and relatively limited. All waste would be managed through the implementation of a Construction Waste Management Plan. There is adequate capacity in existing off-site waste disposal and treatment facilities to accommodate operation waste.
- All emissions from the project would be regulated under an IE licence from the EPA. All wastewater from the plant would be disposed for treatment at Duleek waste water treatment plant.
- Construction activities would be subject to measures set out in a Construction Management Plan.
- The proposed OCGT plant would fall within a category of development to which the Seveso Regulations would apply. Construction works would be carried out following the approval from HSA.
- Both the proposed Construction Environmental Management Plan and the Environmental Management Plan during the operation would seek to ensure there would be no risk posed to human health.

Location of the Proposed Development

- The site is located in an area that is becoming increasingly industrialised and would form part of a cluster of industrial and energy uses.
- There would be no discharges to land, soils or water. There are no wetlands in the vicinity and the site is distant from any European Sites.
- The site is distant from coastal zones and the marine environment where the nearest European Sites are located.

- An Appropriate Assessment has been undertaken and it is concluded that the proposed development, individually or in combination with other plans or projects, would not be likely to have a significant effect on any designated European Site.
- There are no mountain or forest areas located at or in the vicinity of the site.
- The site is distant from the Brú na Bóinne World Heritage Site and lies outside of the buffer zone for this heritage site as designated in the current Meath County Development Plan. The site is separated therefrom by agricultural and industrial type developments, inclusive of the Irish Cement works at Platin immediately to the north of the site. The proposed development would not have any significant impact on Brú na Bóinne, would have no effect on any nature reserves and parks, or on any landscapes and would have no direct effect on sites of historical, cultural or archaeological significance.
- There would be no emissions associated with the proposed development that could have significant effects on waterbodies. The development would be subject to the requirements of an IE licence.
- The proposed development would not be located within or in the vicinity of any densely populated area.

Type and Characteristics of the Potential Impacts

- A large geographical area would not be impacted as a result of the proposal.
 The development would be sited in a location that is increasingly of an industrialised nature within a confined rural area.
- The proposed development would not have any notable impact on areas of significant density of population, being remote from the town of Drogheda and the village of Duleek. Any potential impact on those working and residing in the immediate vicinity would be limited to the construction phase, which would be short-term and subject to a management plan.
- No trans-frontier impacts would arise.

- There are no anticipated long-term adverse environmental impacts arising from the construction and operational phases. The operation of the development would be subject to an IE licence.
- The duration of the operation of the plant would be long term. It is a scheme that is reversible.
- While a number of planning applications for a range of proposed developments have been permitted for new and existing developments in the general vicinity of the site, they are not anticipated to have a cumulative negative impact with the proposed development.
- No significant emissions are expected to result from the construction and operation of the proposed development due to the control measures, licensing and monitoring proposed to be put in place. Therefore, the need to effectively reduce the impact of the proposed development does not arise.

7.5 Conclusion

7.5.1 Overall, it may reasonably be concluded that the proposal does not exceed the thresholds or meet the classes of development as defined in Schedule 5 of the Planning and Development Regulations. Having regard to the consideration of the likely environmental significance of the proposed development, it may reasonably be concluded that the characteristics of the proposal, its location, and the type and characteristics of the potential impacts arising from the construction and operation of the scheme would not result in a significant environmental impact. It is, thus, reasonably determined that EIA is not required and the requirement for the applicant to submit an EIAR does not arise.

8.0 Appropriate Assessment

8.1 Screening for Appropriate Assessment

8.1.1 The applicant undertook a Screening for Appropriate Assessment. The following is noted from this Screening:

- The potential sources of impact arising from the proposed development relate to the potential effects of pollutant-laden surface water discharges to downstream European sites during construction, increased foul water discharge during operation, and deposition of airborne emissions during operation.
- The pathways between the proposal and European sites are seen to be the surface water network and air currents.
- 8.1.2 The applicant analysed the relationship between individual European sites within a zone of influence of 15km and the potential for effects arising from the proposed development, either alone, or in combination with other plans or projects. Based on the presence of source-receptor-pathway links, the nature of the proposed development, and nearby European sites, it was the applicant's submission that it cannot be concluded that the proposed development will not have a likely significant effect on any European sites. The European sites considered in the analysis were the River Boyne and River Blackwater SAC (Site Code: 002299), Boyne Coast and Estuary SAC (Site Code: 001957), River Boyne and River Blackwater SPA (Site Code: 004232), Boyne Estuary SPA (Site Code: 004080), and River Nanny Estuary and Shore SPA (Site Code: 004158).

8.2 Natura Impact Statement

- 8.2.1 The following is noted from the applicant's NIS:
 - The applicant determined that European sites within the potential zone of influence of the proposed development are the River Boyne and River Blackwater SAC, Boyne Coast and Estuary SAC, River Boyne and River Blackwater SPA, Boyne Estuary SPA, and River Nanny Estuary and Shore SPA.
 - The only European site that has a direct hydrological connection with the proposed development is the River Nanny Estuary and Shore SPA, which is 7.7km to the east. Adverse effects are not predicted for special conservation interest species of the SPA in light of their conservation objectives as a result of the proposed development due to:

- (i) the separation distance and terrestrial and freshwater buffers,
- (ii) habitats within the SAC not being susceptible to increased sediment deposition in light of conservation objectives, and
- (iii) any potential effects on water quality would be of short duration and not of sufficient scale to adversely affect wintering birds in the SAC.
- Mitigation measures are to be employed to ensure there will be no adverse effects on the integrity of the SAC downstream, including the provision of an oil interceptor, silt traps, bunding, etc.
- Duleek WWTP has sufficient capacity to accommodate the foul water load that would be generated by the proposed development.
- Regarding potential airborne impacts, a water injection-based NOx suppression system would be used as a means of mitigating the potential adverse effects of gaseous emissions.
- Predicted NO₂ and SO₂ deposition at qualifying interest Annex I habitats at European sites and their critical load values within the zone of influence of the proposed development demonstrate that emissions of both substances would be significantly below critical load values. Thus, it can be concluded that deposition of airborne emissions during the operation phase would not result in adverse effects on European sites in terms of their conservation objectives.
- There would be no adverse effects on the integrity of European sites arising from the proposed development in combination with other plans and projects.

8.3 Considerations on Appropriate Assessment

8.3.1 Introduction

The following observations are made:

• The Board will note that the proposed development is not directly connected with or necessary to the management of any European Site.

