

Inspector's Report ABP-309686-21

Development 110kV Air Insulated Switchgear (AIS) Loop

Substation with 400m long overhead line grid connection and all associated site

works.

Location Ballykilleen, Cloncreen and Ballinowlart

North, Co. Offaly

Planning Authority Offaly County Council

Applicant Cloncant Renewable Energy Ltd.

Type of Application Application under the provisions of Section

182A of the Planning and Development Act

2000, as amended

Observer(s) Transport Infrastructure Ireland

Health Service Executive

Geological Survey of Ireland

Date of Site Inspection 28th July 2021

Date of Oral Hearing Completion N/A

Inspector Niall Haverty

Inspector's RecommendationGrant Permission with Conditions

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1.0 Introduction

- 1.1. An application has been made by Cloncant Renewable Energy Ltd. (stated to be a Special Purpose Vehicle wholly owned and used by Statkraft Ireland) under the provisions of section 182A of the Planning and Development Act 2000, as amended ('the Act'), for the development of a 110kV Air Insulated Switchgear (AIS) Loop Substation with 400m long overhead line grid connection and all associated site works in the townlands of Ballykilleen, Cloncreen and Ballinowlart North, Co. Offaly.
- 1.2. The stated rationale for the proposed development is that the existing Cushaling 110kV substation, located adjacent to Edenderry Power Station, is at capacity and that permitted and future renewable energy projects in the area require a new 110kV substation to connect to the National Grid.

2.0 Project Background

2.1. Statkraft Ireland made a request to enter into pre-application consultation under section 182E of the Act on 19th December 2019 (Ref. ABP-306323-20). Following an assessment and recommendation from the reporting inspector, the Board determined on the 7th May 2020 that the proposed development falls within the scope of section 182A, and accordingly would comprise strategic infrastructure. On foot of that determination, the applicant subsequently submitted this application under the provisions of section 182A of the Act.

3.0 Site Location and Description

3.1. Overview

- 3.1.1. The application site, which has a total stated area of 5.32 hectares, is located in the townlands of Ballykilleen, Cloncreen and Ballinowlart North, c. 6km south of Edenderry, Co. Offaly.
- 3.1.2. The site is accessed from the R401 regional road, just west of Kilcumber Bridge, and it is opposite the existing Edenderry Power Station. The site currently comprises grassland in agricultural use. It is relatively flat, with hedgerows and trees bounding the fields. The Figile River, a tributary of the River Barrow, is located c. 70m east of

the proposed substation and flows in a general north-south direction in this area. The proposed c. 400m long overhead line will traverse the river and connect to the existing Cushaling to Mount Lucas 110kV overhead line, which runs in a north-south direction, connecting to the Cushaling 110kV substation located adjacent to Edenderry Power Station.

3.1.3. The surrounding area generally comprises agricultural lands and lands where large-scale peat extraction has been undertaken. In addition to the existing Edenderry Power Station, planning permission has been granted for a number of wind farms in the vicinity, including the applicant's Cushaling Wind Farm which includes a substation, referred to as Ballykilleen substation, adjacent to the proposed substation (refer to Section 6 below). The area in the vicinity of the application site is relatively sparsely populated, with the closest house located c. 200m east of the substation on the R401. Further residential ribbon development is located c. 220m east of the southernmost proposed pylon, again along the R401.

3.2. Natural Heritage Designations

3.2.1. The application site is not located within or immediately adjacent to any European Sites. There are 2 No. European Sites designated located within 15km of the proposed development, as identified in the table below:

Site (Site Code)	Distance (Direction)
The Long Derries, Edenderry SAC (000925)	5.3km (north east)
River Barrow and River Nore SAC (002162)	14.2km (south)

3.2.2. There are 2 No. pNHAs and 3 No. NHAs within 15km of the site. These are Grand Canal pNHA (4.7km north), the Long Derries, Edenderry pNHA (5.2km northeast), Black Castle Bog NHA (7.6km northwest), Carbury Bog NHA (11.6km northeast) and Daingean Bog NHA (14.7km west).

4.0 Proposed Development

4.1. The proposed development consists of:

- 1 No. 110kV Air Insulated Switchgear (AIS) Loop Substation including: an outdoor electrical yard including electrical equipment such as electrical pylons, over and underground ducting & cables, busbars, disconnects, breakers, sealing ends, lightning and lighting masts, single storey control building containing associated facilities (relay room, battery room, generator room, messroom, welfare facilities, workshop and office). Security fencing and all associated works.
- 400m long overhead line (OHL) grid connection going south east from the substation and connecting into the adjacent existing Cushaling – Mount Lucas 110kv OHL.
- 1 No. site entrance and 60m entrance road.
- 1 No. temporary construction site compound (95m x 50m).
- Associated surface water management systems.
- All Associated site development works.
- 4.2. The cover letter accompanying the application states that, further to the preapplication consultation, the nature of the 400m grid connection has changed. Due to EirGrid specifications and third party land requirements, a 400m overhead line is now proposed, rather than an underground cable.
- 4.3. An area to the north west of the proposed substation compound, with dimensions of c. 94.5m x 74.5m is identified on the drawings as an 'area for future development'.
- 4.4. Permission is sought for a period of ten years with an unlimited operational period. The proposed substation development is stated to be a standalone development that is proposed to be built and handed over to EirGrid to operate as part of the national electricity transmission system. It is stated that the existing Cushaling 110kV substation adjacent to Edenderry Power Station is at capacity and the stated purpose of the substation is to act as the grid connection for permitted and future renewable energy projects in County Offaly, including the permitted Cushaling Wind Farm.
- 4.5. The application was accompanied by an Environmental Impact Assessment Report (EIAR), a Natura Impact Statement (NIS) and a number of other supporting documents.

5.0 **Submissions and Observations**

5.1. Local Authority

- 5.1.1. Offaly County Council submitted a report/submission which can be summarised as follows:
 - OCC queries the requirement for potentially 3 No. separate substations within 350m radius to connect permitted and future renewable energy projects to the grid (proposed substation, Cloncreen Wind Farm substation, Cushaling substation).
 - OCC is satisfied that proposed development is capable of being absorbed into the landscape without significant impact.
 - No flood incidents on the site or surrounding area.
 - Road Design section has no objection subject to conditions.
 - OCC has no concerns in respect of the environmental carrying capacity of the subject site and surrounding area.
 - OCC acknowledges the requirement/strategic importance of the proposed development as a critical element of physical infrastructure required to facilitate alternative energy development as well as responding to issues of climate change in the county and region.
 - Community gain is not addressed in documentation submitted. Applicant could provide an amenity plan developing/creating linkages or improvements (with appropriate funding) to the existing or proposed walking/cycle/amenity infrastructure in the locality.
 - S. 48 development contribution scheme is applicable to the proposed development.
 - OCC does not seek any further special contribution.
 - OCC recommends a condition requiring lodgement of a deposit or bond to cover any damage to public roads.

5.2. Prescribed Bodies

5.2.1. Submissions were received from Transport Infrastructure Ireland (TII), the Health Service Executive (HSE) and the Geological Survey of Ireland (GSI) and can be summarised as follows:

• TII:

- No reference is made to the potential for abnormal weight loads. All structures on the haul route should be checked to confirm their capacity to accommodate abnormal loads. It is acknowledged that abnormal weights may not be a feature of the subject development.
- There are no other national road interactions to address and TII has no specific observations to make.

HSE:

- HSE could not locate details of public consultation.
- Operation of the substation will have limited environmental impacts and the main emphasis of the HSE report is the control of potentially significant construction phase impacts.
- An assessment of the carbon footprint of construction activities could not be located.
- HSE recommends that meaningful public consultation be undertaken and that a formal complaints procedure be established to resolve any potential issues relating to traffic, noise, dust, water complaints during construction.

GSI:

No specific comment or observation to make at this time.

5.3. **Observers**

5.3.1. None.

5.4. Applicant's Response

5.4.1. The applicant' response to the submissions can be summarised as follows:

- With regard to the HSE submission, the consultation undertaken is documented in the EIAR in Volume 2, Chapter 1 and Volume 3, Appendix 1.
- The level of consultation undertaken is fully compliant with the statutory process.

6.0 Planning History

6.1. **Application Site**

- 6.1.1. The site boundary for the permitted Cushaling wind farm overlaps the application site boundary. The permitted wind farm comprises a total of 9 No. wind turbines straddling the administrative boundaries of Counties Offaly and Kildare. 8 No. of the permitted wind turbines are in Co. Offaly, with 1 No. in Co. Kildare.
- 6.1.2. <u>ABP-306924-20 (Offaly Co. Co. Reg. Ref. 19/606):</u> Permission **granted** following first party appeal against refusal and third party appeals for development consisting of 8 No. wind turbines and associated development in the townlands of Ballykilleen, Shean, Kilcumber, Cloncant and Cushaling.
- 6.1.3. <u>ABP-306748-20 (Kildare Co. Co. Reg. Ref. 19/1323):</u> Permission **granted** following first party appeal against refusal and third party appeal for 1 No. wind turbine and associated development at Ticknevin, Carbury, Co. Kildare.
- 6.1.4. <u>ABP-309940-21 and ABP-310107-21</u>: Two section 5 referral cases relating to an increase in power output at the permitted Cushaling wind farm. The Board determined that it is development and is not exempted development.

6.2. Surrounding Area

- 6.2.1. PA0047: Permission **granted** to Bord na Mona Powergen Ltd. for Cloncreen wind farm, comprising up to 21 No. wind turbines and associated development in the townlands of Esker More, Clongarret, Cloncreen, Ballykilleen, Ballynakill, Ballinrath, Rathvilla or Rathclonbrackan, Ballina and Ballingar, Co. Offaly.
- 6.2.2. <u>ABP-</u>310740-21: Decision under PA0047 altered following a S146B application for alterations. It was considered that the proposed alteration (provision of a higher telecommunications tower than originally permitted) would not be material.

- 6.2.3. <u>ABP-307279-20:</u> **Withdrawn** application by Bord na Mona for substitute consent in relation to peat extraction at bogs in the Allen Bog Group.
- 6.2.4. There is an extensive planning history associated with the nearby Edenderry Power Station site, including:
- 6.2.5. Reg. Ref. 21/291: Current planning application for the continued operation of Edenderry Power Plant from the beginning of 2024 to the end of 2030 exclusively using sustainable biomass fuel. The applicant proposes to increase the volume of biomass consumed at the facility from a current maximum of 300,000 to 530,000 tonnes per annum. It is proposed to utilise the existing permitted electricity generation station and infrastructure, including fuel handling systems, utilities, processing systems and ancillary structures as part of the proposed development. There will be no change to existing infrastructure present on-site. Site access and egress will use the existing permitted site entrances to the R401 public road. There will be no change to the permitted boundary of the facility. Edenderry Power Plant is licenced by the Environmental Protection Agency under an Industrial Emissions (IE) Licence [Ref. P0482-04]. Activities at the facility and associated environmental aspects and emissions will continue to be regulated and controlled by the EPA.
- 6.2.6. This planning is currently the subject of a request for further information. The request generally relates to biomass haulage routes.
- 6.2.7. Reg. Ref. 19/496: Permission **granted** for alterations to existing 110kV Cushaling substation including installation of 110kV AIS switchgear with associated foundations, steelwork, supports and connectors.
- 6.2.8. <u>PL19.245295 (Reg. Ref. 15/129):</u> Permission **granted** for extension of the continued use and operation until the end of 2030 of previously permitted peat and biomass cofired power plant.

7.0 Legislative and Policy Context

7.1. National Policy

7.1.1. <u>National Planning Framework</u>

- 7.1.2. The National Planning Framework (NPF) is the overarching national planning policy document for Ireland. The NPF is a high-level strategic plan that sets out a vision for Ireland to 2040, expressed through ten National Strategic Outcomes (NSOs).
- 7.1.3. NSO No. 8 is "the transition to a low carbon and climate resilient society". The NPF acknowledges that Ireland's energy policy is focused on the pillars of sustainability, security of supply and competitiveness. It is an action of the NPF under NSO no. 8 to "reinforce the distribution and transmission network to facilitate planned growth and distribution of a more renewables focused source of energy across the major demand centres".
- 7.1.4. Section 9.2 of the Plan addresses Resource Efficiency and Transition to a low carbon economy. There are a number of National Policy Objectives which seek to reduce carbon footprint by integrating climate action into the planning system. The NPF states, in relation to energy policy and planning that Ireland's national energy policy is focused on three pillars: "(1) sustainability, (2) security of supply and (3) competitiveness. The Government recognise that Ireland must reduce greenhouse gas emissions from the energy sector by at least 80% by 2050, compared to 1990 levels, while at the same time ensuring security of supply of competitive energy sources to our citizens and businesses".

7.1.5. National Policy Objective 55 states:

"Promote renewable energy use and generation at appropriate locations within the built and natural environment to meet national objectives towards achieving a low carbon economy by 2050."

7.1.6. Climate Action Plan 2019

- 7.1.7. The plan stresses the importance of decarbonising electricity consumed, by harnessing the significant renewable energy resources. Ensuring the building of renewable rather than fossil fuel generation capacity to help meet the projected growth in electricity demand is essential. Ensuring increased levels of renewable generation will require very substantial new infrastructure, including wind and solar farms, grid reinforcement, storage developments, and interconnection.
- 7.1.8. To meet the required level of emissions reduction, by 2030 it is required to increase electricity generated from renewable sources to 70%.

- 7.1.9. <u>Energy Policy Framework 2007-2020 Delivering a Sustainable Energy Future for Ireland (Energy White Paper)</u>
- 7.1.10. This white paper sets out a strategic energy policy framework to deliver a sustainable energy future for Ireland. One of the key elements is to ensure the delivery of security of supply, which is considered to be essential for all sectors of the economy, for consumers in general and for society as a whole. The key items needed to deliver a secure supply of electricity on a consistent basis are identified as robust networks and electricity generating capacity. To this end, it is an overall objective to strongly support electricity investment programmes in the high voltage transmissions network and the distribution network, in order to facilitate regional development. The white Paper also sets the target of 33% of electricity being produced from renewable generation by 2020.
- 7.1.11. Government Policy Statement on the Strategic Importance of Transmission and
 Other Energy Infrastructure, July 2012
- 7.1.12. In this policy statement the Government acknowledges the essential need to meet the demand for energy in a safe, secure and continuous manner as it is the lifeblood of the economy and society. It reaffirms the imperative need for development and renewal of the energy networks, in order to meet both economic and social policy goals. The Government endorses, supports and promotes the strategic programmes of the energy infrastructure providers, particularly EirGrid's Grid 25 investment programme across the regions. The benefits are identified as securing electricity supply to homes, businesses, factories and farms; underpinning sustainable economic growth in the regions and enabling Ireland to meet its renewable energy targets.
- 7.1.13. EirGrid Strategy 2020-2025: Transform the Power System for Future Generations
- 7.1.14. This Strategy provides a strategic overview for the development of the electricity transmission system. It confirms the need for investment in, and further development of, the electricity transmission system to cater for increased demand and increased renewable generation.

