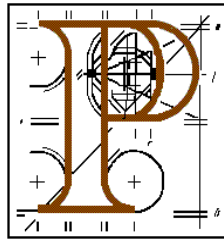


An Bord Pleanála



Inspector's Report

APPLICANT: SSE GENERATION IRELAND LTD

PROPOSED DEVELOPMENT: AIR INSULATED SWITCHGEAR 110Kv
TRANSMISSION SUBSTATION

LOCATION: CARRANSTOWN AND CAULSTOWN,
PLATIN, DULEEK, COUNTY MEATH

PLANNING AUTHORITY: MEATH COUNTY COUNCIL

DATE OF SITE INSPECTION: 31st OCTOBER, 2019

INSPECTOR: KEVIN MOORE

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1.0 THE SITE OF THE PROPOSED DEVELOPMENT

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 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 DESCRIPTION OF THE PROPOSED DEVELOPMENT

2.1 The proposed development would comprise an Air Insulated Switchgear (AIS) 110kV transmission substation. It would consist of the following main elements:

- The construction of a 4 bay Air Insulated Switchgear 110kV transmission substation in a compound area (approx. 15,673m²), under the existing Corduff-Platin 110kV overhead line and the looping into the proposed substation of the said overhead line;
- A substation control building with a floor area of 375m², measuring 25 x 15m and 6m high;
- The removal of a 500m length of the 110kV overhead line and the diversion of this line by means of underground cables along the western and northern boundaries of the site;

- The installation of 2 no. line to cable interface masts (LCIM) approx. 16m in height in the north-east and south-west corners of the site to convert the overhead line into an underground cable;
- All other site and ancillary works, including a widened and upgraded entrance from the R152, internal road, a temporary construction compound, landscaping, palisade fencing, and the erection of 7 no. 18m high lightning protection monopoles; and
- New road markings, including a deceleration lane approaching the site on the R152.

The development would also include the following temporary works to assist in the programmed diversion of the overhead line to facilitate construction works:

- Restringing of the OHL conductor between the existing 110kV pole set and new line cable interface mast at the south-western end of the site. At the north-eastern side of the site, restringing of the OHL conductor between the existing angle mast and the new line cable interface mast. The addition of a new underground 110kV cable and fibre optic cable (c.500m) between the new LCIMs along the northern and western side of the site;
- Removal of 2 no. 110kV pole sets and the removal of 3 no. spans of OHL conductor; and
- Temporary works for the diversion will include erecting temporary stays on the 110kV pole set to the south-west of the site and the temporary rerouting of the fibre optic cable from the existing 110kV angle mast to the north-east of the site to the 110kV pole set to the south-west of the site via 12 no. 38kV wood poles located along the eastern and southern boundaries of the site.

- 2.2 The proposed development is planned to serve an Open Cycle Gas Turbine Generation (OCGT) power plant located adjacent to and to the east and north of the proposed substation compound. The planning application for the proposed power plant is currently subject to appeal under ABP Ref. 305028-19.
- 2.3 The application includes the submission of a Planning Report, an Environmental Impact Assessment Screening, an Environmental Report, and a Natura Impact Statement (NIS). The application also includes 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 and ESB, as the bodies with control over the lands for the proposed development, allowing the making of the planning application. Details of public consultation engagement were outlined.

3.0 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.

4.0 POLICY CONTEXT

4.1 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.”

A previous permitted power generation use on the appeal site is, therefore, acknowledged in the Plan.

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.

5.0 SUBMISSION FROM MEATH COUNTY COUNCIL

5.1 The Council's submission comprised the report of the Chief Executive and a minute of the County Council meeting relating to the proposal. Considerations include:

Planning Report

This set out the planning history associated with the lands and referred to planning policy at national, regional and local levels. Reference is made to the applicant's Environmental Report submitted with the application to the Board.

The Board is advised:

- To consider the need for a sub threshold EIA based on environmental issues currently unresolved and the cumulative impact of the substation application with the OCGT generating plant application and other industries in the area.
- Traffic movements comply with the TTA Section in the application and that no HGVs should be permitted to access Duleek village.
- The importation of waste (soil and stones) as fill has implications in relation to mandatory EIA.
- The impact on biodiversity should be considered following an appropriate ecological survey requested by further information.
- Further information should be sought on attenuation and on retention separators and it was noted that Irish Water had identified concerns in

relation to water usage and waste water discharge as part of its comments on the OCGT plant application.

- Noting the Environment Section had no objection to the proposal, that Section sought further information in relation to greenhouse gas emissions, source of fuel and alternative fuel options when considering the planning application for the OCGT plant.
- Regard should be had to the comments of the Department of Culture, Heritage and the Gaeltacht in the OCGT plant application, wherein an archaeological impact assessment was sought.
- To consider the proposed development in conjunction with the OCGT plant application and other similar type developments in the area in determining possible cumulative impacts.
- The planning authority is of the view that the proposal, in combination with other plans and developments in the vicinity, would not be likely to have a significant effect on any European site.

The planning assessment referenced the above advice, placed emphasis on the letter in the application from the Commission for Regulation of Utilities, and considered the proposal is compliant with planning policy and is acceptable in principle. The recommendation to the Board was to seek further information on surface water, ecology, visual impact and EIA. A schedule of recommended conditions was also included.