- I note the proposed development would be subject to an IE Licence issued by the EPA.
- I accept that the five European Sites identified by the applicant in its Screening for Appropriate Assessment within 15km radius of the proposed site are those within the potential zone of influence of the proposed development.
- I accept as relevant for consideration in this assessment the potential sources of impact arising from the proposal and the pathways identified by the applicant.
- There is no hydrological pathway directly connecting the site to the River Boyne and River Blackwater SAC, Boyne Coast and Estuary SAC, River Boyne and River Blackwater SPA, and Boyne Estuary SPA. In the absence of mitigation at the screening stage, these European sites are potentially within the range of potential deposition of nitrogen and other airborne emissions during the operation of the proposed development. The possibility of significant effects cannot, therefore, be ruled out entirely.
- The River Nanny Estuary and Shore SPA is located downstream of the proposed development. There is, therefore, a hydrological pathway directly connecting the site to the European site. In the absence of any mitigation, the possibility of significant effects arising from pollutant-laden surface water discharges at the construction stage cannot be ruled out. Also, in the absence of mitigation at the screening stage, this European site is potentially within the range of potential deposition of nitrogen and other airborne emissions during the operation of the proposed development. The possibility of significant effects cannot, therefore, be ruled out entirely.

Having regard to the above considerations, I am satisfied to determine that it cannot be concluded that the proposed development would not have a likely significant effect on any European sites and that AA is required.

8.3.2 Appropriate Assessment

My considerations are as follows:

- The only European site that has a direct hydrological connection with the proposed development is the River Nanny Estuary and Shore SPA, which is 7.7km to the east. The potential arises for construction-related pollutants and sediments being mobilised to the SPA. The closest surface waterbody to the site is Platin Stream, which is 150m to the east and beyond the site. It is evident, therefore, that there is a buffer of land separating the site from this waterbody. In addition to this, there is a 9.8km freshwater buffer between the site and the SPA. The applicant's range of proposed mitigation measures constitute appropriate construction management provisions and general good housekeeping practices which would further ensure that potential polluting substances are contained on site and contamination of any nearby waterbody would not result.
- Foul waters that would be generated by the proposed development would be directed to Duleek WWTP, which has sufficient capacity to accommodate the proposed small additional load.
- On airborne emissions during the operation of the proposed development, it is noted that a water injection-based NOx suppression system would be used as a means of mitigating the potential adverse effects of gaseous emissions, reducing combustion temperature and so reducing the formation of thermallyproduced NO_X.
- Based upon the analysis undertaken, it is a reasonable conclusion that deposition of airborne emissions during the operation phase would not result in adverse effects on European sites in terms of their conservation objectives.
- Regarding in-combination effects, in the case of potential water pollution, it is accepted that there are no known plans or projects within the Nanny-Delvin catchment that would be of sufficient scale to impact water quality and negatively affect the conservation objectives of the wetland bird species for which the SAC is designated. In the case of cumulative effects from airborne emissions, it is accepted that, based on the air dispersion modelling undertaken, there would be no significant effects on European sites.

8.3.3 Conclusion

Having regard to the above, I am satisfied to conclude that there would be no adverse effects on the integrity of European sites arising from the proposed development in combination with other plans and projects.

9.0 Planning Assessment

9.1 Introduction

9.1.1 I consider the most significant planning issues of relevance to this appeal are the policy context, the location for the proposed development, the use of distillate oil as fuel, and the proposed use of relocated plant. There are a range of other issues which will also be addressed in this assessment, which include public health, archaeological, traffic and water supply impacts.

9.2 Appeal by Joe Kavanagh

- 9.2.1 Prior to considering the main planning issues relating to the proposed development, I note the grounds of appeal from Joe Kavanagh. These may be deduced to be:
 - The planning authority has failed to carry out a proper screening for Environmental Impact Assessment.
 - The planning authority's considerations on Appropriate Assessment is not an Appropriate Assessment.
- 9.2.2 With due regard to these principal issues of concern, it is reasonable to note that the proposed development subject to appeal is now before the Board *de novo*. These issues have been addressed in earlier sections of this report and I note that the Board will give due regard to these matters in its deliberations.

9.3 Policy Context

9.3.1 Introduction

The proposed development is effectively presented in the planning application as a support mechanism for the provision of renewable energy, notably as a support in 'downtime' for wind energy. Having regard to this, it is important to seek to establish the relevant policy context for renewable energy from the outset and to attempt to understand how the nature and extent of the proposed power plant fits with the policies and provisions being espoused at this time.

9.3.2 International Objectives

The Paris Agreement

In December 2015, global agreement on climate change was agreed in Paris. The Agreement aims to restrict global temperature rise to well below 2 degrees above pre-industrial levels and to pursue efforts to limit the temperature increase to 1.5 degrees. Low greenhouse gas emissions development is fostered under the Agreement. Under this Agreement, the EU commits to reduce greenhouse gas emissions by at least 40% by 2030, compared with 1990 levels.

9.3.3 <u>EU Policy</u>

EU Renewables Directive 2009/28/EC

This Directive required each Member State to increase its share of renewable energies to 20% by 2020 and a 10% share of energy from renewable sources in each Member State's transport energy consumption by 2020 (Article 3). It established the requirement for Member States to adopt a national renewable energy action plan (NREAP) to set out national targets for the share of energy from renewable sources consumed in transport, electricity and heating and cooling in 2020 (Article 4). It set a series of interim targets, known as 'indicative trajectories', in order to ensure steady progress towards the 2020 targets. Each Member State had flexibility to set targets across the heating, transportation and electricity sectors to meet the overall renewable energy targets. Annex I indicates that the national target for Ireland for the share of energy from renewable sources in gross final consumption of energy in 2020 was set at 16%.

These targets will not be met in Ireland.

Renewable Energy Directive (2018/2001) (RED II)

The Preamble of the recast Directive of 11th December 2018 includes the following:

(2) ... The increased use of energy from renewable sources or 'renewable energy' constitutes an important part of the package of measures needed to reduce greenhouse gas emissions and comply with the Union's commitment under the 2015 Paris Agreement on Climate Change following the 21st Conference of the Parties to the United Nations Framework Convention on Climate Change (the 'Paris Agreement), and with the Union 2030 energy and climate framework, including the Union's binding target to cut emissions in the Union by at least 40% below 1990 levels by 2030...

The following is noted from the Directive itself:

Article 1 states that the Directive establishes a common framework for the promotion of energy from renewable sources. It sets a binding Union target for the overall share of energy from renewable sources in gross final consumption of energy in 2030. It lays down rules on financial support for electricity produced from renewable sources, on self-consumption of renewable electricity, and on renewable energy use in the heating and cooling and transport sectors, on regional cooperation between Member States and with third countries, on guarantees of origin, on administrative procedures and on information and training. It establishes sustainability and greenhouse gas emissions savings criteria for biofuels, bioliquids and biomass fuels.