7.2. Regional Policy

- 7.2.1. Regional Spatial & Economic Strategy for the Eastern and Midland Regional

 Assembly
- 7.2.2. I note that the Regional Strategic Outcomes contained in the Strategy include 'Support the Transition to Low Carbon and Clean Energy' (RSO 9) and 'A Strong Economy supported by Enterprise and Innovation' (RSO 12).
- 7.2.3. I also note the following Regional Policy Objectives:
 - RPO 10.20: Support and facilitate the development of enhanced electricity and gas supplies, and associated networks, to serve the existing and future needs of the Region and facilitate new transmission infrastructure projects that might be brought forward in the lifetime of this Strategy. This Includes the delivery of the necessary integration of transmission network requirements to facilitate linkages of renewable energy proposals to the electricity and gas transmission grid in a sustainable and timely manner subject to appropriate environmental assessment and the planning process.
 - RPO 10.22: Support the reinforcement and strengthening of the electricity transmission and distribution network to facilitate planned growth and transmission/ distribution of a renewable energy focused generation across the major demand centres to support an island population of 8 million people.

7.3. Local Policy

- 7.3.1. Offaly County Development Plan 2021-2027
- 7.3.2. The Development Plan contains numerous policies supporting renewable energy and development of energy infrastructure, including:
 - CAEP-01: It is Council policy to support the development, reinforcement, renewal and expansion of the electricity transmission and distribution grid, including the development of new lines, pylons and substations as required to provide for the future physical and economic development of Offaly.
 - CAEP-07: It is Council policy to support local, regional, national and international initiatives for climate adaptation and mitigation and to limit

- emissions of greenhouse gases through energy efficiency and the development of renewable energy sources which make use of all natural resources, including publicly owned lands, in an environmentally acceptable manner.
- CAEP-08: It is Council policy to support the transition to a competitive, low carbon, climate-resilient and environmentally sustainable economy by 2050, by way of reducing greenhouse gases, increasing renewable energy, and improving energy efficiency.
- CAEP-20: It is Council policy to require that environmental assessments should address reasonable alternatives for the location of new energy developments, and where existing infrastructural assets such as sub-stations, power lines and roads already exist within the proposed development areas, then such assets should be considered for sustainable use by the proposed development where the assets have capacity to absorb the new development.
- CAEP-22: It is Council policy to encourage and facilitate the production of energy from renewable sources, such as from bioenergy, waste material, solar, hydro, geothermal and wind energy, subject to proper planning and environmental considerations.
- CAEP-23: It is Council policy to encourage developers of proposed large scale renewable energy projects to carry out community consultation in accordance with best practice and to commence the consultation at the commencement of project planning.
- CAEP-24: It is Council policy to ensure that whenever possible, community
 benefits are derived from all renewable energy development in the county
 such as near-neighbour benefit funds and general community benefit funds,
 which may take the form of contributions in kind to local projects, assets and
 facilities such as public amenities on the renewable energy site, measures to
 promote energy efficiency or a local energy discount scheme.

8.0 EIA Screening

8.1. The proposed development is not considered to constitute a project within either Annex I or Annex II of the Directive 2011/92/EU as amended by 2014/52/EU or within Part 1 or Part 2 of Schedule 5 to the Planning and Development Regulations 2001, as amended. Nonetheless an Environmental Impact Assessment Report has been submitted as the proposed development will facilitate the connection of permitted and future renewable energy projects to the national grid, including the applicant's Cushaling Wind Farm which was subject to EIAR and permitted by the Board in September 2020.

9.0 **Oral Hearing**

9.1. The Board directed on the 13th of July 2021 that an Oral Hearing in respect of the application should not be held.

10.0 Planning Assessment

10.1. Introduction

- 10.1.1. I consider that the main issues in respect of the planning assessment are as follows:
 - Principle and planning policy.
 - Residential amenity.
 - Consultation.
 - Flood risk and surface water management.
 - Other issues.
- 10.1.2. The issues of Environmental Impact Assessment and Appropriate Assessment are considered separately below in Section 11 and 12, respectively.

10.2. Principle and Planning Policy

10.2.1. As set out above, the proposed development comprises a 110kV substation, overhead power line and associated development, which is required to facilitate the

- connection of permitted and future renewable energy projects to the national grid. The proposed substation will be transferred to EirGrid once completed and will be operated as part of the national electricity transmission system.
- 10.2.2. Renewable energy projects are supported 'in principle' at national, regional and local policy levels, with the imperative at all policy levels being the need to reduce greenhouse gas emissions, reduce reliance on fossil fuels and combat climate change.
- 10.2.3. EU Directive 2009/28/EC sets a target of 20% of EU energy consumption from renewable sources and a 20% cut in greenhouse gas emissions by 2020. As part of this Directive, Ireland's legally binding target is 16% energy consumption from renewable sources by 2020. The more ambitious national objective, as expressed in the NREAP, is for 40% of electricity consumption to be from renewable sources by 2020. The White Paper entitled 'Ireland's Transition to a low carbon Energy Future 2015-2030' sets out a vision to reduce greenhouse gas emissions by between 80% and 95% compared to 1990 levels by 2050.
- 10.2.4. It is also an action of the NPF under National Policy Objective 8 to reinforce the distribution and transmission network to facilitate planned growth and distribution of a more renewables focused source of energy across the major demand centres. At a local level, the Offaly County Development Plan 2021-2027 contains numerous policies supporting renewable energy and development of energy infrastructure, including CAEP-01, CAEP-07, CAEP-08, CAEP-20, CAEP-22, CAEP-23, CAEP-24, CAEP-32.
- 10.2.5. The application site is located on unzoned agricultural lands. It is, however, located opposite the existing Edenderry Power Station and the existing Cushaling 110kV substation. Two wind farms have also been granted permission in the vicinity, Cloncreen Wind Farm and Cushaling Wind Farm, both of which include permitted substations. The Planning Authority, while not objecting to the proposed development, query the requirement for potentially 3 No. separate substations within a 350m radius. It appears from the application documentation that the existing Cushaling substation is at capacity and will be supplemented by the proposed development.

10.2.6. The proposed substation would have significant separation distances from the nearest residential dwellings and is not subject to any particular constraints in terms of archaeological, cultural and architectural heritage, landscape designation or land use zoning objectives. I consider that the presence of an additional substation in this area of existing and increasing importance for the electricity generation and transmission system would not be incompatible with the principles of proper planning and sustainable development. As set out above, there is substantial policy support at national, regional and local level for the development of the electricity network and for renewable energy projects, such as that which would be facilitated by the proposed development. I therefore consider the proposed development to be acceptable in principle, subject to consideration of the key planning issues outlined in Section 10.1 above.

10.3. Residential Amenity

- 10.3.1. The application site is located on agricultural lands, close to an existing power station and with a separation distance in excess of 200m to the nearest residential dwellings. I note that no third party observations were made in respect of this application.
- 10.3.2. Construction phase residential amenity issues with regard to the potential for traffic, dust and noise disturbance are examined within the relevant sections of the EIAR assessment hereunder and will not be repeated within this section of the report. However, having regard to the separation distances and the limited duration of the construction period, I do not consider that any significant impacts on residential amenity are likely to occur during the construction phase. Notwithstanding this, I recommend, should the Board be minded to grant permission, that a condition be attached requiring the submission of a Construction Environmental Management Plan (CEMP) for the agreement of the Planning Authority.
- 10.3.3. The HSE submission recommends that a formal complaints procedure be established to resolve any potential issues relating to traffic, noise, dust, water complaints during construction. I consider that such a complaints procedure can readily be incorporated within the abovementioned CEMP.

10.3.4. With regard to the operational phase, noting the separation distances involved, the nature and limited scale of the proposed substation development, I do not consider that the proposed development is likely to result in any significant adverse impacts on residential amenity during its operational phase.

10.4. Consultation

- 10.4.1. The HSE submission states that they could not locate details of public consultation in the application documentation and they recommend that meaningful public consultation be undertaken and that a formal complaints procedure be established to resolve any potential issues relating to traffic, noise, dust, water complaints during construction.
- 10.4.2. The applicant, in response, draws the Board's attention to Volume 2, Chapter 1 and Volume 3, Appendix 1 of the EIAR, where the consultation undertaken is documented. The applicant contends that the level of consultation undertaken is fully compliant with the statutory process.
- 10.4.3. Consultation documents were issued to a range of prescribed bodies, with responses made by the HSE and TII. A letter drop was also made to all residential properties within 1km of the site. This is stated as having occurred in March 2021 and I note that the application was lodged on 12th March 2021. Consultation meetings were also had with EirGrid and Offaly County Council. Further consultation occurred as part of the EIAR preparation for the applicant's permitted Cushaling Wind Farm.
- 10.4.4. In addition to the measures outlined above, statutory planning notices and notification requirements were complied with and a project website was set up. I note that submissions were received from the Local Authority and a number of prescribed bodies and that no third party observations were made.
- 10.4.5. I am satisfied that the applicant has complied with all statutory requirements in relation to consultation.

10.5. Flood Risk and Surface Water Management

- 10.5.1. The application site and surrounding lands are relatively flat, while the proposed substation would be located c. 70m from the River Figile. The proposed 110kV overhead lines will traverse the river to connect to the existing 110kV transmission system. There are also a number of drainage ditches within and in the vicinity of the site, generally along field boundaries, which drain toward the Figile River.
- 10.5.2. A Flood Risk Assessment (FRA) for the proposed development was included with the application. Historical OSI mapping indicates some areas on both sides of the Figile River as being 'liable to floods'. The river is, however, a drained channel with the site identified on OPW maps as being 'benefitted lands'. OPW records do not identify any fluvial or pluvial flood risk on or in the vicinity of the site, indicating that it is within Flood Zone C (less than 1 in 1000 for river flooding).
- 10.5.3. The applicant considers the only potential source of flooding to be the Figile River and hydraulic modelling was undertaken to assess potential flood risk and establish an appropriate construction level.
- 10.5.4. The analysis indicates that the substation site is within Flood Zone C. Substation developments constitute 'highly vulnerable development' under the Planning System and Flood Risk Management Guidelines with such development considered to be 'appropriate' in Flood Zone C under the Justification Test matrix contained in Table 3.2 of the Guidelines. The pylons are not vulnerable to flooding and therefore are acceptable in all flood zones. Given the minimal footprint of the pylons and poles, they will not displace flood plain storage, increasing flood risk elsewhere. I also note that the Local Authority did not express any concerns in relation to flood risk.
- 10.5.5. Therefore, having regard to the location of the proposed substation, I do not consider that the proposed development would be subject to a significant flood risk or that it would exacerbate the risk of flooding on other lands.
- 10.5.6. With regard to surface water management, I note that a permeable hardcore surface is proposed in the substation compound which will facilitate infiltration to ground. Stormwater from impermeable areas (road and control building) will be collected and discharged to ground via a fuel interceptor and soak-pit, although some will be diverted to the rainwater harvesting system. Having regard to these sustainable

drainage proposals, I am satisfied that surface water management proposals are generally acceptable.

10.6. Other Issues

10.6.1. Duration of Permission and Decommissioning

- 10.6.2. I note that the applicant is seeking a 10-year permission. While the proposed development is not particularly extensive in scale or complexity, I consider this duration to be appropriate, given the stated purpose of the proposed substation is to facilitate the connection of permitted and future renewable energy projects to the national grid. I note in this regard that the Board granted a 10-year permission for the Cushaling Wind Farm in 2020.
- 10.6.3. With regard to the lifespan of the proposed development, it will be handed over to EirGrid upon completion and will operate as part of the national electricity transmission system, alleviating capacity issues at the existing Cushaling 110kV substation. For this reason, I do not consider it necessary to attach a decommissioning and reinstatement condition to any grant of permission.

10.6.4. Development Contributions and Bonds

- 10.6.5. Section 27 of the Offaly County Council Development Contribution Scheme 2021-2025 sets out exemptions and reductions for certain types of development. I do not consider that the proposed development would fall under any of the exemptions listed. Accordingly, should the Board be minded to grant permission, I recommend that a suitably worded condition be attached requiring the payment of a section 48 Development Contribution in accordance with the Acts.
- 10.6.6. I note that Offaly County Council has requested the imposition of a section 48 development contribution but does not seek that any special contribution be imposed. I would agree that a special contribution is not warranted in this instance having regard to the scale and nature of the proposed development.
- 10.6.7. Offaly County Council has also sought that a cash deposit or bond be imposed by way of condition to cover damage to the public roads. Given the nature of the proposed development, I consider this request to be reasonable. I recommend that a

condition requiring payment of a deposit/bond be included, should the Board be minded to grant permission.

10.6.8. Community Gain

10.6.9. With regard to community gain, Offaly County Council has requested that the applicant provide an amenity plan and funding for the development/creation of linkages or improvements to the existing or proposed walking/cycling/amenity infrastructure in the locality. Given the nature and purpose of the proposed development, which will be transferred to EirGrid upon completion in order to address capacity issues at an existing substation and which will operate as part of the national electricity transmission system, facilitating the connection of permitted and future renewable energy projects to the national grid, I do not consider that a community gain condition would be warranted in this instance.

11.0 Environmental Impact Assessment

11.1. Introduction

- 11.1.1. The application is accompanied by an Environmental Impact Assessment Report (EIAR) which was prepared by Malachy Walsh and Partners. Section 1.5.2 of the EIAR states that it was prepared on foot of pre-application consultation with An Bord Pleanála and in light of legal Judgements for wind farm/grid connection developments.
- 11.1.2. This section of my report comprises an environmental impact assessment of the proposed development. As noted in Section 10 above, some of the matters considered have already been addressed in the Planning Assessment above. This section of the report should therefore be read, where necessary, in conjunction with the relevant sections of the Planning Assessment.

11.2. Format of EIAR

11.2.1. The EIAR comprises 3 No. volumes. Volume 1 is a Non-Technical Summary (NTS), which provides a summary of the EIAR in non-technical language. Volume 2 comprises the main body of the EIAR, and Volume 3 comprises a series of technical appendices relating to various chapters of Volume 2. The Natura Impact Statement

- is included as a separate standalone document. A schedule of mitigation measures is contained at Chapter 14 of Volume 2.
- 11.2.2. This application was submitted after 16th May 2017, the date for transposition of Directive 2014/52/EU amending the 2011 EIA Directive, and therefore the subject application falls within the scope of the amending 2014 EIA Directive (Directive 2014/52/EU).