Reports received from the Environment, Transportation, Conservation and Water Services Sections are attached with the submission. These include requests for further information and recommended conditions to be attached with any grant of permission.

6.0 SUBMISSIONS FROM PRESCRIBED BODIES

6.1 Transport Infrastructure Ireland (TII)

TII submits that the proposal lies within the line of the Leinster Orbital Route and the relationship of the site to the route does not appear to have been assessed in the application. The Board is asked to note the provisions of Objective TRAN OBJ 21 of the Meath County Development Plan. While acknowledging the site's planning history, it was considered that the matter should be addressed by the applicant in consultation with the local authority to demonstrate the application is compatible with the road scheme and that it will not undermine the long term delivery of the route. Section 2.9 of the DoECLG Spatial Planning and National Roads Guidelines are referenced in this context.

6.2 Health Service Executive (HSE)

5.2.1 The HSE reviewed the issues relating to environmental health impact addressed in the application submission. HSE recommended that a copy of the Construction Environmental Management Plan should be included with the Environmental Report so that it can be assessed, the need for noise monitoring at the construction and operational stages to verify the effectiveness of the proposed mitigation measures and the scale of change of the noise environment, and the implementation of a formal public complaints procedure.

7.0 THIRD PARTY SUBMISSIONS

7.1 Helen McEntee TD

7.1.1 Ms. McEntee raises concern about the proximity of the proposed development to a subsurface Neolithic henge and considers a 25 metre buffer zone to be

insufficient. Further concern is expressed about the nature of developments in the vicinity and handling of waste and treatment of waste in the immediate area. It is requested that the Board and Meath County Council should seek the basing of an EPA monitoring station / regional office in Duleek in light of the range of developments with environmental impact potential at this location.

8.0 ENVIRONMENTAL IMPACT ASSESSMENT

- 8.1 The proposed development constitutes a type of development under the provisions of section 182A and 182B of the Planning and Development Act 2000 (as amended). This application was subject to pre-application consultations between SEE Generation Ireland Limited and An Bord Pleanála. I note that the Board determined during the pre-application consultation stage that the proposed substation would comprise Strategic Infrastructure Development and that the power generation plant would not.
- 8.2 I submit to the Board that Environmental Impact Assessment is not required for the proposed development as the project falls well below the threshold of development that would require EIA as defined by either Part 1 or Part 2 of Schedule 5 of the Planning and Development Regulations 2001 (as amended).
- 8.3 I acknowledge that the applicant undertook the preparation of an Environmental Report and I note the conclusions. The Board will understand that the development is being proposed to serve an Open Cycle Gas Turbine (OCGT) power plant on land adjoining the site for the substation. This Environmental Report addressed the overall development. My considerations in that report should be understood in the context of the overall development.

9.0 APPROPRIATE ASSESSMENT

9.1 *Screening for Appropriate Assessment*

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.

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).

9.2 *Natura Impact Statement*

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:
 - the separation distance and terrestrial and freshwater buffers,
 - habitats within the SAC not being susceptible to increased sediment deposition in light of conservation objectives, and
 - 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 NO_x 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 with the zone of influence of the proposed development demonstrates 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.

9.3 ***Considerations on Appropriate Assessment***

Introduction

- 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.

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 NO_x 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 thermally-produced 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.

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.

10.0 PLANNING ASSESSMENT

10.1 Introduction

The proposed development is required in the event the development of the proposed OCGT power plant on adjoining lands proceeds, i.e. that development which is subject to Planning Appeal Ref. ABP-305028-19. In the event that the proposed OCGT power plant does not receive planning permission then the proposed substation would not be required. The Board will note my assessment and recommendation in relation to ABP-305028-19 which is to refuse permission for the proposed power plant. That assessment addresses the principal planning and environmental issues that relate to both the power plant and the substation. The likely impacts of the substation, being an integral part of the overall power plant development, cannot be separated and, ultimately, the conclusions drawn on the power plant relate to the overall development.

For clarity and consistency, I now include the overall assessment contained in ABP-305028-19.

9.0 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.)*

Note: This appellant did not make any submission to the Board in relation to the proposed substation.

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 **EU Policy**

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 coal- and 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:

- (i) 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
- (ii) 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?

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 adaptation 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. Onshore wind is also recognised as remaining a key part of Ireland’s 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 utilise 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 energy-generating 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 planned 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 time-consuming design, specification and procurement processes for the new above-ground 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 hence. 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 low-carbon 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 back-up 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.

11.0 Recommendation on Proposed Substation

Having regard to the proposed substation being an integral part of the overall development of the proposed power plant at this location, it is considered that the conclusions and recommendation set out in ABP-305028-19 are directly applicable to the development of the proposed substation. It is recommended that permission be refused in accordance with the above referenced reason and considerations and that the following additional reason be attached also:

2. Having regard to the proposed air insulated switchgear 110kV transmission station forming an integral part of a proposed 208MW(electrical output) open cycle gas turbine power plant at this location for which planning

permission has been refused, it is considered that it would be inappropriate for the Board to consider a grant of permission for the proposed development in such circumstances.

Kevin Moore

Senior Planning Inspector

18th November, 2019.