Article 3 requires:

(1) Member States to collectively ensure that the share of energy from renewable resources in the Union's gross final consumption of energy in 2030 is at least

32%, with a view to submitting a legislative proposal by 2023 to increase it where there are further substantial cost reductions in the production of renewable energy, where needed to meet the Union's international commitments for decarbonisation, or where a significant decrease in energy consumption in the Union justifies such an increase,

- (2) Member States to set national contributions to collectively meet the binding overall Union target set in paragraph 1 of the Article,
- (4) that, from 1 January 2021 onwards, the share of energy from renewable resources in each Member State's gross final consumption of energy shall not be lower than that shown in the third column of the table in Part A of Annex I of the Directive.

Ireland's national target is set at 16% in Annex I.

Article 36 requires Member States to bring into force laws, regulations and administrative provisions necessary to comply with this Directive by 30 June 2021.

As can be seen from the obligations under this Directive, there are substantial implications arising for the energy sector in Ireland. Under the recast Directive, there is a binding Union target of a share of at least 32% of renewable energy and this is to be reviewed upwards. It is, therefore, evident that, since the original 2009 Directive, obligations relating to the increase in the share of renewable energies required has become more burdensome, with Member States such as Ireland greatly failing in achieving reductions in greenhouse gas emissions. In light of rapid climate change impacts and the urgency to address such impacts, it is apparent that a duty to proceed with appropriate measures and to achieve minimum targets is paramount. The implications of an obligation to proceed with appropriate measures potentially have significant impacts on consideration of the sustainability of the proposed development now before the Board, which seeks to use the fossil fuel distillate fuel oil to fire the power generating facility.

9.3.4 National Policy

Climate Action Plan 2019

I note the Government's recent publication of *Climate Action Plan 2019: To Tackle Climate Breakdown*. The Executive Summary of the Plan refers to a broad range of matters including:

- Agenda 2030 and the Paris Agreement on climate change requiring a transformational shift of our economies and societies towards climate resilient and sustainable development and the need for the various networks, including energy, to adapt rapidly;
- Ireland supporting the ambition emerging within the European Union to achieve a net zero target by 2050;
- The greatest savings being from known technologies that lie in Transport and Electricity; and
- Specifically on electricity, the objective to increase reliance on renewables from 30% to 70% adding 12GW of renewable energy capacity (with peat and coal plants closing).

Chapter 7 of this Plan specifically addresses 'Electricity'. The following are considered relevant to the proposed development:

- 30.1% of electricity produced was from renewable sources in 2017. The target is to reach 40% by 2020;
- Given our 40% target is based on a percentage of total energy demand, this
 rising demand makes meeting our 2020 target even more challenging and
 latest forecasts indicate we may miss this target by 3 to 4 percentage points;
- In 2016, the CO2eq. emissions intensity of Ireland's electricity emissions per capita was 13% higher than the EU 28 due to greater use of high-carbon fuels;
- While decarbonising electricity is at the heart of the strategy, this has to be done against a background of very rapid projected growth in electricity demand. EirGrid recently projected that by 2027 as much as 31% of Ireland's electricity could be powering data centres. Demand for electricity is forecast to

increase by 50% above existing capacity in the next decade in line with economic forecasts.

- Ensuring we build renewable, rather than fossil fuel, generation capacity to help meet this demand is essential;
- Renewable generation is intermittent and often unpredictable. This creates new challenges for utilities, market participants, and policy makers.
 Intermittency also creates the need for a range of technology solutions which may include large-scale interconnection, storage, and dispatchable capacity (e.g., natural gas plants that can generate electricity at times where there is no wind). There is no one-size-fits-all answer to supporting 70% renewables. However, we are witnessing rapid improvement in some of the technology that could support higher renewable penetration;
- In the electricity sector, reaching a 70% share of renewable electricity would require 50-55% emissions reduction by 2030 relative to pre-National Development Plan (NDP) 2030 projections;
- Achieving 70% renewable electricity by 2030 will involve phasing out coaland peat-fired electricity generation plants, increasing our renewable electricity, reinforcing our grid (including greater interconnection to allow electricity to flow between Ireland and other countries), and putting systems in place to manage intermittent sources of power, especially from wind;
- Increased levels of storage and interconnection will be critical to absorbing high levels of renewable generation on to the system, as renewables require back-up which will have to be provided by quick response plant, storage or interconnection;

From the above it is clear that there are a number of determinants that have particular relevance to the proposed development. These may be understood to include:

 (iv) There is a distinct emphasis on ensuring a build out of renewable generation capacity in place of fossil fuel generation to meet future electricity demand, and (v) The inherent deficiency of renewable energy in the form of intermittency is recognised. The Plan notes the need for a range of technological solutions to address this, which includes dispatchable capacity. There is a clear emphasis on putting systems in place to manage intermittent sources of power, especially from wind. Most importantly, and I would suggest to the Board particularly relevant, is the express reference to natural gas plants generating electricity at times when there is no wind.

The question that must then be posed arising from the above is:

Does the proposed use of distillate fuel oil, as the fuel proposed to be used to provide an intermittent source of power, present a viable, sustainable, supportable, and appropriate alternative fuel option at this site in accordance with this national policy guidance?

Project Ireland 2040 – National Planning Framework

The Framework's National Strategic Outcomes include the goal: "*Transition to a low carbon, climate-resilient society.*" The NPF notes that new energy systems and transmission grids will be necessary for a more distributed, renewables-focused energy generation system. Chapter 9, 'Realising Our Sustainable Future', sets out environmental and sustainability goals, with reference to a low carbon economy and emphasising the need to accelerate action on climate change.

National Policy Objective 53 supports the bio economy, including the greater use of renewable resources, while National Policy Objective 54 seeks the reduction of our carbon footprint by integrating climate action in the planning system. The NPF supports the reduction of greenhouse gas emissions from the energy sector by at least 80% by 2050 compared to 1990 levels. To this end, National Policy Objective 55 promotes renewable energy use and generation at appropriate locations within the built and natural environment to meet national objectives towards achieving a low carbon economy by 2050.

The question arising from the proposed development in the context of the NPF is: Does the proposed use of distillate fuel oil, as an intermittent replacement, assist in the achievement of the targets expressly set in the NPF for the reduction of greenhouse gas emissions from the energy sector by 2050?

National Development Plan 2018-2027

This Plan references the National Strategic Outcomes set out in the NPF and refers to Public Investment Priorities in Chapter 5. It is recognised that Ireland's energy system requires a radical transformation in order to achieve its 2030 and 2050 energy and climate objectives. It identifies measures that include those required to decarbonise energy generation and enhance energy efficiency. It is acknowledged that the main renewable energy technology that companies have invested in to date is on-shore wind and that these companies plan to continue to invest in these technologies over the coming years. The Plan also acknowledges that, given the intermittent nature of wind power technology, a proportion of Ireland's electricity needs will likely continue to be generated from gas over the medium to longer term and that it will, therefore, remain necessary for a certain level of gas fired generation to continue to be available to ensure continuity of supply and the integrity of the electricity grid during the transition towards a low-carbon energy system.