11.2.3. The EIAR:

- Describes the project and provides information on the site, design, size and particular features of the proposed development;
- Describes the likely significant effects of the project on the environment;
- Describes the features of the project and/or measures envisaged to avoid,
 prevent, reduce, and if possible, remedy significant impacts;
- Provides a description of the main alternatives studied, and an indication of the main reasons for the choice of alternative put forward, taking into account environmental effects; and
- Includes a non-technical summary of the above information.
- 11.2.4. As is required under Article 3(1) of the amending Directive, the EIAR describes and assesses the direct and indirect significant effects of the project on the following factors: (a) population and human health; (b) biodiversity with particular attention to the species and habitats protected under Directive 92/43/EEC and Directive 2009/147/EC; (c) land, soil, water, air and climate; (d) material assets, cultural heritage and the landscape. It also considers the interaction between the factors referred to in points (a) to (d).
- 11.2.5. I have carried out an examination of the information presented by the applicant, including the EIAR and the submissions made during the course of the application. A summary of the submissions made by the planning authority and prescribed bodies has been set out at Section 5 of this report and the issues arising are addressed below under the relevant headings, and as appropriate in the reasoned conclusion and recommendation, including conditions.

11.2.6. I am satisfied that the EIAR has been prepared by competent experts to ensure its completeness and quality, and that the information contained in the EIAR and supplementary information provided by the developer is up to date, adequately identifies and describes the direct and indirect effects of the proposed development on the environment, and complies with article 94 of the Planning and Development Regulations 2001, as amended.

11.3. Alternatives

- 11.3.1. The issue of alternatives is addressed in Section 2.9 of the EIAR. I note that Article 5(1)(d) of the 2014 EIA Directive requires:
 - "(d) a description of the reasonable alternatives studied by the developer, which are relevant to the project and its specific characteristics, and an indication of the main reasons for the option chosen, taking into account the effects of the project on the environment;"
- 11.3.2. Annex IV of the Directive (Information for the EIAR) provides more detail on 'reasonable alternatives':
 - "A description of the reasonable alternatives (for example in terms of project design, technology, location, size and scale) studied by the developer, which are relevant to the proposed project and its specific characteristics, and an indication of the main reasons for selecting the chosen option, including a comparison of the environmental effects."
- 11.3.3. The EIAR describes the alternatives that were considered under the headings of 'alternative substation location', 'alternative grid connection route' and 'underground cable or overhead line grid connection alternative.
- 11.3.4. Three sites were considered for the substation, with the application site chosen as the closest, most-direct and economically feasible route to the grid network. A number of grid connection routes were also considered, with the final alignment chosen due to ease of access to the 110kV overhead line and to avoid impacts on a badger sett. An underground cable and an overhead line were considered for the grid connection, with an overhead line considered to be preferable from an environmental perspective, and not significant from a visual perspective due to the existing overhead lines in the area.

11.3.5. The consideration of alternatives is an information requirement of Annex IV of the EIA Directive, and the single most effective means of avoiding significant environmental effects. Having regard to this requirement and its purpose (i.e. avoidance of significant environmental effects) and noting the nature and purpose of the proposed development, I am satisfied that the consideration of alternatives is adequate.

11.4. Population and Human Health

- 11.4.1. Population and human health are addressed in Chapter 3 of the EIAR.
- 11.4.2. The construction phase impacts addressed in this section of the EIAR include: population; economic activity and employment; social and land use considerations; and health and safety, including public safety, traffic and road usage, noise and dust. Operational phase impacts addressed include economic activity; social and land use considerations; health and safety; and visual impacts.
- 11.4.3. The existing environment includes a dispersed rural population, with lands generally in agricultural, commercial forestry or cutover bog use. The closest settlement is Edenderry, which is c. 6km to the north of the site, which the closest residential dwelling is c. 200m to the east of the substation, with further ribbon development to the south east. With regard to other potential receptors, it is noted that there are no hospitals or schools within 3km of the site. Other forms of development in the area include Edenderry Power Station to the north, the permitted Cloncreen Wind Farm to the west/south west, an inert landfill to the west/north west and a quarry to the north west.
- 11.4.4. During the construction phase there will be minor positive temporary economic impacts as a result of employment and economic activity generated by the substation development. The numbers to be employed during construction are estimated to be 30 35 people, with a c. 12 month construction phase. During the operational phase, no economic impacts are predicted, since the substation development will be unmanned during normal operation.
- 11.4.5. No significant impacts on land use are predicted due to the scale of the proposed development and the lack of any impact on rights of way or amenities. Temporary

- disruption of local public roads is likely during the construction phase but is not considered to be significant.
- 11.4.6. With regard to potential health and safety impacts, the EIAR accepts that construction-related hazards exist, but states that the development will be undertaken in compliance with relevant health and safety legislation and guidance and that a Safety and Health Plan covering all aspects of the development will be prepared. During the operational phase, fencing and security measures are proposed to mitigate any health and safety risks associated with the electrical infrastructure.
- 11.4.7. Temporary negative impacts are likely to arise during the construction phase due to increased traffic movements. Peak traffic movements are predicted to occur during the first 2 months of the c. 12 month construction programme. Peak traffic volumes of up to 60 No. HGVs per day to and from the site are predicted, with a peak of up to 8 No. HGVs per hour. It is stated that construction traffic will occur outside of peak morning and evening commuter traffic and, as noted elsewhere, the surrounding area is relatively sparsely populated with no schools in the vicinity. Given the short-term nature of the construction phase, I am satisfied that the impact on the local population and the local road networks arising from this traffic will not be significant. Operational phase traffic associated with the proposed development will be minimal due to the nature of the development and no significant impacts are likely as a result.
- 11.4.8. With regard to potential health impacts due to air quality impacts, I consider that these will generally relate to dust generated during the construction phase, since the proposed development will not produce any air emissions during the operational stage. While no significant dust-related health impacts on residential receptors are predicted due to separation distances, the EIAR considers the potential for nuisance dust on local roads to be a temporary minor negative impact, which will be mitigated with the implementation of the standard dust management measures contained in the CEMP. Having regard to the nature of the proposed development and its separation distance from the closest sensitive receptors, I concur with the applicant's assessment that such impacts will not be significant.
- 11.4.9. With regard to noise, considering the separation distances between the site and the closest residential properties and the temporary nature of the construction activities, I

- consider that no significant adverse impacts will arise during the construction phase. Similarly, during the operational phase, while the electrical plant and equipment within the substation will generate a limited level of noise, the impact on noise sensitive receptors will not be significant due to separation distances.
- 11.4.10. Section 3.4 of the EIAR relates to mitigation measures and refers to the measures contained within the various chapters of the EIAR relating to noise, dust, traffic etc. It also states that a CEMP has been prepared and will be implemented. No additional mitigation measures are proposed.
- 11.4.11. No significant residual impacts are predicted following implementation of the mitigation measures and no cumulative impacts on population and human health are anticipated.
- 11.4.12. I have considered all of the written submissions made in relation to population and human health and the relevant contents of the file including the EIAR. I am satisfied that the potential for impacts on population and human health can be avoided, managed and mitigated by measures that form part of the proposed scheme, the proposed mitigation measures and through suitable conditions. I am therefore satisfied that the proposed development would not have any unacceptable direct, indirect or cumulative impacts on population or human health.

11.5. Biodiversity

- 11.5.1. Biodiversity is addressed in Chapter 4 and Appendix 2 of the EIAR. A Natura Impact Statement was also submitted with the application, and I have addressed the issue of Appropriate Assessment separately in Section 12.
- 11.5.2. The EIAR identifies all European and nationally designated sites within a 15km Zone of Influence (ZoI) and these are set out in Tables 4.4 and 4.5 and mapped in Figures 4.1 and 4.2 of the EIAR. I note that the application site is not located in or immediately adjacent to any designated sites. There are a number of Natural Heritage Areas (NHAs) and proposed Natural Heritage Areas (pNHAs) within the ZoI, including Grand Canal pNHA (02104), Long Derries, Edenderry pNHA (000925), Black Castle Bog NHA (000570), Carbury Bog NHA (001388) and Daingean Bog NHA (002033). The only European sites located within the ZoI are The Long Derries, Edenderry SAC (000925) and the River Barrow and River Nore SAC (002162).

- Having regard to the nature and scale of the proposed development and the potential pathways to the designated sites, I consider the applicant's choice of ZoI to be acceptable.
- 11.5.3. A habitats survey of the application site, carried out in accordance with the Fossit guidelines, was undertaken with the results mapped in Appendix 2-B of the EIAR. The proposed substation site spans two fields of improved agricultural grassland (GA1) with associated hedgerows (WL1), scrub (WS1) and drainage ditches (FW4) forming field boundaries. Some of the wetter parts of the field close to the drainage ditches had species indicative of wet grassland (GS4), such as Rushes (Junus spp.), Yellow iris (Iris pseudacorus), Silverweed (Potentilla anserina) and Meadow sweet (Filipendula ulmaria). Species found in hedgerows and scrub were Hawthorn (Crataegus monogyna), Gorse (Ulex europaeus), Holly (Ilex aquifolium), Bramble (Rubus fruticosus agg.), Ivy (Hedera helix), Ash (Fraxinus excelsior), Hazel (Corylus avellana), and Willows (Salix spp.).
- 11.5.4. The proposed grid connection route runs in a south-easterly direction and crosses the Figile River, a lowland/depositing river (FW2), and three additional fields of improved agricultural grassland.
- 11.5.5. In the surrounding area outside of the application site, the habitat types comprise mostly improved agricultural grassland (GA1) and wet grassland (GS4), with large areas of cutover bog (PB4) and conifer plantations (WD4) extending away from the site to the west and south east, respectively. Edenderry power station, which is classed as buildings and artificial surfaces (BL3) is located to the north east.
- 11.5.6. The plant species recorded during the walkover survey are listed in Appendix 2-B of the EIAR. A number of protected species of flora are also recorded in the National Biodiversity Data Centre (NBDC) as occurring in the hectad (i.e. 10km x 10km grid square) within which the site is located. These include Basil thyme (Clinopodium acinos), Blue fleabane, Red hemp-nettle (Galeopsis angustifolia), Green-winged orchid, Alder buckthorn (Frangula alnus), Large White moss (Leucobryum glaucum) and Round-leaved wintergreen (Pyrola rotundifolia subsp. Rotundifolia). However, there are no suitable habitats within the application site for these protected flora species, due to the artificial character of the surrounding grassland environs.

- 11.5.7. No invasive species were observed at the application site or in its immediate surrounds during the site survey. However, NBDC records list the presence of a number of invasive species within the hectad, including Douglas Fir (Pseudotsuga menziesii), Japanese knotweed (Fallopia japonica), Nuttall's waterweed (Elodea nuttallii), Spanish bluebell (Hyacinthoides hispanica) and Sycamore (Acer pseudoplatanus).
- 11.5.8. With regard to fauna, NBDC indicate the presence of a number of species of non-volant mammals within the hectad, including Otter (Lutra lutra), Irish hare (Lepus timidus hibernicus), Pine martin (Martes martes), Badger (Meles meles), Red squirrel (Sciuris vulgaris), Hedgehog (Erinaceus europaeus) and Eurasian pygmy shrew (Sorex minutus). Otter are known to use the Figile River, while evidence of badger activity was also found. A suspected badger sett is located to the south of the application site, close to the field boundary, while a second location, in scrub to the east of the site, is likely to be used for foraging. Trail cameras also recorded hare and fox activity.
- 11.5.9. The NBDC and Bat Conservation Ireland database list a number of bat species within the area, with bat surveys associated with the permitted Cushaling Wind Farm identifying a number of species, icnlduing Soprano pipistrelle, Common pipistrelle, Leisler's bat, Brown long-eared bat and Myotis species. Some of the mature trees within the site had some cracks and crevices and some hedgerows had ivy cover that may be potential roost sites. Hedgerows, treelines and the Figile River comprise linear features that provide a high degree of connectivity and good foraging habitat within the site and surrounding area.
- 11.5.10. Walkover bird surveys and trail cameras identified a range of bird species using the site, including Buzzard (Buteo buteo), Chaffinch (Fringilla coelebs), Goldfinch (Carduelis carduelis), Skylark (Alauda arvensis), Starling (Sturnus vulgaris), Swallow (Hirundo rustica), Wood pigeon (Columba palumbus), Wren (Troglodytes troglodytes), Blackbird (Turdus merula), Jay (Eurasian) (Garrulus glandarius), Robin (Erithacus rubecula), Woodcock (Scolopax rusticola). The majority of these bird are green or amber-listed, with the only red-listed bird being Woodcock.
- 11.5.11. Salmon are present throughout the Barrow catchment, including the Figile subcatchment. The reach of the Figile River adjacent to the proposed development is

- considered generally unsuitable for salmonid spawning due to its slow flowing nature. Other species likely to be present in the Figile River include Brook Lamprey, coarse fish, Brown Trout, Duck mussel and White-clawed Crayfish.
- 11.5.12. Of the European and nationally designated sites within the ZoI, as identified above, only the River Barrow and River Nore SAC (site Code 002162) has connectivity with the application site via hydrological pathways. The remaining sites have no connectivity with the application site and are located at a considerable remove from the site. Thus, no direct or indirect effects on those other sites are anticipated.
- 11.5.13. I have considered the potential effects on European site No. 002162 in Section 12 below, where I conclude that the proposed development, individually or in combination with other plans or projects would not adversely affect the integrity of that site, or any other European site, in view of the site's Conservation Objectives.
- 11.5.14. Construction of the proposed development on this greenfield site will result in direct habitat loss, disturbance and fragmentation. This is considered to be a moderate negative impact.
- 11.5.15. While no invasive species were identified on site, the effect associated with the spread of such species is classified as a moderate negative impact. It is proposed to undertake a pre-construction survey for invasive species.
- 11.5.16. Impacts on fauna are primarily related to habitat loss, disturbance and displacement. These are generally considered to range from temporary imperceptible to long-term moderate. Short-term significant impacts are identified should breeding badgers be present during the construction phase. Long-term to permanent profound negative impacts on White-clawed Crafish are also identified, due to the potential for introduction of Crayfish plague on contaminated equipment.
- 11.5.17. During the operational phase no significant effects on any of the identified habitats and fauna are anticipated.
- 11.5.18. Cumulative impacts were also considered with a series of other projects, including wind farms, peat extraction, industry and agriculture. No significant cumulative impacts are anticipated.
- 11.5.19. The proposed mitigation measures include appointment of an Environmental Manager/Ecological Clerk of Works to ensure all environmental controls and

- mitigation measures are implemented. This will include preparation of a finalised CEMP, with an outline CEMP having been included in the EIAR, to include standard pollution prevention measures, water management measures, and good practice construction measures.
- 11.5.20. Impacts on habitats will be mitigated by the removal of trees outside of bird breeding season and the avoidance of pesticides.
- 11.5.21. General measures to mitigate impacts on fauna include no encroachment on habitats outside of the works area and adherence to daytime working hours except in exceptional circumstances. Pre-commencement badger and otter surveys will be undertaken no more than 10-12 months prior to commencement, with a further inspection immediately prior to site clearance. Any additional surveys/enabling works will only take place under the appropriate NPWS licence.
- 11.5.22. A number of mitigation measures for bats are proposed in line with TII and NPWS guidance. This includes bat surveys of any trees with bat roosting potential prior to felling and avoidance of felling during hibernation and breeding months.
- 11.5.23. Various mitigation measures to control and manage the spread of invasive alien species are also proposed in accordance with NRA and Inland Fisheries Ireland guidance. The measures primarily relate to good site hygiene, cleaning of plant and equipment prior to arrival at site and careful sourcing of materials. An invasive species survey will also be undertaken prior to commencement of construction.
- 11.5.24. While no significant impacts are anticipated in the operational phase, mitigation measures including replanting of hedgerows, provision of bat and bird boxes and stacking of wood for invertebrates.
- 11.5.25. Post-mitigation, the EIAR considers that residual effects on all aspects of biodiversity will not be significant.
- 11.5.26. Finally, with regard to the submissions of the Local Authority and prescribed bodies, I note that no objections were made on biodiversity grounds.
- 11.5.27. I have considered all of the written submissions made in relation to biodiversity and the relevant contents of the file including the EIAR. I am satisfied that the potential for impacts on biodiversity can be avoided, managed and/or mitigated by measures that form part of the proposed scheme, the proposed mitigation measures and

through suitable conditions. I am therefore satisfied that the proposed development would not have any unacceptable direct, indirect or cumulative impacts on biodiversity.

11.6. Land, Soil, Water, Air and Climate

11.6.1. Land and Soil is addressed in Chapter 5 of the EIAR, while Water, Air and Climate, and Noise are addressed in Chapters 6, 7 and 8, respectively.

11.6.2. **Land and Soil**

- 11.6.3. Land and soil desk studies and field surveys were undertaken, however no site investigation works were undertaken on the basis that the required earthworks are of a minor nature.
- 11.6.4. With regard to existing land use, CORINE land cover mapping identifies it as primarily 'pastures', with 'peat bogs' to the west and 'mineral extraction sites' to the north. The site is relatively level, with the soil type generally comprising 'cut raised bog cutaway/cutover' according to Teagasc/EPA soil mapping. The eastern bank of the River Figile is in an area mapped as having 'BminPD Mineral poorly drained (mainly basic)' and 'BminPDPT peaty poorly drained mineral (mainly basic)' soils. The soil environment at the site has been improved for agricultural purposes. The underlying bedrock is primarily the Lucan Formation, a dark limestone and shale, while a small western part of the site is underlain by the Edenderry Oolite Member, an oolitic limestone.
- 11.6.5. There are no recorded geological heritage features within the site. The closest heritage sites are listed in Table 5-1 of the EIAR, with the nearest being a spring c. 3.15km from the site. There are also a number of quarries in the vicinity, with the nearest being the Jude Shean Sand and Gravel Quarry c. 2.5km from the site, while peat extraction also occurs in the surrounding area.
- 11.6.6. Potential impacts are outlined in Section 5.3 of the EIAR for both construction and operational phases. During construction, impacts relate to change of land use, excavation works, roads and drainage, storage of materials, soil erosion and waste generation. Having regard to the scale and nature of the proposed development, the magnitude of materials and excavations required and the heavily modified nature of the site, the construction phase impacts on land and soil are considered to be slight

- or minor negative impacts. Potential moderate negative impacts are identified due to the potential for soil erosion and inappropriate stockpiling to impact on water and due to the potential for hydrocarbon releases to impact on soils, subsoils and water.
- 11.6.7. In the operational phase, no significant impacts on land and soils are anticipated. The impact is classified as a slight medium term negative impact, associated with soil erosion and hydrogeological contamination, until areas are reinstated and revegetated.
- 11.6.8. Cumulative impacts are assessed with regard to other nearby developments particularly with respect to potential impacts on hydrogeology. The aquifers underlying the site are classified by GSI as being of generally Low or Moderate vulnerability, increasing to High vulnerability to the east of the River Figile. Having regard to the highly modified nature of the site and surrounding area, the potential for cumulative impacts is considered to be a slight medium term negative impact.
- 11.6.9. The primary mitigation measure is mitigation by design, through the positioning of the substation compound in order to achieve a balance between land requirement, access criteria and required volumes of excavated and imported materials. Other mitigation measures include the re-use of excavated materials on-site, construction of drainage in parallel with road and substation construction, use of silt fencing and other drainage protection measures, use of cut-off drains around excavations and storage of plant and materials in suitable locations. The handling, storage and management of excavated spoil and general site management including fuel management will be carried out in accordance with the measures outlined in the CEMP. A construction waste management plan will also be prepared, with all construction waste materials taken off site at the end of the construction phase.
- 11.6.10. Given the magnitude and nature of the impacts during the operational phase and as a result of cumulative impacts, no specific mitigation measures are proposed.
- 11.6.11. No significant residual impacts on the land and soils environment are likely to occur as a result of the construction and operation of the proposed development.

11.6.12. Water

11.6.13. The site topography is relatively flat and generally drains towards the River Figile, which is within the Barrow River Basin District, by means of land drains along field boundaries. The fields within the site are wet, most likely due to the peaty soils which

- are not freely draining. The River Figile is monitored by the EPA at numerous locations upstream and downstream of the application site. The water quality at these monitoring stations varies, with the river receiving a status of Q3-4 (Moderate). A biological water quality assessment undertaken in connection with the Cushaling Wind Farm EIAR included an assessment site adjacent to the application site, with the results indicating a BMWP category of 'Good', interpreted as being 'clean but slightly impacted' status. The EIAR considers all surface waters within and near the site to be of low to moderate sensitivity.
- 11.6.14. The peaty soil in the area has a generally low permeability and acts as a confining layer, preventing the free movement of surface water to the underlying aquifer. The groundwater vulnerability is generally Low or Moderate, increasing to High vulnerability to the east of the River Figile.
- 11.6.15. Potential impacts on water are outlined in Section 6.3 of the EIAR for both construction and operational phases. During construction, potential impacts include moderate risk of groundwater contamination, increased rate of run-off and increase in suspended solids, increased risk of flooding downstream, obstruction of existing overland flow, spillages of fuels, oils and other hydrocarbons to surface waters with consequent effects on groundwater, surface water quality and aquatic ecology.
- 11.6.16. In the operational phase, potential effects on water are limited to an increase in the rate of run-off, although this is likely to be minimal given the permeable surfaces in the substation compound. A flood risk assessment is also included in Appendix 3 of the EIAR. This indicates that a 1 in 100 year flood event level below the footprint of the substation, with no impact on downstream flooding during this event. I note that the Local Authority submission states that there are no records of flood incidents on the site or surrounding area.
- 11.6.17. The potential impacts are tabulated in Table 6-8 of the EIAR, with magnitudes and significance, prior to mitigation, ranging from minor to moderate.
- 11.6.18. With regard to potential cumulative effects, these are considered with reference to the permitted wind farms in the area, the existing Edenderry Power Station and peat extraction activities. The main potential for such effects is considered to be related to increases in the total sediment entering the downstream river system. However, as the other developments include mitigation measures to prevent impacts on water,

- the overall cumulative risk of an increase in sedimentation or pollution is anticipated to be low. No significant cumulative effects on water are therefore considered likely to arise.
- 11.6.19. In order to mitigate the potential effects, a series of best practice construction management and pollution prevention measures and other specific mitigation measures are proposed. These are summarised in the submitted Outline Construction Environmental Management Plan (Appendix 4). It is stated that an Environmental Manager will be appointed to ensure compliance with the CEMP and EIAR environmental control and mitigation measures.
- 11.6.20. With regard to the proposed river crossing, it is noted that this will be done with an overhead line, with minimal construction works in the vicinity of the river, requiring only the installation of wooden poles and there will be no impact on the riparian borders of the River Figile.
- 11.6.21. Other proposed construction phase mitigation measures include, inter alia:
 - Maintenance of existing land drains and installation of check dams and silt traps in drains.
 - Additional silt fences where required in areas prone to siltation of the River Figile and provision of spill kits.
 - Monitoring of sediment control measures during the construction phase.
 - Concrete control measures, including no pours during heavy rainfall, no
 washing out of trucks on site, provision of a dedicated chute wash-out area
 on site.
 - Measures for appropriate storage of cementitious materials, excavated soils, fuels and chemicals (e.g. bunding, buffer zones from watercourses, provision of spill kits).
 - Refuelling measures (e.g. designated refuelling area on impermeable surface, checking and maintenance of machinery and vehicles).
 - Provision of a dedicated waste storage area and adherence to a waste management plan.

- Training of all personnel in pollution incident control response and preparation of an emergency response plan as part of the CEMP.
- 11.6.22. In the operational phase, storm water will be directed through a fuel interceptor and into a soakpit. Sanitary waste from the substation toilet facility will be collected in a sealed holding tank which will be emptied during the regular maintenance regime.
- 11.6.23. Following the implementation of the identified mitigation measures, the EIAR considers that the residual effects on water will not be significant.

11.6.24. Air and Climate

- 11.6.25. The application site is located in a primarily agricultural area, although the Edenderry Power Station, which operates under an EPA Licence is located immediately to the north of the site. The EIAR states that the power station is the largest potential source of air pollution in the vicinity of the site, with estimated annual CO₂ emissions of 680,652t CO₂E. Other potential sources of pollution in the area include road traffic, an existing quarry and methane and nitrogen emissions associated with agriculture. The site is located within an area classified by the EPA in their Air Quality Index for Health (AQIH) as having '2 Good' air quality (the AQIH ranks air quality from 1 to 10).
- 11.6.26. The EIAR notes that air quality monitoring results for the nearest EPA monitoring stations at Emo Court, Emo, Co. Laois (c. 20km south west of the application site) and at Portlaoise (c. 10km south west of Emo Court.) indicate no exceedances at either site in 2020 or 2021.
- 11.6.27. During the construction phase, air quality impacts may arise due to fugitive dust emissions and vehicle emissions, including SO₂, NO_x, carbon monoxide and particulate matter. With regard to dust emissions, NRA guidance¹ indicates that dust arising from 'minor-size' construction sites is unlikely to cause significant impacts at sensitive receptors beyond 25m from the source, when standard mitigation measures are in place. The application site is c. 200m from the nearest sensitive receptor (a dwelling) and therefore it is considered unlikely, once mitigation is in place, that any receptors will be affected by fugitive dust emissions during construction, or that there will be adverse impacts on local ambient air quality.

¹ Guidelines for the Treatment of Air Quality during the Planning and Construction of National Road Schemes.

- Similarly, no significant dust impacts on vegetation and ecosystems are anticipated once standard mitigation measures are in place.
- 11.6.28. The scale of the proposed development is such that exhaust emissions from vehicles during construction are unlikely to have an adverse impact on local air quality or on air quality in the wider area. With regard to NO_x, which is identified as the principal pollutant of concern to sensitive ecosystems, NRA guidelines state that where the predicted concentrations exceed 30µg/m³, then the sensitivity of the relevant species should be assessed by the project ecologist. The EIAR states that it is not possible to accurately estimate vehicle emissions associated with the construction phase but notes that the EPA monitoring station in Winetavern Street in Dublin City Centre indicates an hourly NO2 emission value of 17.75 µg/m³. Given the level of traffic associated with the construction phase, it is considered that there will be no significant impact on sensitive ecosystems.
- 11.6.29. During the operational phase the substation will not generate any greenhouse gas emissions. Any emissions associated with the development during the operational phase will be associated with vehicles needed for maintenance of the substation. Such visits will be limited and are not likely to result in significant impacts on air quality. The substation will also become a node on the transmission network and will operate as a grid connection point for future renewable energy projects in the area, which will have a positive effect on air quality and climate change due to the displacement of fossil fuels and associated combustion emissions.
- 11.6.30. The EIAR and the accompanying Outline CEMP set out a series of mitigation measures for the construction phase, which generally comprise best practice construction methods. These include:
 - The use of water as a dust suppressant.
 - Public roads will be inspected regularly for cleanliness and cleaned as necessary.
 - Covering of loads entering and leaving the site during dry periods if dust becomes a nuisance on site.
 - Control of vehicle speeds passing over access roads within the site.
 - Wheel wash facilities at the site entrance from the public road.

- Site stockpiling of materials will be designed and laid out to minimise exposure to wind.
- Daily site inspections to examine dust measures and their effectiveness.
- Regular maintenance and technical inspection of plant and equipment.
- All site vehicles and machinery to be switched off when not in use.
- 11.6.31. No mitigation measures are proposed for the operational phase, given the lack of negative impacts identified.
- 11.6.32. Potential cumulative impacts are considered in Section 7.3.4 of the EIAR. As no significant air or climate impacts are likely to arise, it is contended that there is no potential for cumulative impacts to arise.
- 11.6.33. Once operational, no negative residual impacts on air quality or climate are likely to arise.

11.6.34. Noise and Vibration

- 11.6.35. The EIAR notes that the main noise source from a high voltage substation is from the transformer, however no transformer will be present within the proposed substation compound. The transformers will instead be located in the permitted adjacent Ballykilleen substation associated with the Cushaling Wind Farm. Other noise sources from electrical infrastructure include Aeolian noise (wind through power lines), Corona noise (hiss or crackling from power lines) or potentially noise from faulty equipment. Construction noise will also occur during earth moving, excavation, laying of roads and transportation of materials and equipment.
- 11.6.36. The application site is illustrated in Figure 8-2 of the EIAR, with the nearest noise-sensitive receptors (NSR1 and NSR2) mapped. These NSRs are located c. 400m and c. 240m, respectively, from the proposed substation. NSR1 is a habitable house, while NSR2 is a house owned by Bord na Mona which is not used as a dwelling. NSR2 is excluded as a receptor in Bord na Mona's annual noise compliant monitoring and is not considered a noise sensitive receptor in the EIAR assessment. I consider this position to be reasonable.