Having regard to the above, it is critically important to recognise that the National Development Plan places emphasis on a proportion of Ireland's electricity needs being met by gas due to the intermittent nature of wind power technology. National policy, therefore, appears to acknowledge a need for a dispatchable alternative fossil fuel in the form of gas. Clearly, there is no promotion of the use of distillate diesel oil as a fuel and/or the utilisation of existing energy infrastructure using such fuel that is to be relocated.

Climate Action and Low Carbon Development Act, 2015

This Act provides for the approval of plans by the Government in relation to climate change for the purpose of pursuing the transition to a low carbon economy by 2050

and to provide for the establishment of the Climate Change Advisory Council. It provides for the making of a national mitigation plan and a national adaption framework on which the Advisory Council advises and makes recommendations. Section 15 of the Act requires a 'relevant body' (i.e. a prescribed body and public body), in the performance of its functions, to have regard to the most recent approved national mitigation plan, the most recent approved national adaptation framework and approved sectoral adaptation plans, the furtherance of the national transition objective, and the objective of mitigating greenhouse gas emissions and adapting to the effects of climate change in the State

National Mitigation Plan

The National Mitigation Plan, adopted pursuant to the Climate Action and Low Carbon Development Act 2015, includes details of an overall framework for policy on climate action operating in Ireland within the context of international and EU climate policy objectives and describes the policy context within which action is being taken in the electricity sector to achieve a low carbon energy sector by 2050. The Plan notes that the 2013 report *Low Carbon Energy Roadmaps for Ireland* explored possible routes towards decarbonisation of the energy system, drawing conclusions that included fossil fuels being incompatible with a low carbon economy and, while their use will be greatly diminished, natural gas may still be required in electricity generation. The Plan places a strong emphasis on viable storage solutions for renewable generation portfolio out to 2030. It is expressly stated: "*Gas will remain the generation back-up technology*" (page 35), while further interconnection with Britain and mainland Europe are anticipated to enhance stability of the grid.

It can be seen from the National Mitigation Plan that there is reference to a continued level of dependence on natural gas as a form of back-up in electricity generation. This once again begs the question as to why the development of a power plant on this site ultimately is pursuing the use of distillate fuel oil as the fuel to power the plant. This site has previously been permitted to develop a power plant that proposed to utilise natural gas. Connectivity to the natural gas system is readily available at this location. Why one would be relocating plant from different parts of the country to this site and using an alternative fossil fuel that is clearly unsupported at national policy level at this time, and which requires importation and transportation of this fuel to the site, is baffling from a sustainable development perspective, in my opinion. The appropriate selection of a back-up to renewable energy supply must itself be seen to be a responsible option. There can be little, if any, merit in the argument that this is simply relocating existing plant and using similar fuel. At this stage in the pursuit of critically important supports in the delivery of renewable energy from a climate change perspective, I am of the view that a failure to adhere to national policy on this issue at this site, i.e. policy which would promote the use of natural gas as the back-up, is very much a backward step.

National Adaptation Framework

This Framework, adopted pursuant to the Climate Action and Low Carbon Development Act 2015, specifies the national strategy for the application of adaptation measures in different public sectors and by local authorities in order to reduce the vulnerability of the State to the negative effects of climate change and to avail of any positive effects that may occur. There are no specific provisions directly applicable to the proposed development.

Further to the above and due to references in the applicant's submissions, I refer briefly to the following for the Board's information:

Draft National Energy and Climate Plan

I note that the National Energy and Climate Plan is at a draft stage. This sets out a general framework for integrated national energy and climate plans. I note that it references "DS3 System Services – EirGrid – Ireland's Transmission System Operator", i.e. the work focusing on enhanced ancillary services to ensure there is enough energy flow to meet demand continually. The Plan acknowledges that, with the rapid increase of intermittent generation, a different set of equipment and technologies is needed.

Delivering a Secure, Sustainable Electricity System (DS3) - EirGrid

The objective of this project is to ensure the power system can be securely operated with increasing amounts of variable renewable generation. The 2020 renewable electricity target means that the amount of non-synchronous generation on the Irish power system has to be increased. The aim of the DS3 Programme is to meet the challenges of operating the electricity system in a secure manner while achieving these 2020 renewable electricity targets. The programme brings together many different strands, including development of financial incentive products for improved plant performance and the development of new operational policies and system tools in order to accommodate increasing levels of renewable generation on the grid in a secure and sustainable manner. The programme involves many different stakeholders, including the Distribution System Operators (DSOs), Regulatory Authorities, Conventional Generators, Renewable Generators, as well as the Transmission System Operators (TSOs).

9.3.5 Overview of EU and National Policy

I consider that it is reasonable to conclude that there is no policy support either at EU or national level for the development of a power plant such as that proposed to utilise distillate fuel oil as a fuel and to relocate power plant infrastructure from other established locations. All relevant national policy points towards the use of natural gas as the fossil fuel to be used in support of renewable energy. It is pertinent to note that a power plant fuelled by natural gas has previously been approved on this site and that natural gas is available to be used at this location. Notwithstanding this, an alternative unsupported fuel option of distillate fuel oil, a fuel that would be imported and that would be transported by public road, is being pursued in this application. This is not sustainable development and it is not supported at a EU and national policy level.

9.3.6 Regional Policy

I note that the Eastern and Midlands Regional Spatial and Economic Strategy is at Draft stage. The outstanding relevant Regional Planning Guidelines are the *Regional* Planning Guidelines for the Greater Dublin Area 2010-2022. The Guidelines note that the maintenance, adequate provision of, reinforcement and expansion of energy networks are a critical part of securing the region's future. Furthermore, the Guidelines note that there is a need to fully exploit renewable energy potential such as wind and wave energies and reduce national dependency on imported fuels for energy provision, to the benefit of the economy as well as the environment. Strategic Recommendations on energy include:

PIR25: That reinforcements and new infrastructure are put in place by the key agencies, and their provision is supported in Local Authority policies, to ensure the energy needs of future population and economic expansion within designated growth areas and across the GDA can be delivered in a sustainable and timely manner and that capacity is available at local and regional scale to meet future needs.

The proposal to use imported distillate fuel oil and to transport it to the site, in place of a gas fuelled plant where there is infrastructure at this location which would allow for the deliverance of a gas fuelled power plant, does not sit comfortably with this regional guidance.