- 11.6.37. Baseline noise monitoring was undertaken at NSR1 over a four-week period as part of the Cushaling Wind Farm noise impact assessment (undertaken by the same author). The results of this monitoring are provided in Table 8-4 of the EIAR.
- 11.6.38. Construction of the substation compound is predicted to have a worst-case noise emission level of 54dB(A), which is below the construction noise threshold set out in British Standard 5228-1: 2009+A1: 2009 'Code of Practice for Noise and Vibration Control on Construction and Open Sites Noise'. The significance of impact of this construction is predicted to be a temporary slight adverse impact.
- 11.6.39. Construction of the overhead line grid connection will take place over a very short period of time and will require minimal noise generating works and construction equipment. The potential noise impacts associated with this element of the works will not be significant.
- 11.6.40. During the operational phase, there will be no significant source of noise from the proposed development due to the absence of transformers and therefore there will be no significant effect on noise levels at the nearest NSR.
- 11.6.41. The cumulative impacts are considered with respect to the Edenderry Power Station and the permitted Cushaling and Cloncreen Wind Farms. As no significant operational noise emissions will be generated by the proposed development, there is no potential for significant cumulative impacts.
- 11.6.42. While no significant construction phase noise effects are anticipated, and thus no mitigation measures required, the EIAR states that best practice measures, in line with the abovementioned British Standard BS5228, will be adopted during the construction phase. I note that this commitment is reflected in the Outline CEMP included in Appendix 4 of the EIAR.
- 11.6.43. No residual noise impacts are predicted in relation to either the construction or operation of the development.

11.6.44. Conclusion on Land, Soil, Water, Air and Climate

11.6.45. I have considered all of the written submissions made in relation to land, soil, water, air and climate and the relevant contents of the file including the EIAR. I am satisfied that the potential for impacts on land, soil, water, air and climate can be avoided, managed and/or mitigated by measures that form part of the proposed scheme, the

proposed mitigation measures and through suitable conditions. I am therefore satisfied that the proposed development would not have any unacceptable direct, indirect or cumulative impacts on land, soil, water air and climate.

11.7. Material Assets, Cultural Heritage and the Landscape

11.7.1. Material Assets is addressed in Chapter 12 of the EIAR, while Traffic and Transportation is addressed separately in Chapter 11. Landscape and Visual Impact and Cultural Heritage are addressed in Chapters 9 and 10, respectively.

11.7.2. Material Assets

- 11.7.3. The main material assets identified in the EIAR as being subject to potential environmental impacts are built services and waste management.
- 11.7.4. With regard to electrical infrastructure, it is noted that the substation site is a greenfield site that does not contain any underground utilities or services. The proposed grid connection will be a 400m overhead line looped in/out to the existing overhead line, supported by wooden poles and pylons. There will be no impact on the existing Edenderry Power Station or Cushaling 110kV substation. The proposed development will complement the national electricity grid development strategy and contribute to the introduction of increased renewable energy to the grid. There will therefore be a positive impact on the electricity grid, which will not require mitigation.
- 11.7.5. There is no gas or water pipeline infrastructure within the vicinity of the proposed substation. It is proposed to mitigate any potential impacts on underground infrastructure along public roads at the site entrance through standard practices, such as the use of 'dial before you dig' services, review of services maps and use of cable avoidance tools.
- 11.7.6. With regard to the use of resources and waste management, it is noted that water will be required for wash down of vehicles/equipment and in the construction compound. I do not consider that significant volumes of water are likely to be required, and I note that the proposed development will generally be unmanned during the operational phase.

- 11.7.7. The proposed development will result in waste generation, including construction waste, mixed organic waste, mixed dry recyclables and toilet waste from the staff welfare facilities and unused oil and diesel.
- 11.7.8. Waste minimisation and management procedures are set out in the preliminary CEMP included in Appendix 4 of the EIAR, which includes an Environmental Management Plan for construction waste management. Potential impacts arising from waste generation during the construction phase are likely to be short-term and not significant and can be readily addressed through standard waste management protocols, as documented in the CEMP and by way of condition.
- 11.7.9. I concur with the applicant that no significant adverse impacts on material assets are likely, although there will be a positive residual impact on electricity supply as a result of the operation of the proposed development. Given the scale and nature of the proposed development, no significant cumulative impacts on material assets are likely to occur.

11.7.10. Traffic and Transportation

- 11.7.11. With regard to traffic and transportation, the EIAR notes that it was prepared in early 2021, when travel was restricted for essential work only, due to the Covid-19 pandemic. Consequently, it was not possible to record typical baseline traffic volumes in the vicinity of the site and on delivery routes. Instead, the baseline traffic volumes provided in the EIAR for the permitted nearby Cushaling Wind Farm were used. I note that both EIARs were prepared by Malachy Walsh & Partners. Given the particular constraints presented by the Covid-19 pandemic and noting that the Cushaling Wind Farm EIAR is relatively recent, and that the proposed substation development is associated with said wind farm, I consider this approach to be reasonable.
- 11.7.12. The application site is located on the western side of the R401 Regional Road which runs in a general north-south direction. The R401 extends from Kildare in the south, via Rathangan, to Kinnegad in the north, via Edenderry. It connects to the M4 Motorway at Junction 10, at Kinnegad. The R401 is a typical rural road carriageway with a general width of c. 6m and centreline and edge markings and a speed limit of 80km/hr in the vicinity of the application site. The road passes over Kilcumber Bridge

- on the River Figile c. 200m from the site entrance, where it has a restricted width with priority given to southbound traffic.
- 11.7.13. The baseline traffic data for the R401 in the vicinity of the proposed development indicates an AADT of 2,205, 13.1% of which is HGV traffic. This is well within the capacity of a rural road link as provided in TII guidance document DN-GEO-03031, with an AADT volume/capacity ratio of 44%. Similarly, the R402, which the R401 connects to at Edenderry, has a volume/capacity ratio of 41%. In the 'do-nothing' scenario, traffic volumes on the R401 and R402 would remain comfortably within their capacity up to a design year of 2039.
- 11.7.14. The construction phase for the proposed development is expected to last 12 months, with peak traffic volumes of 180 vehicle movements per day (120 of which are HGV) and 16 in the peak hour (16 HGV). This peak traffic is expected to arise over a 2 month period and is primarily associated with stone importation. The AADT associated with the proposed development is 68 No. vehicles. With this level of construction traffic, both the R401 and R402 roads would continue to operate well within their capacity, and the EIAR states that the construction works would have a slight to moderate short-term negative impact. Having regard to the nature of the development and the receiving environment, I would concur with this assessment, i.e. that the construction phase effects will not be significant.
- 11.7.15. I note the submission from TII, which states that no reference is made to the potential for abnormal weight loads and recommends that all structures on the haul route should be checked to confirm their capacity to accommodate abnormal loads. TII does, however, acknowledge that abnormal weights may not be a feature of the subject development. Given the nature and scale of the proposed substation and grid connection works I do not consider it likely that there would be a significant requirement for abnormal load deliveries and am satisfied that any such arrangements can be adequately dealt with by way of condition, should the Board be minded to grant permission.
- 11.7.16. During the operational phase, there will be minimal traffic associated with the substation development due to its unmanned nature. Any traffic will be associated with periodic maintenance work and will generate a low volume of vehicles, including

- occasional heavy vehicles. The operational phase impacts are predicted to be imperceptible to not significant.
- 11.7.17. The EIAR considers the cumulative effects of the proposed development with the permitted Cushaling Wind Farm. The permitted Cloncreen Wind Farm is also considered, however the EIS for that development indicates that only c. 10% of HGV construction traffic will use the R401, and thus no significant cumulative traffic volumes on the local road network are likely to occur should construction of Cloncreen Wind Farm coincide with construction of the proposed development. With regard to Cushaling Wind Farm, no significant cumulative effects are anticipated, with the cumulative effect again classified as slight to moderate short-term negative effect. Having regard to the nature of the proposed development and the information set out in the EIAR I would concur with this conclusion.
- 11.7.18. Given the limited magnitude of expected impacts, mitigation measures are limited to the proposed preparation of a Construction Traffic Management Plan. No additional mitigation measures are proposed as no significant adverse impacts are envisaged. Similarly, no operational phase mitigation is proposed due to the lack of significant operational traffic impacts. No significant residual impacts are expected to arise.

11.7.19. Cultural Heritage

- 11.7.20. A desk-based assessment was undertaken within a 1.5km radius of the application site. There are no recorded monuments or archaeological features within the application site, however the Sites and Monuments Register denotes a cluster of 107 No. sites within the study area, c. 0.8km north west of the application site, in the townland of Ballykilleen. These sites were recorded on peatland below a hilltop enclosure on Ballykilleen Hill in Cloncreen Bog and appear to primarily date from the Middle to Late Bronze Age. 103 No. of these sites were made redundant in 2011 and will not be included in the next revision of the SMR. The remaining 4 No. recorded archaeological monuments within the study area, which the field inspection found not to have a visible presence on the ground, are as follows:
 - Enclosure OF019-003 (c.1.6km to the N).
 - Road-unclassified togher, OF019-009 (c.1.2km to the N).
 - Road-Class 1 togher, OF019-041 (c.1.3km to the NW).

- Road, Class 3 togher, OF019-076 (c.1.3km to the NNW).
- 11.7.21. Kilcumber Bridge, which dates from c. 1850, is located c. 70m north east of the proposed substation and c. 180 north of the proposed overhead power line. The Bridge is recorded in the National Inventory of Architectural Heritage (NIAH) and is listed in the Record of Protected Structures (RPS) in the County Development Plan.
- 11.7.22. A number of field inspections of the site were also undertaken, with nothing of archaeological interest noted.
- 11.7.23. With regard to the identified cultural heritage assets, no significant direct effects are predicted from the proposed development. Similarly, having regard to the nature of the proposed development and the separation distances from these identified sites, I do not consider that the proposed development would have significant indirect effects on the setting or character of any identified protected structures or recorded monuments.
- 11.7.24. The EIAR notes the substantial number of archaeological sites discovered in Ballykilleen townland as evidence that the area has been occupied since at least the Neolithic period. Having regard to this and noting the proximity to the Figile River and the better quality land on the site compared to the surrounding area, the EIAR considers that there is a medium to high possibility that the construction of the proposed development could significantly impact on unknown sub-surface archaeology.
- 11.7.25. Cumulative impacts are addressed with reference to Edenderry Power Station and the as-yet unbuilt Cushaling Wind Farm. No cumulative effects on the archaeological, architectural or cultural heritage resource of the study area are anticipated.
- 11.7.26. In order to mitigate the identified medium to high potential for significant direct effects on unknown sub-surface archaeology, it is proposed to undertake archaeological test excavations in advance of construction. Such testing should be explicitly required by way of condition, should the Board be minded to grant permission. Following mitigation, no significant residual effects are anticipated.

11.7.27. **Landscape**

- 11.7.28. The EIAR assesses landscape and visual impacts within a 2km radius study area. Having regard to the scale and nature of the proposed development and the relatively flat topography of the surrounding area, I consider this to be a reasonable study area.
- 11.7.29. The application site and surrounding lands comprise relatively flat to low rolling terrain, which is typical of the midlands. The most notable landscape feature is Ballykilleen Hill at the northern periphery of the study area. This low hill has a max. height of c. 109m AOD, compared with c. 60-70m AOD in the vicinity of the site. The site is located within a 'Low Sensitivity Area', which is described in Table 7.11.1 of the Development Plan as follows:

"This class largely encompasses the county's main urban and farming areas. These areas comprise natural enclosing features (e.g. topography, vegetation) which have the capacity to absorb a range of new development."

- 11.7.30. I note that the landscape sensitivity mapping included in the Development Plan 2021-2027 remains unchanged in respect of the site and surrounding area and that the definition of 'low sensitivity areas' remains generally unchanged.
- 11.7.31. The Development Plan states that "these areas in general can absorb quite effectively, appropriately designed and located development in all categories (including: telecommunication masts and wind energy installations, afforestation and agricultural structures)". It goes on to state that "due to the rural nature of the area, development shall be screened by appropriate natural boundaries that are sympathetic to the landscape generally, where possible".
- 11.7.32. Within the wider 2km radius study area utilised in the EIAR, there are a number of areas of Moderate and High Sensitivity.
- 11.7.33. The Development Plan also identifies Areas of High Amenity, one of which adjoins the Figile River in the northern portion of the study area. The EIAR notes that the AHA has similar extents to the abovementioned High Sensitivity area. There are no protected or designated scenic views or scenic amenity routes within the 2km study area. The closest protected view is V09, at a distance of c. 10km with views in a south eastern direction over bogland.
- 11.7.34. A Zone of Theoretical Visibility map is provided in Figure 9.8 of the EIAR. This is based on a 'bare ground' terrain model (i.e. excluding potential screening features

- such as trees, hedgerows etc.). The ZTV indicates that elements of the proposed development will be visible from the majority of the 2km study area, which is to be expected given the flat terrain in the area.
- 11.7.35. Having inspected the application site and surrounding area, I would agree with the Development Plan designation of the landscape character as being of low sensitivity. The site sits within a relatively flat landscape, with surrounding land uses including agricultural uses, large-scale cutover boglands, Edenderry Power Station and small areas of conifer plantation. Permission has also been granted for two wind farms in the area. Views in the area are generally limited due to the flat topography and the presence of dense hedgerows and treelines at field boundaries.
- 11.7.36. With regard to likely landscape impacts, the EIAR considers that the impacts during the construction phase will be of medium low magnitude and of temporary duration and consequently with a significance rating of slight. In the operational phase, the impacts will be of low magnitude and will be relatively localised and absorbed by surrounding large-scale development (i.e. Edenderry Power Station). Having regard to the low sensitivity of the receiving landscape, this will result in a slight imperceptible significance in the central 500m of the study area, reducing to imperceptible beyond this, as the development becomes a progressively smaller part of the wider landscape fabric.
- 11.7.37. With regard to likely visual impacts, the EIAR identifies 6 No. Viewshed Reference Points (VRPs) in the vicinity which are considered to be reflective of representative views experienced from various visual receptor types. The locations of the VRPs are illustrated in Figure 9.9 of the EIAR, with photomontages provided in Appendix 5. 3 No. of the VRPs are located along the R401 in the vicinity of the site, while the remaining 3 No. VRPs are located along roads to the north of the site. I note that VRP1 is in the vicinity of Ballykilleen Hill. Having inspected the application site and surrounding area, I consider the selection of viewpoints to be reasonable and suitably representative. I note that photomontage views are provided for both the proposed development and the cumulative development scenario (proposed development + Cushaling Wind Farm + Cloncreen Wind Farm).
- 11.7.38. The sensitivity of the 6 No. VRPs is variously classified as low, medium-low, or medium. The significance of the visual impact ranges from imperceptible to slight,