9.3.7 Local Policy

Meath County Development Plan 2013-2019

I note the County Development Plan provisions on Renewable Energy. The location of the appeal site is referenced in context of clustering development. The Plan states:

"The requirement to prepare a Thematic Spatial Strategy for Industrial Development (Objective TRANS OBJ 22 refers) is also considered relevant with regard to meeting the specific needs of renewable energy and general energy related infrastructure projects. As part of the preparation of this Thematic Spatial Strategy, there is particular merit in examining significant landholdings associated with quarrying and extractive industries to develop energy related infrastructure projects. The existing example to support such a clustering argument is Carranstown and Caulstown, Duleek adjacent to Irish Cement operation at Platin – Indaver 70MW waste to energy facility and the permitted Scottish and Southern Energy Plc 60MW open cycle gas turbine power generation plant. The accommodation of such energy related infrastructure projects which tend to absorb large areas of land and cannot be facilitated within traditional industrial zonings in towns around the county is worthy of further detailed consideration."

On matters relating to 'Energy', the Plan notes:

"In relation to power generation, Meath is well placed to encourage and facilitate the development of power generation facilities in the county, for a variety of reasons, namely:

- the county's proximity to Dublin;
- the passage of a number of gas mains and trunk elements of the national grid through Meath; and
- the availability of sites."

Policies include:

EC POL 1

To facilitate energy infrastructure provision, including the development of renewable energy sources at suitable locations, so as to provide for the further physical and economic development of Meath.

EC POL 11

To support and facilitate the development of enhanced electricity and gas supplies, and associated networks, to serve the existing and future needs of the County.

In the policy context that is being discussed here, it is evident that the specific reference to Carranstown and Caulstown in the County Development Plan relates to the range of established activities in this area and to the previously permitted power plant on the appeal site. It is again worth noting that this previously permitted proposal was a gas fuelled plant. With due regard to the Plan's acknowledgement of the county's ability to accommodate power generation facilities, it can be seen that

the passage of gas mains through the county is viewed as a key factor. Carranstown and Caulstown is one such location where such infrastructure is in place. Why one is not seeking to utlise the available supply and is seeking to import and transport distillate oil to fuel a new power plant at this location does not culminate in sustainable, orderly development. In light of what the County Development Plan appears to be promoting, the proposed development could not reasonably be seen to sit comfortably with its provisions on supporting the use of established infrastructure in locations best placed to make a contribution to the development of power generation.

9.4 Location of the Proposed Development

9.4.1 Introduction

I note that the appeal site is some 4km remote from the village of Duleek and some 4km remote from the town of Drogheda. This is a rural area. In considering the suitability of the site location for the proposed development, a number of factors need to be taken into consideration, including zoning/designation of land use in development plans, the site's planning history, and the development in the context of established neighbouring uses.

9.4.2 *Plan Provisions*

I first note that the Meath County Development Plan and the Duleek Written Statement in Volume 5 of the County Plan do not contain any designations of the location for the proposed development as an area or zone for industrial or energygenerating uses. As noted earlier, the Meath County Development Plan, in reference to 'Renewable Energy' refers to a requirement to prepare a Thematic Spatial Strategy for Industrial Development and alludes to merit in examining significant landholdings associated with quarrying and extractive industries to develop energy related infrastructure projects. The example to support a clustering argument is given as Carranstown and Caulstown, Duleek adjacent to the Irish Cement operation at Platin, Indaver 70MW waste to energy facility and the permitted Scottish and Southern Energy Plc 60MW open cycle gas turbine power generation plant. The latter was proposed for the appeal site. It is stated in the Plan that the accommodation of such energy related infrastructure projects, which tend to absorb large areas of land and cannot be facilitated within traditional industrial zonings in towns around the county, is worthy of further detailed consideration.

Having regard to the above, I accept that there is specific plan reference to this location for the nature of development proposed in the County Development Plan. I also accept that development of the nature proposed requires a large land area for its development and that such development cannot readily be accommodated in traditional industrially zoned areas that are frequently located on the periphery of towns. It remains, however, most unsatisfactory from a plan-led perspective that there is no definitive planned approach and associated designation of lands for development of this nature at this location, with aims, policies, and objectives for this area clearly laid out. When one ultimately seeks to consider 'proper planning and sustainable development' for a development of particular strategic importance, this should be subject to plan-led contextualisation and clarity. In isolation of this, the proposed development ultimately remains sited in a rural area and without considered guidance.

9.4.3 The Site's Planning History

The site of the proposed development has been subject to two previous planning permissions – ABP Ref. PL 17.118993 (P.A. Ref. 99/2490) for a 400MW Combined Cycle Gas Turbine (CCGT) power generation plant and P.A. Ref. SA100263 for a 60MW open cycle gas turbine (OCGT) power generation plant. It is clear that the Board was satisfied previously that this site was suitable to accommodate CCGT plant and that the planning authority is satisfied that it is a suitable location to accommodate OCGT plant.

Of particular importance to note is that both previously permitted developments proposed to use natural gas for electricity production. In the case of the CCGT plant, distillate fuel oil was solely proposed to be stored (approximately 9,000 m3) on site for use in the event of an interruption to the natural gas supply.

9.4.4 Site Context

I note once again the proposed siting of this development is in a rural area remote from urban areas. It fronts onto Regional Road R152 which links the M1 Motorway with the N2 and which passes the village of Duleek. Platin quarry and cement works and Indaver waste-to-energy facility are two developments in the immediate vicinity that generate substantial HGV traffic at this location. The siting of such developments at this location can reasonably be understood. In the case of the former, the quarry is sited where the natural resource is available. In the case of the latter, it may reasonably be determined that its siting in close proximity to the M1 motorway, its reliance on delivery of waste by road, its separation from built-up residential areas, the need for a substantial landholding, etc. merit that choice of site.

Having regard to the nature, scale, land area demands, and the industrialised context in which the proposed development now before the Board would be set, it could reasonably be concluded that the established context lends itself to the absorption of the proposed OCGT plant. Other factors that may be construed as relevant to the specific location may be seen to include the ability to export power to the national grid via the 110kV line currently traversing the site and its siting relative to the demands currently placed on supply in the Greater Dublin Area.

9.4.5 Conclusion

In conclusion on the issue of site location, it may be reasonable to determine that the Carranstown / Caulstown area is a suitable location in spatial planning terms for a development of the nature proposed, albeit that there is a clear lack of plan-led guidance. The choice of fuel to power the plant, in light of the available supply of gas at this location, remains an outstanding factor that would call into question the sustainability of this specific location for an electricity generating facility to be powered by an imported fuel requiring transportation by the road network.

9.5 The Fuel Supply – Distillate Fuel Oil

- 9.5.1 In considering this issue, I note the following:
 - The Draft National Energy Plan referenced earlier notes that Ireland is entirely dependent on shipping for all oil imports (p.13). The proposal would, thus, necessitate the importation of oil and its transportation by road to this site from ports.
 - The policy context addressed earlier implies that, due to the intermittent
 nature of wind power technology, a proportion of Ireland's electricity needs to
 be met by a dispatchable alternative fossil fuel and that the fossil fuel clearly
 promoted is natural gas.
 - The location for the proposed development has an available gas supply that could be used to fuel a power plant.
 - The site has been subject to two previous planning permissions for power plants that were to be fuelled by natural gas.

On the basis of planned, orderly, sustainable development, the selection of distillate fuel oil as a fuel to serve the proposed plant appears misplaced.

9.5.2 Further to the above, I acknowledge that both natural gas and distillate fuel oil are fossil fuels and that it is evident that carbon emissions would be greater from such fuels when used during the 'down time' of renewable energy sources. Distillate fuel oil would be a liquid fuel that would be distilled from crude petroleum. The applicant has submitted in response to the third party appeals that it would not be dissimilar to the type of diesel used in cars. It is notable that there has been no significant consideration given in the application to the carbon intensity of emissions arising from the proposed use of distillate fuel oil. I consider it reasonable to note that it would generally be understood that natural gas would be one of the cleanest burning fossil fuels, i.e. it would emit the least amount of carbon dioxide when combusted compared with many other fossil fuels. Indeed, it is pertinent to note that Meath County Development Plan submits that "*Natural gas is the cleanest of all fossil fuels*" (p. 152). I acknowledge that natural gas, albeit a fossil fuel, is generally recognised as having a lower carbon intensity than that of coal, peat or oil. While there is a lack

of comprehensive information in the planning application on the low sulphur distillate fuel oil proposed to be used, one would have to reasonably suggest that its importation and transportation to this site, when there is an available gas supply to serve a power plant at this site, would present itself as not being the most sustainable, most effective response as a back-up to renewable energy. Whilst I acknowledge that systems need to be put in place to manage intermittent sources of power, especially from wind, I submit to the Board that the use of distillate fuel oil is not an appropriate response.

9.5.3 Finally, I note that the applicant has submitted that there is currently no suitable gas connection point available to the site, that the creation of a new connection point to the pipeline across the north of the site would be technically challenging and would require additional consent processes that would entail additional delay and timeconsuming design, specification and procurement processes for the new aboveground installation. Having regard to what is determined to constitute 'proper planning and sustainable development', this does not stand up in any rational manner to scrutiny. It is very clear from this submission that connectivity to the gas supply at this site is achievable. I yet again refer to the previous proposals permitted for gas powered plants on this site. If one is going to pursue a 'back-up' to renewable energy at this location then one must pursue the development of the most sustainable infrastructure. There can be no shying away from what is necessary as a fuel for this plant. The solution cannot reasonably be imported distillate oil when natural gas is available. One should not use excuses such as the technical challenge, procurement, additional consents, etc. to support the unsustainable use of an inappropriate fuel. This plant must be developed correctly from the outset. It is notable that significant time has elapsed since this site was subject to permissions for previous gas fuelled power plants.

9.6 The Use of Relocated Plant

9.6.1 I consider that it is a reasonable to ask why is the applicant proposing to use existing plant from County Offaly and County Mayo in place of new plant? One would anticipate that there would be significant efficiencies to be gained by the use of the newer technology, i.e. by the installation of new plant. While the utilisation of plant

from Rhode and Tawnaghmore could be viewed as being a best use method of recycling, there has been no details provided on the efficiencies of the established plant in these locations when compared to the development of newer plant technology. It is also concerning that the applicant has submitted that OCGT plant is not as efficient as Combined Cycle Gas Turbine (CCGT) power generation plant. The efficiency of such plant must be called into question in assessing this application.

9.6.2 The applicant has submitted that, as the OCGT units are existing units that are being relocated, there would be no net increase in emissions over and above emissions within the energy sector and they can, thus, be considered largely carbon neutral. In my opinion, there can be no 'more of the same' in the context of the need to respond immediately to significant climate change concerns arising from greenhouse gas emissions. Old plant using distillate fuel oil as a back-up to renewable energy is not alone unsustainable but must be rejected as an alternative option. Furthermore, one cannot refute the evident outcome of allowing this development to proceed that additional operational hours will result from the plant's operation. This contradicts the applicant's submission that there would be no net increase in emissions. There would be increases in emissions. One must be actively pursuing the reduction in greenhouse gas emissions, not looking to stay the same.

9.7 Miscellaneous Issues

9.7.1 Introduction

In my opinion, the assessment above has addressed the most significant planning issues arising from the proposed development. I acknowledge that there is a wide range of other issues that have been raised in the appeals and observations and I will seek to briefly address them.

9.7.2 Impact on Public Health

The appellants and observers submit that the proposal will produce harmful emissions. The proximity to Indaver and Irish Cement is also a concern as this is seen to likely result in higher emissions in the area, culminating in harmful effects for the wider community. The applicant has submitted that potential impacts have been addressed in the Environmental Report, notably in relation to air and noise emissions. It is also submitted that Irish Cement was discussed in both the noise and air assessment reports and that cumulative assessment has been undertaken.

It is my submission that the public health concerns of residents of this area are understandable. This is an area that has been, and is, undergoing significant change within a very short period of time. The nature of activities, which include those of Irish Cement and Indaver, rightly initiate health concerns due to the emissions associated with their activities. The proposed development, adding to industrial-type activity in close proximity to residential properties, also would add further emissions to the environment. The developments that exist and the proposed development appear to be facilitated by the planning authority in isolation of any plan-led approach. This piecemeal approach to planning for such significant strategic infrastructure would encourage public reaction on a proposal-by-proposal basis in this vacuum.

I note the findings from the applicant's Environmental Report. It is evident that the cumulative impacts of noise and air quality were accounted for in the applicant's assessments and that a range of mitigation measures are proposed along with programmes for ongoing monitoring. I acknowledge that the proposed development would be subject to an Industrial Emissions Directive Licence which would seek to prohibit the development from having significant adverse impacts on ambient air quality and on the noise environment. I also acknowledge, in the context of its siting, that the proposal has been assessed by the Health and Safety Authority. The Health Service Executive also examined the health-related impacts arising from the proposal. Taking all of these inputs into consideration and the associated recommendations of those reporting, I do not consider that the Board is in any position to determine that the proposed development is likely by itself, or in combination with existing developments in the area, to result in significant adverse health impacts. The licensing of the activity would ultimately be the key to the setting of limits, the scheduling of monitoring, specifying emission controls, etc. which determine environmental and public health impacts that would result.

9.7.3 Impact on Water Supplies

The appellants and observers have raised concerns about the water supply serving the area, submitting there are constant issues with household water supplies. It is argued that the infrastructure and capacity for additional demand to serve the proposed development is not available and that the proposal will deplete availability in the area. The applicant has submitted that the proposal would not place a continuous demand on the water network and that Irish Water has confirmed supply capacity would exceed the proposal's demands.