- due to the extensive visual screening provided by existing mature hedgerows and trees and the intervening presence of Edenderry Power Station in the case of views from the northernmost VRPs. Where the proposed development is visible, it will typically be seen together with the adjacent permitted Ballykilleen substation, with both substations likely to be perceived as being visually associated with the industrial structures of Edenderry Power Station, rather than the permitted wind farms.
- 11.7.39. The greatest magnitude of visual effect is in respect of VRP6, a close-range view from the R401. The proximity of the proposed substation to the road, and the need to remove hedgerows for the site entrance track will result in a noticeable change in the nature of the view, however when seen in the context of the nearby Edenderry Power Station, the nature of the visual impact is not uncharacteristic of the location and magnitude of the impact is therefore considered to be medium low, with the low sensitivity of the visual receptor resulting in a visual impact of slight significance.
- 11.7.40. With regard to cumulative impacts, the EIAR considers potential cumulative landscape and visual impacts associated with the proposed development and the permitted Cushaling and Cloncreen Wind Farms, to the east and west of the site, respectively. As noted elsewhere, the Cushaling Wind Farm includes a permitted substation adjacent to the proposed substation, referred to as Ballykilleen substation, while the Cloncreen Wind Farm includes a permitted substation c. 500m north west of the proposed development. The submitted photomontages include views with the permitted wind turbines and substations, where relevant. No significant cumulative landscape or visual impacts are predicted, given the relatively minor scale of the proposed development in the context of the permitted Wind Farms and existing power station.
- 11.7.41. Given the lack of significant impact, no specific mitigation measures are proposed, other than 'mitigation by design', with reference to the choice of a site adjacent to the permitted Ballykilleen substation, which in turn is adjacent to the Edenderry Power Station and existing Cushaling substation.
- 11.7.42. As no specific mitigation measures are considered necessary, the impacts will remain as set out above and no significant residual impacts are expected to arise.
- 11.7.43. Conclusion on Material Assets, Cultural Heritage and the Landscape

11.7.44. I have considered all of the written submissions made in relation to material assets, cultural heritage and the landscape and the relevant contents of the file including the EIAR. I am satisfied that the potential for impacts on material assets, cultural heritage and the landscape can be avoided, managed and/or mitigated by measures that form part of the proposed scheme, the proposed mitigation measures and through suitable conditions. I am therefore satisfied that the proposed development would not have any unacceptable direct, indirect or cumulative impacts on material assets, cultural heritage and the landscape.

11.8. The Interaction between the Above Factors

- 11.8.1. The interactions between the above factors is addressed in Chapter 13 of the EIAR. Generally, the interactions relate to construction phase effects, although some operational phase interactions are identified, including a number of positive effects, such as population and human health and air and climate. The interactions between the factors are tabulated in Table 13-1 of the EIAR. No significant interactions are identified.
- 11.8.2. Having regard to the nature of the proposed development, the receiving environment and the foregoing chapters of the EIAR, I am satisfied that the summary of the potential for interactions between environmental factors is reasonable.

11.9. Reasoned Conclusion

- 11.9.1. Having regard to the examination of environmental information contained above, and to the submission by the planning authority and prescribed bodies it is considered that the main significant direct and indirect effects of the proposed development on the environment are as follows:
 - Population and Human Health: Potential air quality, dust and noise impacts
 on human health will be mitigated through compliance with a Construction
 Environmental Management Plan, best practice construction methods and
 distance to sensitive receptors.
 - Biodiversity: Potential significant effects on bats, badgers and white-clawed crayfish during construction phase due, primarily, to disturbance, loss of habitats/roosts, or introduction of disease. These potential effects will be

- mitigated through standard good practice construction measures, timing of vegetation removal, water pollution prevention measures, provision of bat boxes, biosecurity measures and the implementation of a Construction Environmental Management Plan. Further pre-commencement badger and bat surveys are also proposed.
- Land, Soils, Water, Air and Climate: Potential significant effects on hydrology, hydrogeology and soils are identified, due to construction phase erosion, stockpiling of materials, sedimentation of the River Figile and potential contamination of hydrology and soils with hydrocarbons. These effects will be mitigated by a series of best practice construction management and pollution prevention measures and other specific measures outlined in the EIAR and Outline Construction Environmental Management Plan.
- Material Assets, Cultural Heritage and the Landscape: The location of the
 proposed development is of medium to high potential for unknown
 archaeological remains, due to the substantial number of recorded
 archaeological sites in Ballykilleen townland, within the study area. This will
 be mitigated through archaeological testing and monitoring during the
 construction phase.
- 11.9.2. The EIAR has considered that the main direct and indirect effects of any significance arising from the proposed development on the environment would be primarily mitigated by environmental management measures, as appropriate. I am satisfied on the basis of the submitted information that impacts can be adequately mitigated and that no residual significant negative impacts on the environment would remain as a result of the proposed scheme. I am, therefore, of the view that the potential for unacceptable direct or indirect effects on the environment can be excluded on the basis of the submitted information.

12.0 Appropriate Assessment

12.1. Introduction

12.1.1. The requirements of Article 6(3) as related to appropriate assessment of a project under part XAB, sections 177U and 177V of the Planning and Development Act

2000, as amended, are considered fully in this section. The areas addressed in this section are as follows:

- Compliance with Article 6(3) of the EU Habitats Directive.
- The Natura Impact Statement.
- Screening the need for Appropriate Assessment.
- Appropriate Assessment.

12.2. Compliance with Article 6(3) of the EU Habitats Directive

- 12.2.1. The Habitats Directive deals with the Conservation of Natural Habitats and of Wild Fauna and Flora throughout the European Union. Article 6(3) of this Directive requires that any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects shall be subject to appropriate assessment of its implications for the site in view of the site's conservation objectives. The competent authority must be satisfied that the proposal will not adversely affect the integrity of the European site before consent can be given.
- 12.2.2. The proposed development is not directly connected to or necessary to the management of any European site and therefore is subject to the provisions of Article 6(3).

12.3. The Natura Impact Statement

12.3.1. The application included a Natura Impact Statement (Malachy Walsh and Partners, February 2021), which describes the proposed development, the project site and the surrounding area. Appendix 1 of the NIS comprises a Screening Report for Appropriate Assessment, which concludes that significant adverse impacts to the River Barrow and River Nore SAC (Site Code 002162) cannot be ruled out and that it is necessary to proceed to Appropriate Assessment. The NIS outlines the methodology used for assessing potential impacts on the habitats and species within this European Site that have the potential to be affected by the proposed development. It predicts the potential impacts for this site and its conservation

- objectives, it suggests mitigation measures, assesses in-combination effects with other plans and projects and it identifies any residual effects on the European site and its conservation objectives.
- 12.3.2. The NIS was informed by the following studies and surveys:
 - A desk-based study, including review of available information sources such as NPWS website, National Biodiversity Data Centre website, OSI mapping and aerial photography, Teagasc soil area maps, GSI maps, EPA water quality data and South Eastern River Basin District datasets.
 - Ecological walkover surveys of the site and surroundings on the 13th July and 2nd December 2020.
- 12.3.3. It is stated that consultation was undertaken in respect of the Cushaling Wind Farm (which included Kilcumber Bridge 110kV substation, albeit with a different layout) and in respect of the subject application. Consultation is stated as having been undertaken with Offaly County Council, Kildare County Council, Eirgrid, local community and a range of statutory and non-statutory bodies. No reference is made in the NIS to responses from relevant statutory bodies such as NPWS, IFI etc.
- 12.3.4. No habitat types corresponding with Annex I habitats were recorded within the overall site. The habitats identified within the site were primarily Improved Agricultural Grassland (GA1) with associated Hedgerows (WL1), Scrub (WS1) and Drainage Ditches (FW4) forming boundaries. Observed species included Ryegrasses, Clover, Meadow-grasses, Nettle, Plaintains, Creeping buttercup, Dandelion, Thistles and Docks. Some of the wetter parts of the site close to the drainage ditches had species indicative of Wet Grassland (GS4), including Rushes, Yellow Iris, Silverweed and Meadow Sweet. The Hedgerows and Scrub included species such as Hawthorn, Gorse, Holly, Bramble, Ash, Hazel and Willow. The Figile River is classified as a Lowland/Depositing River (FW2). Extending westwards from the site are large areas of Cutover Bog (PB4), while Edenderry Power Station to the north east of the site is classified as Buildings and Artificial Surfaces (BL3).
- 12.3.5. I note that no invasive species were observed at the site or in its immediate surrounds.

- 12.3.6. Camera traps placed in the vicinity of the site recorded mammal activity almost every night, primarily Badger and Fox. No Otter activity was recorded.
- 12.3.7. The NIS concludes that, provided the recommended mitigation measures are implemented in full, it is not considered that the construction and operation of the proposed development will result in adverse effects on the integrity of the River Barrow and River Nore SAC (Ste Code 002162).
- 12.3.8. Having reviewed the NIS and the supporting documentation, I am satisfied that it provides adequate information in respect of the baseline conditions, clearly identifies the potential impacts, and uses best scientific information and knowledge. Details of mitigation measures are provided and they are summarised in Section 6 of the NIS. I am satisfied that the information is sufficient to allow for appropriate assessment of the proposed development.

12.4. Screening the Need for Appropriate Assessment

- 12.4.1. The proposed development is not directly connected to or necessary to the management of any European Site and therefore is subject to the provisions of Article 6(3).
- 12.4.2. The screening contained within the NIS considers European Sites within 15km of the proposed development. Having regard to the nature of the proposed development, the nature of the receiving environment and the source-pathway-receptor model, I consider this to be a reasonable zone of influence. There are 2 No. European Sites within the zone and Table 12.1 below lists the qualifying interests of these sites, their conservation objectives and identifies possible connections between the proposed development (source) and the sites (receptors).
- 12.4.3. Having regard to: the information and submissions available; the nature, size and location of the proposed development; its likely direct, indirect and cumulative effects; the source-pathway-receptor model; and the sensitivities of the ecological receptors, I consider that the 2 No. identified sites are relevant to include for the purposes of initial screening for the requirement for Stage 2 appropriate assessment on the basis of likely significant effects.

European Site	Distance	Qualifying Interest(s)	Conservation	Connections	Considered further
(Code)	(Direction)		Objectives	(Source-Pathway-	in screening
				Receptor)	
The Long	5.3km (NE)	Semi-natural dry grasslands and scrubland	To maintain or restore	No	No
Derries,		facies on calcareous substrates (Festuco-	the favourable	SAC is designated for	Due to lack of
Edenderry SAC		Brometalia) (*important orchid sites) [6210]	conservation condition	a terrestrial habitat	pathway.
(000925)			of the Annex I habitat(s)	and is upgradient of	
			and/or the Annex II	application site. No	
			species for which the	pathway for direct or	
			SAC has been selected.		
River Barrow	14.2km (or	Estuaries [1130]	To maintain or restore	Yes	Yes
and River Nore	c. 21km via	Mudflats and sandflats not covered by	the favourable	Hydrological	Hydrological
SAC (002162)	the	seawater at low tide [1140]	conservation condition	connection to SAC via	connection to SAC
	hydrological	Reefs [1170]	of the Annex I habitat(s)	Figile River.	could give rise to
	connection)	Salicornia and other annuals colonising mud	and/or the Annex II		changes in water
	(S)	and sand [1310]	species for which the		quality during
		Atlantic salt meadows (Glauco-	SAC has been selected,		construction phase.
		Puccinellietalia maritimae) [1330]	as defined by a list of		Construction works
		Mediterranean salt meadows (Juncetalia maritimi) [1410]	specific attributes and		could impact on
		Water courses of plain to montane levels	targets.		qualifying habitats
		with the Ranunculion fluitantis and			or species through
		Callitricho-Batrachion vegetation [3260]			sedimentation,
		European dry heaths [4030]			Jeunnemanon,

Hydrophilous tall herb fringe communities of	contamination or
plains and of the montane to alpine levels [6430]	disturbance.
Petrifying springs with tufa formation (Cratoneurion) [7220]	
Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0]	
Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) [91E0]	
Vertigo moulinsiana (Desmoulin's Whorl Snail) [1016]	
Margaritifera margaritifera (Freshwater Pearl Mussel) [1029]	
Austropotamobius pallipes (White-clawed Crayfish) [1092]	
Petromyzon marinus (Sea Lamprey) [1095]	
Lampetra planeri (Brook Lamprey) [1096]	
Lampetra fluviatilis (River Lamprey) [1099]	
Alosa fallax (Twaite Shad) [1103]	
Salmo salar (Salmon) [1106]	
Lutra lutra (Otter) [1355]	
Trichomanes speciosum (Killarney Fern) [1421]	
Margaritifera durrovensis (Nore Pearl	
Mussel) [1990]	

- 12.4.4. Based on my examination of the NIS and supporting information, the NPWS website, aerial and satellite imagery, the scale of the proposed development and likely effects, separation distance and functional relationship between the proposed works and the European Sites, their conservation objectives and taken in conjunction with my assessment of the subject site and the surrounding area, I would conclude that a Stage 2 Appropriate Assessment is required for 1 No. European Site, namely the River Barrow and River Nore SAC.
- 12.4.5. The remaining site (The Long Derries, Edenderry SAC) can be screened out from further assessment because of the scale of the proposed development, the nature of the Conservation Objectives and Qualifying Interests, the separation distances and in particular the lack of a substantive linkage between the proposed development and the European site.

12.4.6. <u>Screening Determination</u>

- 12.4.7. Following the screening process, it has been determined that Appropriate Assessment is required as it cannot be excluded on the basis of objective information that the proposed development individually or in-combination with other plans or projects will have a significant effect on the following European site (i.e. there is the possibility of significant effect):
 - River Barrow and River Nore SAC (Site Code 002162)
- 12.4.8. The possibility of significant effects on other European sites has been excluded on the basis of objective information. The following European site has been screened out for the need for appropriate assessment.
 - The Long Derries, Edenderry SAC (Site Code 000925)
- 12.4.9. Measures intended to reduce or avoid significant effects have not been considered in the screening process.

12.5. Appropriate Assessment of Implications of the Proposed Development

12.5.1. The following is a summary of the objective scientific assessment of the implications of the project on the qualifying interest features of the abovementioned European site using the best scientific knowledge in the field. All aspects of the project which

- could result in significant effects are assessed and mitigation measures designed to avoid or reduce any adverse effects are considered and assessed.
- 12.5.2. The following site is subject to Appropriate Assessment:
 - River Barrow and River Nore SAC (Site Code 002162).
- 12.5.3. A description of the site, its Conservation Objectives and Qualifying Interests/Special Conservation Interests, including any relevant attributes and targets for the site, are set out in the NIS and summarised in Table 12.2 of this report as part of my assessment. I have also examined the Natura 2000 data forms as relevant and the Conservation Objectives supporting documents for the site available through the NPWS website (www.npws.ie).

12.5.4. Aspects of the proposed development

- 12.5.5. In my opinion, having reviewed the development proposals, the main aspects of the proposed development that could adversely affect the conservation objectives of the abovementioned European Site arise during the construction phase and include:
 - Impacts to water quality through construction related pollution events (e.g. chemicals, oil/fuel, cementitious materials etc.) or sediments/silt run-off.
 - Disturbance and or displacement of species listed as qualifying interests due to potential water quality impacts during construction or disturbance of foraging/commuting routes or breeding habitats.
 - Habitat loss, fragmentation or alteration.
 - Introduction of invasive species or biosecurity issues during construction.
- 12.5.6. Table 12.2 summarises the Appropriate Assessment and site integrity test. The conservation objectives for the European Site have been examined and assessed with regard to the identified potential significant effects and all aspects of the project (alone and in combination with other plans and projects). Mitigation measures proposed to avoid and reduce impacts to a non-significant level have been assessed, and clear, precise and definitive conclusions reached in terms of adverse effects on the integrity of the European site.
- 12.5.7. With regard to the operational phase, considering the nature of the proposed development and the distance from the abovementioned European Site, I do not

consider that the proposed development – once operational – is likely to adversely affect the integrity of the European Site in light of its conservation objectives. In light of this, no mitigation measures are therefore considered necessary during the operational phase.

Table 12.2: Summary of Appropriate Assessment of implications of the proposed development on the integrity of European Site 002162 alone and in combination with other plans and projects in view of the site's Conservation Objectives.

Table 12.2: River Barrow and River Nore SAC (002162)

Summary of Key issues that could give rise to adverse effects:

- Impacts to water quality through construction related pollution events (e.g. chemicals, oil/fuel, cementitious materials etc.) or sediments/silt run-off.
- Disturbance and or displacement of species due to potential water quality impacts during construction or disturbance of foraging/commuting routes or breeding habitats.
- Habitat loss, fragmentation, or alteration.
- Introduction of invasive species or biosecurity issues during construction.

Conservation Objectives: https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO002162.pdf

	Summary of Appropriate Assessment						
Qualifying Interest feature	Conservation Objectives Targets and attributes	Potential adverse effects	Mitigation measures	In- combination effects	Can adverse effects on integrity be excluded?		
Vertigo moulinsiana (Desmoulin's Whorl Snail) [1016]	Maintain favourable conservation condition. No decline in occupied sites (see Map 7 of Conservation Objectives document for 2 No. known sites); At least 5 adult snails in at least 50% of samples; Adult snails present in at least 60% of samples per site; Minimum of 1ha of suitable habitat per site; 90% of samples in habitat classes I and II as defined in Moorkens & Killeen (2011); 90% of samples in	No Known sites of Desmoulin's whorl snail are not within likely Zone of Influence of proposed development and hydrological connection is tenuous.	No mitigation required.	None	Yes Species not within Zol		
	moisture class 3-4 as defined in Moorkens & Killeen (2011)						

Margaritifera margaritifera (Freshwater Pearl Mussel) [1029]	Status of freshwater pearl mussel as a qualifying Annex II species for the SAC is currently under review. No site-specific conservation objective currently. Maintain favourable conservation	No Known populations of freshwater pearl mussel are in 3 No. tributaries of the River Barrow in Co. Carlow, not the main channel, and are well outside of the likely Zone of Influence of proposed development. Yes	No mitigation required. Best practice pollution	None No likely	Yes Species not within Zol
Austropotamobius pallipes (White-clawed Crayfish) [1092]	condition. No reduction in distribution from baseline; Juveniles and/or females with eggs in at least 50% of positive samples; No alien crayfish species; No instances of disease; Water quality at least Q3-4 at all sampled sites; No decline in heterogeneity or habitat quality.	Potential for direct and indirect effects due to presence of species in the Figile River and the sensitivity of the species to pollution of watercourse with chemicals, silt/soil, contaminants etc. during construction phase. Risk of introduction of crayfish plague.	prevention methods are set out in Section 6 of the NIS and include detailed measures to mitigate impacts to water quality. Biosecurity measures are also set out in Section 6.8.2 of the NIS to prevent introduction of crayfish plague from construction equipment/materials. Ecological Clerk of Works to be appointed to monitor compliance with mitigation measures and conditions.	significant incombination effects.	No doubt as to the effectiveness or implementation of mitigation measures proposed to prevent direct or indirect effects on integrity.
Petromyzon	Restore favourable conservation	<u>No</u>	No mitigation required.	None.	Yes
marinus (Sea	condition.	Due to distance to			Species not within
Lamprey) [1095]		relevant estuaries and			Zol.

Lampetra planeri (Brook Lamprey) [1096]	Greater than 75% of main stem length of rivers accessible from estuary; At least three age/size groups present; Juvenile density at least 1/m²; No decline in extent and distribution of spawning beds; More than 50% of sample sites positive for juvenile habitat. Restore favourable conservation condition. Access to all watercourses down to first order streams; At least three age/size groups of brook/river lamprey present; Mean catchment juvenile density of brook/river lamprey at least 2/m²; No decline in extent and distribution of spawning beds; More than 50% of sample sites positive for juvenile habitat.	lower reaches of the River Barrow, which are at a considerable distance from the site. Yes – Direct & Indirect Potential for direct and indirect effects due to recorded presence of species in the Figile River and the sensitivity of the species to pollution of watercourse with chemicals, silt/soil, contaminants etc. during construction phase.	Best practice pollution prevention methods are set out in Section 6 of the NIS and include detailed measures to mitigate impacts to water quality. Ecological Clerk of Works to be appointed to monitor compliance with mitigation measures and conditions.	No likely significant in- combination effects.	Yes No doubt as to the effectiveness or implementation of mitigation measures proposed to prevent direct or indirect effects on integrity.
Lampetra fluviatilis (River	Restore favourable conservation condition.	No Due to distance to	No mitigation required.	None.	Yes Species not within
Lamprey) [1099]	Greater than 75% of main stem and major tributaries down to second order accessible from estuary; At least three age/size groups of river/brook lamprey present; Mean catchment juvenile density of brook/river lamprey at least 2/m²; No decline in extent and distribution of spawning beds; More than 50% of sample sites positive for juvenile habitat.	relevant estuaries and lower reaches of the River Barrow, which are at a considerable distance from the site.			Zol.

Alosa fallax fallax	Restore favourable conservation	No	No mitigation required.	None.	Yes
(Twaite Shad)	condition.	Species is limited to			Species not within
[1103]	Greater than 75% of main stem length of	lower reaches of the			Zol.
	rivers accessible from estuary; More than	River Barrow, at a			
	one age class present; No decline in	considerable remove			
	extent and distribution of spawning	from the likely Zone of			
	habitats; Water oxygen levels no lower	Influence of proposed			
	than 5mg/l; Maintain stable gravel	development.			
	substrate with very little fine material, free				
	of filamentous algal growth and				
	macrophyte growth				
Salmo salar	Restore favourable conservation	Yes – Direct & Indirect	Best practice pollution	No likely	Yes
(Salmon) [1106]	condition.	Potential direct and	prevention methods are	significant in-	No doubt as to the
	100% of river channels down to second	indirect effects due to	set out in Section 6 of	combination	effectiveness or
	order accessible from estuary;	hydrological link and	the NIS and include	effects.	implementation of
	Conservation Limit for each system	sensitivity of species to	detailed measures to		mitigation measures
	consistently exceeded; Maintain or	pollution of watercourse	mitigate impacts to		proposed to prevent
	exceed 0+ fry mean catchment-wide	with chemicals, silt/soil,	water quality.		direct or indirect
	abundance threshold value - currently set	contaminants etc. during	Ecological Clerk of		effects on integrity.
	at 17 salmon fry/5 min sampling; No	construction phase.	Works to be appointed		
	significant decline in out-migrating smolt		to monitor compliance		
	abundance; No decline in no. and		with mitigation		
	distribution of spawning redds due to		measures and		
	anthropogenic causes; Water quality at		conditions.		
	least Q4 at all sampled sites.				
Lutra lutra (Otter)	Restore favourable conservation	Yes – Direct & Indirect	Best practice pollution	No likely	Yes
[1355]	condition.	Potential direct and	prevention methods are	significant in-	No doubt as to the
	No significant decline in distribution; No	indirect effects due to	set out in Section 6 of	combination	effectiveness or
	significant decline in terrestrial habitat	hydrological link and	the NIS and include	effects.	implementation of
	(122.8ha above high water mark;	sensitivity of species to	detailed measures to		mitigation measures
	1136.0ha along river banks / around	pollution of watercourse	mitigate impacts to		proposed to prevent
	ponds); No significant decline in marine	with chemicals, silt/soil,	water quality. While no		direct or indirect
	habitat (857.7ha); No significant decline in		otter holts were found		effects on integrity.

	river habitat (Length 616.6km); No significant decline in lake habitat (2.6ha);	contaminants etc. during construction phase.	during the site survey, a pre-construction survey		
	No significant decline in couching sites and holts; No significant decline in fish	Potential temporary disturbance to foraging	is proposed to identify any newly created holts.		
	biomass.	and breeding habitats or commuting otters. Potential impacts on fish could affect otter foraging.	Ecological Clerk of Works to be appointed to monitor compliance with mitigation measures and conditions.		
Margaritifera	Restore favourable conservation	<u>No</u>	No mitigation required.	None	Yes
durrovensis (Nore	condition.	Known locations of			Species not within
Pearl Mussel)	Maintain distribution at 15.5km; Restore	species are not located			Zol
[1990]	population to 5,000 adult Mussels;	within likely Zone of			
	Restore to at least 20% of population no	Influence of proposed			
	more than 65mm in length; and at least	development.			
	5% of population no more than 30mm in				
	length; Mortality no more than 5% decline				
	from previous number of live adults				
	counted and dead shells less than 1% of				
	the adult population and scattered in				
	distribution; Restore suitable habitat in				
	length of river corresponding to				
	distribution target (15.5km) and any				
	additional stretches necessary for salmonid spawning; Restore water				
	quality-macroinvertebrates: EQR greater				
	than 0.90 and phytobenthos: EQR greater				
	than 0.93; Restore substratum quality-				
	filamentous algae: absent or trace (<5%),				
	macrophytes: absent or trace (<5%);				
	Restore substratum quality- stable cobble				
	and gravel substrate with very little fine				
	and graver educations with very little lille				

	material and no artificially elevated levels of fine sediment; Restore redox potential to no more than 20% decline from water column to 5cm depth in substrate; Restore appropriate hydrological regimes; Maintain sufficient juvenile salmonids to host glochidial larvae				
Trichomanes	Maintain favourable conservation	No	No mitigation required.	None	Yes
speciosum	condition.	Known locations of			Habitat not within Zol
(Killarney Fern)	No decline in distribution; Maintain at	habitat are not located			
[1421]	least three colonies of gametophyte, and	within likely Zone of			
	at least one sporophyte colony of over 35	Influence of proposed			
	fronds; At least one of the locations to	development.			
	have a population structure comprising				
	sporophyte, unfurling fronds, 'juvenile'				
	sporophyte and gametophyte				
	generations; No loss of suitable habitat,				
	such as shaded rock crevices, caves or				
	gullies in or near to, known colonies. No				
	loss of woodland canopy at or near to				
	known locations; Maintain hydrological				
	conditions at the locations so that all				
	colonies are in dripping or damp seeping				
	habitats and water is visible at all				
	locations; No increase in no. of				
	dessicated fronds; No changes in shading				
	due to anthropogenic impacts; Invasive				
Estuaries [1130]	species absent or under control Maintain favourable conservation	No	No mitigation required	None	Yes
Estuaries [1130]	condition.	No Coastal habitat, not	No mitigation required.	None	Habitat not within Zol
	The permanent habitat area is stable or	located within likely			riabitat not within 201
	increasing, subject to natural processes;	Zone of Influence of			
	I increasing, subject to natural processes,	Zone of influence of			

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	should be maintained in a natural				
	condition: Muddy estuarine community				
	complex; Sand to muddy fine sand				
	community complex; Fine sand with				
	Fabulina fabula community; Maintain the				
	natural extent of the Sabellaria alveolata				
	reef, subject to natural process.				
Mudflats and	Maintain favourable conservation	No	No mitigation required.	None	Yes
sandflats not	condition.	Coastal habitat, not			Habitat not within Zol
covered by	The permanent habitat area is stable or	located within likely			
seawater at low	increasing, subject to natural processes;	Zone of Influence of			
tide [1140]	The following sediment communities	proposed development.			
	should be maintained in a natural				
	condition: Muddy estuarine community				
	complex; Sand to muddy fine sand				
	community complex.				
Reefs [1170]	Omitted from Conservation Objectives	No	No mitigation required.	None	Yes
	document.	Coastal habitat, not			Habitat not within Zol
		located within likely			
		Zone of Influence of			
		proposed development.			
Salicornia and	Maintain favourable conservation	No	No mitigation required.	None	Yes
other annuals	condition.	Coastal habitat, not			Habitat not within Zol
colonising mud	Area stable or increasing,	located within likely			
and sand [1310]	subject to natural processes, including	Zone of Influence of			
	erosion and succession (0.03ha); No	proposed development.			
	decline in occurrence, subject to natural				
	processes; Maintain or where necessary				
	restore natural circulation of sediments				
	and organic matter, without any physical				
	obstructions; Maintain natural tidal				
	regime; Maintain/restore creek and pan				
	structure, subject to natural processes,				
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	including erosion and succession;				
	Maintain range of saltmarsh habitat				
	zonations including transitional zones,				
	subject to natural processes including				
	erosion and succession; Maintain				
	structural variation within sward; Maintain				
	more than 90% of area outside creeks				
	vegetated; Maintain range of sub-				
	communities with typical species listed in				
	Saltmarsh Monitoring Project (McCorry &				
	Ryle, 2009).; No significant expansion of				
	Spartina. No new sites for this species				
	and an annual spread of less than 1%				
	where it is already known to occur.				
Atlantic salt	Restore favourable conservation	No	No mitigation required.	None	Yes
meadows (Glauco-	condition.	Coastal habitat, not			Habitat not within Zol
Puccinellietalia	Area stable or increasing, subject to	located within likely			
maritimae) [1330]	natural processes, including erosion and	Zone of Influence of			
	succession; No decline in habitat	proposed development.			
	distribution, subject to natural processes;				
	Maintain/restore natural circulation of				
	sediments and organic matter, without				
	any physical obstructions; Maintain				
	natural tidal regime; Maintain/restore				
	creek and pan structure, subject to natural				
	processes, including erosion and				
	succession; Maintain range of saltmarsh				
	habitat zonations including transitional				
	zones, subject to natural processes				
	including erosion and succession;				
	Maintain structural variation within sward;				
	Maintain more than 90% of area outside				
	creeks vegetated; Maintain range of sub-				