I note the applicant's proposal to install a flow control valve to ensure that the stipulated flow rate is not exceeded and the provision of a water storage tank to allow the plant to continue operating if the mains supply is not available. More importantly, I note that Irish Water in its submission to the planning authority, after the applicant's submission of further information, expressly stated that it had no objection to the proposal and set out its conditions to be met, which were standard conditions. Notwithstanding the nature and scale of industrial-type development that exists at this location and the addition of the proposed development adding to the demands on water infrastructure, it is evident that Irish Water has determined that there is capacity to serve the proposed development. It is reasonable to determine on this basis that a refusal of permission would not be warranted on water supply or prematurity grounds based on inadequate water infrastructure.

9.7.4 Transportation Impact

The proposed development would have access onto the R152 Regional Road. This road runs from the north between the M1 Motorway southwards past the village of Duleek and on to the N2 National Primary Road. There is a range of industrial and commercial activities in the immediate vicinity of this site that generate very substantial volumes of HGV traffic on the R152. Platin Cement and Indaver are particularly notable and Duleek Business Park to the south is also acknowledged. The function of the road as a link between the M1 and N2 also cannot go unnoticed. With due regard to its overall function, I must acknowledge that this is a very heavily trafficked road that carries a substantial volume of HGVs.

The proposed development seeks to use imported distillate fuel oil that would be required to be transported to the site by road. I have already impressed upon the Board the unsustainable choice of fuel in light of the availability of natural gas to serve a power plant at this location. Introducing a development of this nature, reliant upon imported fuel requiring road transportation, will add unnecessarily to the volumes of HGV and other traffic on the busy regional road. From my site inspection, it is very clear that traffic speeds are high along this stretch of road, the volumes of HGVs are very substantial, and that the road is heavily trafficked during the working day. The proposed development would unquestionably add to the volumes of HGV movements on this road and would increase the traffic hazard on this stretch of regional road where the maximum speed limit of 80kph applies.

9.7.5 The Proposed Leinster Outer Orbital Route

I note the submission from Transport Infrastructure Ireland (TII) to the planning authority. TII notes that the proposal lies within the constraints study area for the Leinster Orbital Route. It is submitted that the relationship of the site to the proposed route appears not to have been assessed in the application. TII considers that the matter should be addressed by the applicant in consultation with the local authority.

In addition to this submission, I note that the proposed route is subject to objective TRANS OBJ 21 in the current Meath County Development Plan, which is as follows:

TRAN OBJ 21: To co-operate with the NRA, NTA and other Local Authorities in clarifying and finalising the route of the Leinster Outer Orbital Route (linking Drogheda, Navan, Trim and Naas) proposed in the 'Regional Planning Guidelines for the Greater Dublin Area' and the NTA's draft Transport Strategy. This is particularly important in the vicinity of proposed major junctions along the route in order to protect the identified corridor from development intrusion.

The proposed orbital route is also referred to in the Regional Planning Guidelines for the Greater Dublin Area, the Draft Regional Spatial and Economic Strategy for the Eastern and Midlands Region, and the National Transport Authority's Transport Strategy for the Greater Dublin Area. The applicant has acknowledged that the proposed road scheme is not referenced in the National Planning Framework nor is it included in the current National Development Plan 2018-2027. The applicant refers to the Leinster Orbital Route Corridor Protection Study illustrating the corridor for the proposed road scheme and submits that this Study clearly references the corridor as an 'indicative route corridor'.

While I consider the matter has not been addressed in any comprehensive way in this application by the planning authority, I consider that there are a number of observations worthy of note. The first of these is that this site has been the subject of a number of planning applications for a power plant. In addition, this is an area that appears to be incrementally developing as a hub for a range of energy-related activities and other such uses, albeit ad hoc and in isolation of a plan-led strategy. Furthermore, the understanding of the proposed Leinster Orbital Route is somewhat tentative at this stage, where a very wide corridor is indicatively provided. In light of these observations, I consider that it would be reasonable to determine that this specific location for the power plant would place very distinct constraints on the developability of a key piece of national road infrastructure. In my opinion, allowing for the stymying of a development of the nature now proposed for the site, given the indicative nature of the routing the proposed road and the lack of a clear determination on the timing of its delivery, would appear unreasonable at this time. I, therefore, do not consider that the proposed development would merit a refusal of permission based upon the prematurity of the determination of a specific road alignment for the Leinster Orbital Route.

9.7.6 Archaeological Impact

I note that a geophysical survey of the area in the immediate vicinity of this site has revealed a substantial henge-type monument beneath the surface, almost half of which extends into the west side of the lands proposed for the development. There is also a linear feature extending in a north-south direction across the central area of the site. This is aligned with an existing field boundary to the north. It is pre-18th

century in date and the applicant's submission on archaeology views that as being a possible early field boundary.

The site of the above referenced embanked enclosure was previously classified in the Record of Monuments and Places (RMP) as a redundant record. The Department of Culture, Heritage and the Gaeltacht was notified as a result of the geophysical survey and the monument awaited registration as an embanked enclosure, possible henge. It is apparent that, once registered, this site would be subject to statutory protection. The applicant has recognised that the north-west area of the site can, therefore, be described as an area of high archaeological sensitivity and that any development would have a severe adverse impact on the monument.

The applicant's schedule of proposed mitigation measures include:

- Preservation *in situ*, i.e. avoidance of the embanked enclosure. The layout of the proposed development is designed to avoid it. A buffer zone of 25m would be established around the monument to avoid impact at construction stage.
- The geophysical survey informed on where anomalies exist and these would be subsequently investigated by archaeological test trenching. This would determine if sub-surface features exist and the extent they would be impacted. The results would be submitted to the National Monuments Service.
- Site investigation works proposed to be undertaken, including boring and silt trenching, are proposed not encroach on the enclosure. An archaeologist would be present at all times during site investigation works.
- All topsoil removal operations would be monitored by a qualified archaeologist.
- The potential to gauge an understanding of the exact nature of the linear feature extending in a north-south direction across the central area of the site would be permitted arising from the above testing and monitoring provisions.

I further acknowledge that the applicant was requested to undertake an archaeological impact assessment and this was submitted by way of further information. The following is noted from this assessment:

 The embanked enclosure has now been classified as an archaeological monument – ME027-078.

- The linear feature extending in a north-south direction across the central area of the site may represent an early field boundary as it is aligned with an existing field boundary to the north.
- 15 archaeological test trenches were excavated throughout the site. A small number of potential archaeological features were identified in the east and south sides of the site. These would be impacted directly by proposed construction works.
- The discovered embanked enclosure to the west of the site has no surface expression. This general location has been subject to considerable infrastructure development in recent years. It is considered that the overall visual impact of the proposed development on the enclosure would be low.
- A range of pre-construction and construction phase mitigation measures are proposed. These include preservation in-situ, providing a buffer zone, archaeological monitoring, and the investigation of the archaeological features identified within the site at the construction stage.

It is very clear that the recent discovery of a significant archaeological feature at this location places a very substantial physical constraint on the development of a power plant and associated substation. It is reasonable to ascertain that the applicant has undertaken comprehensive assessment of this site and has set out an orderly response to how development would proceed and what measures would be employed to minimise impact on what is now an archaeological monument.

Having regard to the above, it would be remiss of me not to determine that the development as proposed would radically alter the context and siting of this monument. This must be acknowledged, notwithstanding the recent discovery of this monument and the fact that planning permissions have been previously been granted for power plants at this location. While there is no evident physical expression of an enclosure at ground level at this location, it still begs the question as to what the appropriate response to a development of the nature proposed should be at such a sensitive location. I consider that, in a context such as this, reliance upon guidance from the Department of Culture, Heritage and the Gaeltacht is reasonable. When the application was with the planning authority, the Department requested that an archaeological impact assessment be undertaken. When this was

provided, the Department then proceeded to set out its requirements in the event planning permission being granted. This took the form of a planning condition. I consider that, in the event of the Board granting planning permission for the proposed development, a similar condition would appear appropriate to meet with the requirements of the Department and, thus, to meet with the need to adequately protect the monument in situ.

10.0 Conclusion and Recommendation

Having regard to my assessment above, the following conclusions are drawn:

- The need for a peaker power plant is understood.
- The location for the proposed power plant is generally acceptable.
- Both previously permitted power plant developments at this site, ABP Ref. PL 17.118993 (P.A. Ref. 99/2490) for a 400MW Combined Cycle Gas Turbine (CCGT) power generation plant and P.A. Ref. SA100263 for a 60MW open cycle gas turbine (OCGT) power generation plant, proposed to use natural gas for electricity production.
- The proposed development, using distillate fuel oil, will not assist in the reduction of greenhouse gas emissions that would aid in Ireland meeting its obligations under the Paris Agreement and the targets set by the EU under the Renewable Energy Directive.
- The CO2eq. emissions intensity per capita of Ireland's electricity emissions is at an unacceptable level and national and EU targets will not be met in the medium term.
- Renewable generation is intermittent and this intermittency creates the need for a range of technological solutions which includes dispatchable capacity.
- The recently published *Climate Action Plan* references natural gas plants generating electricity at times where there is no wind. The proposed peaker plant seeks to address intermittency associated with wind energy.

- The National Planning Framework, with regard to the transition to a low carbon, climate-resilient economy, recognises that new energy systems will be necessary for a more distributed, renewables-focused energy generation system and emphasises the need to accelerate action on climate change.
- The National Development Plan recognises that Ireland's energy system requires a radical transformation in order to achieve its 2030 and 2050 energy and climate objectives. Furthermore, the Plan acknowledges that, given the intermittent nature of wind power technology, a proportion of Ireland's electricity needs will likely continue to be generated from gas over the medium to longer term and that it will, therefore, remain necessary for a certain level of gas-fired generation to continue to be available to ensure continuity of supply and the integrity of the electricity grid during the transition towards a lowcarbon energy system.
- The National Mitigation Plan, arising from the Climate Action and Low Carbon Development Act 2015, recognises that fossil fuels are incompatible with a low carbon economy and, while their use will be greatly diminished, natural gas may still be required in electricity generation. The Plan expressly states that gas will remain the generation back-up technology, while further interconnection with Britain and mainland Europe are anticipated to enhance stability of the grid.
- There is an available supply of natural gas to serve a proposed peaker plant at this location.
- Natural gas is considered as having a lower carbon intensity than that of distillate fuel oil, which would be compounded by the requirement for the latter to be imported and transported to the site.
- The urgency to reduce the State's greenhouse gas emissions at this time demands new energy infrastructure to reduce emissions. One cannot support the relocation and re-use of infrastructure and choice of fuel that maintains and continues to promote an unacceptable level of greenhouse gas emissions.
- Established older plant using distillate fuel oil is not a sustainable option as a back-up for renewable energy. There is no merit in proceeding with such a

fuel option that will likely increase emissions due to additional operational hours.

Overall, I put it to the Board that, if one is going to pursue a 'back-up' for renewable energy, namely wind energy, at this location then one must, at this time, when there is a necessity to urgently address greenhouse gas emissions, pursue the development of the most sustainable infrastructure. The solution cannot reasonably be imported distillate oil when natural gas is available to serve a new power generating facility at Platin. Any peaker plant at this site at this time must be developed correctly from the outset. The relocation of plant from other parts of the country and use of the fossil fuel distillate oil is not supported at national policy level and will not aid in reducing greenhouse gases in accordance with this State's obligations in tackling climate change. I am of the view that it would irresponsible at this time to relocate existing power plant infrastructure and to fuel it with imported distillate fuel oil when the better alternative to fuel a necessary peaker plant with natural gas is readily available at this location.

A refusal of planning permission is merited in this instance in accordance with the following reasons and considerations:

Reasons and Considerations

1. It is considered that the provision of a regionally significant power generating facility, arising from the increase of wind power on the national grid and the requirement to provide additional stability to the electricity supply, needs to be associated with and aligned with strategic planning and renewable energy policies and plans in order to achieve balanced, orderly development. Furthermore, it is considered that the development of such energy infrastructure, to address intermittency associated with wind energy, must itself pursue the optimum sustainable fuel source in order that such development would not maintain or add to the current unsustainable levels of greenhouse gas emissions within the State.

Having regard to:

- The national requirements under the EU Renewables Directive 2009/28/EC relating to the share of energy from renewable sources and to the increased obligations under the recast Renewable Energy Directive (2018/2001);
- The recently published *Climate Action Plan* promoting the use of natural gas plants generating electricity at times where there is no wind;
- The National Planning Framework recognising the necessity for a more distributed, renewables-focused energy generation system and placing emphasis on the need to accelerate action on climate change;
- The National Development Plan acknowledging that a proportion of Ireland's electricity needs will likely continue to be generated from gas over the medium to longer term given the intermittent nature of wind power technology;
- The National Mitigation Plan expressly promoting gas as the generation backup technology;
- The availability of a natural gas supply to serve a peaker plant at this location;
- Natural gas having a lower carbon intensity than that of distillate fuel oil;
- The necessity to import and transport by road the distillate fuel oil to the site;
- The relocation and re-use of existing power plant infrastructure and choice of fuel that would maintain and continue to promote an unacceptable level of greenhouse gas emissions; and
- A likely increase in greenhouse gas emissions due to additional operational hours associated with the proposed development and the utilisation of established older plant using distillate fuel oil,

it is considered that the proposed development 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 provision of energy infrastructure to address intermittency in renewable power generation, would constitute an unsustainable form of development as a back-up to renewable energy, and would, therefore, be contrary to the proper planning and sustainable development of the area.

Kevin Moore Senior Planning Inspector 18th November, 2019.