Spartina. No new sites for this species and an annual spread of less than 1% where it is already known to occur. Maintain favourable conservation condition.	<u>Yes</u>	Best practice pollution prevention methods are	No likely significant in-	Yes
and an annual spread of less than 1%				
·				
Spartina. No new sites for this species				
· ·				
Ryle, 2009; No significant expansion of				
Saltmarsh Monitoring Project (McCorry &				
communities with typical species listed in				
Maintain more than 90% of area outside				
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•	proposed development.			
•	_			
	,			Habitat not within Zol
	<u>No</u>	No mitigation required.	None	Yes
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·				
Ryle, 2009; No significant expansion of				
Saltmarsh Monitoring Project (McCorry &				
	Ryle, 2009; No significant expansion of Spartina. No new sites for this species and an annual spread of less than 1% where it is already known to occur. Restore favourable conservation condition. Area stable or increasing, subject to natural processes, including erosion and succession; No decline in habitat distribution, subject to natural processes; Maintain/restore natural circulation of sediments and organic matter, without any physical obstructions; Maintain natural tidal regime; Maintain/restore creek and pan structure, subject to natural processes, including erosion and succession; Maintain range of saltmarsh habitat zonations including transitional zones, subject to natural processes including erosion and succession; Maintain structural variation within sward; Maintain more than 90% of area outside creeks vegetated; Maintain range of subcommunities with typical species listed in Saltmarsh Monitoring Project (McCorry & Ryle, 2009; No significant expansion of	Saltmarsh Monitoring Project (McCorry & Ryle, 2009; No significant expansion of Spartina. No new sites for this species and an annual spread of less than 1% where it is already known to occur. Restore favourable conservation condition. Area stable or increasing, subject to natural processes, including erosion and succession; No decline in habitat distribution, subject to natural processes; Maintain/restore natural circulation of sediments and organic matter, without any physical obstructions; Maintain natural tidal regime; Maintain/restore creek and pan structure, subject to natural processes, including erosion and succession; Maintain range of saltmarsh habitat zonations including transitional zones, subject to natural processes including erosion and succession; Maintain structural variation within sward; Maintain more than 90% of area outside creeks vegetated; Maintain range of subcommunities with typical species listed in Saltmarsh Monitoring Project (McCorry & Ryle, 2009; No significant expansion of	Saltmarsh Monitoring Project (McCorry & Ryle, 2009; No significant expansion of Spartina. No new sites for this species and an annual spread of less than 1% where it is already known to occur. Restore favourable conservation condition. Area stable or increasing, subject to natural processes, including erosion and succession; No decline in habitat distribution, subject to natural processes; Maintain/restore natural circulation of sediments and organic matter, without any physical obstructions; Maintain natural tidal regime; Maintain/restore creek and pan structure, subject to natural processes, including erosion and succession; Maintain range of saltmarsh habitat zonations including transitional zones, subject to natural processes including erosion and succession; Maintain more than 90% of area outside creeks vegetated; Maintain range of subcommunities with typical species listed in Saltmarsh Monitoring Project (McCorry & Ryle, 2009; No significant expansion of	Saltmarsh Monitoring Project (McCorry & Ryle, 2009; No significant expansion of Spartina. No new sites for this species and an annual spread of less than 1% where it is already known to occur. Restore favourable conservation condition. Area stable or increasing, subject to natural processes, including erosion and succession; No decline in habitat distribution, subject to natural processes; Maintain/restore natural circulation of sediments and organic matter, without any physical obstructions; Maintain natural tidal regime; Maintain/restore creek and pan structure, subject to natural processes, including erosion and succession; Maintain range of saltmarsh habitat zonations including transitional zones, subject to natural processes including erosion and succession; Maintain more than 90% of area outside creeks vegetated; Maintain range of sub-communities with typical species listed in Saltmarsh Monitoring Project (McCorry & Ryle, 2009; No significant expansion of

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levels with the	No decline in occurrence, subject to	Potential for direct or	set out in Section 6 of	combination	No doubt as to the
Ranunculion	natural processes; Area stable or	indirect effects due to	the NIS and include	effects.	effectiveness or
fluitantis and	increasing, subject to natural processes;	hydrological link and	detailed measures to		implementation of
Callitricho-	Maintain appropriate hydrological	sensitivity of species to	mitigate impacts to		mitigation measures
Batrachion	regimes; The groundwater flow to the	pollution of watercourse	water quality.		proposed to prevent
vegetation [3260]	habitat should be permanent and	with chemicals, silt/soil,	Ecological Clerk of		direct or indirect
	sufficient to maintain tufa formation; The	contaminants etc. during	Works to be appointed		effects.
	substratum should be dominated by large	construction phase.	to monitor compliance		
	particles and free from fine sediments;		with mitigation		
	The groundwater and surface water		measures and		
	should have sufficient concentrations of		conditions.		
	minerals to allow deposition and				
	persistence of tufa deposits; The				
	concentration of suspended solids in the				
	water column should be sufficiently low to				
	prevent excessive deposition of fine				
	sediments; The concentration of nutrients				
	in the water column should be sufficiently				
	low to prevent changes in species				
	composition or habitat condition; Typical				
	species of the relevant habitat sub-type				
	should be present and in good condition;				
	The area of active floodplain at and				
	upstream of the habitat should be				
	maintained.				
European dry	Maintain favourable conservation	<u>No</u>	N/A	None	Yes
heaths [4030]	condition.	Habitat is not present in			Habitat not within Zol
	No decline from current habitat	vicinity of proposed			
	distribution, subject to natural processes;	development. No			
	Area stable or increasing, subject to	potential for indirect			
	natural processes; No significant change	effects due to nature of			
	in soil nutrient status, subject to natural	proposed development			
	processe; No increase or decrease in				

	area of natural rock outcrop; Cover of	and potential effects			
	characteristic sub-shrub indicator species	arising.			
	at least 25%: gorse (Ulex europaeus) and				
	where rocky outcrops occur bilberry				
	(Vaccinium myrtillus) and woodrush				
	(Luzula sylvatica); Cover of senescent				
	gorse less than 50%; Long shoots of				
	bilberry with signs of browsing collectively				
	less than 33%; Cover of scattered native				
	trees and shrub less than 20%; Number				
	of positive indicator species at least 2				
	(e.g. gorse and associated dry heath/acid				
	grassland flora); Cover of positive				
	indicator species at least 60% (including				
	gorse, bilberry and associated acid				
	grassland flora); Number of bryophyte or				
	non-crustose lichen species present at				
	least 2; Cover of bracken less than 10%;				
	Cover of agricultural weed species				
	(negative indicator species) less than 1%;				
	Cover of non-native species less than 1%;				
	No decline in distribution or population				
	sizes of rare, threatened or scarce				
	species, including Greater Broomrape				
	(Orobanche rapum-genistae) and the				
	legally protected clustered clover				
	(Trifolium glomeratum); Cover of				
	disturbed bare ground less than 10% (but				
	if peat soil less than 5%); No signs of				
	burning within sensitive areas				
Hydrophilous tall	Maintain favourable conservation	<u>No</u>	N/A	None	Yes
herb fringe	condition.	Habitat is not present in			Habitat not within Zol
communities of		vicinity of proposed			

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plains and of the	No decline in occurrence, subject to	development. No			
montane to alpine	natural processes; Area stable or	potential for indirect			
levels [6430]	increasing, subject to natural processes;	effects due to nature of			
	Maintain appropriate hydrological	proposed development			
	regimes; 30-70% of sward is between 40	and potential effects			
	and 150cm in height; Broadleaf herb	arising.			
	component of vegetation between 40 and				
	90%; At least 5 positive indicator species				
	present; Negative indicator species,				
	particularly non-native invasive species,				
	absent or under control.				
Petrifying springs	Maintain favourable conservation	<u>No</u>	N/A	None	Yes
with tufa	condition.	Habitat is not present in			Habitat not within Zol
formation	Area stable or increasing, subject to	vicinity of proposed			
(Cratoneurion)	natural processes; No decline in	development. No			
[7220]	occurrence; Maintain appropriate	potential for indirect			
	hydrological regimes; Maintain	effects due to nature of			
	oligotrophic and calcareous conditions;	proposed development			
	Maintain occurrence of typical species.	and potential effects			
		arising.			
Old sessile oak	Restore favourable conservation	<u>No</u>	N/A	None	Yes
woods with Ilex	condition.	Habitat is not present in			Habitat not within Zol
and Blechnum in	Area stable or increasing, subject to	vicinity of proposed			
the British Isles	natural processes (85.08ha); No decline	development. No			
[91A0]	in occurrence; Woodland area stable or	potential for indirect			
	increasing; Woodland to have diverse	effects due to distance,			
	structure with a relatively closed canopy	nature of proposed			
	containing mature trees, subcanopy layer	development and			
	with semi-mature trees and shrubs and	terrestrial nature of			
	well-developed herb layer; Maintain	habitat.			
	diversity and extent of Woodland				
	community types; Seedlings, saplings and				
	pole age-classes occur in adequate				

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	proportions to ensure survival of				
	woodland canopy; Ensure at least				
	30m ³ /ha of fallen timber greater than				
	10cm dia., 30 snags/ha, both categories				
	should include stems greater than 40cm				
	dia.; No decline in veteran trees per				
	hectare; No decline in occurrence of				
	indicators of local distinctiveness; No				
	decline in native tree cover (not less than				
	95%); A variety of typical native species				
	present; Negative indicator species,				
	particularly non-native invasive species,				
	absent or under control.				
Alluvial forests	Restore favourable conservation	<u>No</u>	N/A	None	Yes
with Alnus	condition.	Habitat is not located			Habitat not within Zol
glutinosa and	Area stable or increasing, subject to	within likely Zone of			
Fraxinus excelsior	natural processes (181.54ha); No decline	Influence of proposed			
(Alno-Padion,	in occurrence; Woodland area stable or	development			
Alnion incanae,	increasing; Woodland to have diverse				
Salicion albae)	structure with a relatively closed canopy				
[91E0]	containing mature trees, subcanopy layer				
	with semi-mature trees and shrubs and				
	well-developed herb layer; Maintain				
	diversity and extent of Woodland				
	community types; Seedlings, saplings and				
	pole age-classes occur in adequate				
	proportions to ensure survival of				
	woodland canopy; Appropriate				
	hydrological regime necessary for				
	maintenance of alluvial vegetation;				
	Ensure at least 30m³/ha of fallen timber				
	greater than 10cm dia., 30 snags/ha, both				
	categories should include stems greater				

than 40cm dia. (greater than 20cm dia. in		
the case of alder); No decline in veteran		
trees per hectare; No decline in		
occurrence of indicators of local		
distinctiveness; No decline in native tree		
cover; A variety of typical native species		
present; Negative indicator species,		
particularly non-native, invasive species,		
absent or under control.		

Overall conclusion: Integrity test

Following the implementation of mitigation, the construction and operation of the proposed development will not adversely affect the integrity of the River Barrow and River Nore SAC in light of the site's Conservation Objectives. No reasonable scientific doubt remains as to the absence of such effects.

12.5.8. <u>Mitigation Measures</u>

- 12.5.9. The proposed mitigation measures are set out in Section 6 of the NIS under the headings of: Construction and Environmental Management Plan; Ecological Clerk of Works; water quality control; wastes; plant and machinery management; emergency plans and procedures; otter; and invasive species.
- 12.5.10. The NIS notes that the main risk to water quality arising from the proposed development is associated with the potential for ingress of sediment or accidental fuel or oil spillages discharging to watercourses during excavation and construction works. The proposed measures to mitigate impacts to water quality are grouped under the sub-headings of: Runoff and sediment control; fuel management plan; concrete; and temporary site compound. The mitigation measures include:
 - Raw or uncured waste concrete/cementitious material will be disposed of by removal from the development area. Washout of concrete trucks will not occur within the development area. Trucks will return to the supplier's yard for washout.
 - Suitable excavated soil will be re-used where possible as backfill and landscaping. Temporary stockpiles will not be permitted within 20m of a watercourse. Silt fences will be installed on the side of temporary stockpiles to prevent run-off to watercourses and drains in the event of an adverse weather event.
 - Fuelling and lubrication of equipment will be carried out under controlled conditions in bunded areas within the site compound and away from the watercourses and drains. Plant will be refuelled prior to the start of each day's works program.
 - Any spillage of fuels, lubricants or hydraulic oils will be immediately contained, and the contaminated soil removed from the site and properly disposed of.
 - Sufficient oil booms and oil soakage pads will be kept on site to deal with any accidental spillage.
 - Waste oils and hydraulic fluids will be collected in leak-proof containers and removed from the site for disposal or recycling.

- Prior to any work, it will be ensured that all construction equipment/machinery is mechanically sound to avoid leaks of oil, fuel, hydraulic fluids and grease.
- Overnight parking of plant machinery and site vehicles will only take place in the designated site compound.
- Control measures to prevent runoff flowing across exposed ground within the
 working areas and become polluted by sediments, including: diversion of any
 cleanwater around the site, silt fences and check dams in drainage ditches.
- Silt and runoff will be prevented from entering surface water drains or water courses using appropriate means. These include the temporary installation of silt fences, cut off drains, silt traps and drainage to vegetated areas where appropriate.
- Regular inspection and maintenance of surface water and sediment controls, especially after prolonged or intense rainfall.
- Use of biodegradable products where possible, e.g. hydraulic fluid.
- Procedures and contingency plans will be set up to deal with emergency accidents or spills.
- An emergency spill kit with the oil boom, absorbers, etc. will be kept on site in the event of an accidental spill.
- Procedures and contingency plans will be set up to deal with emergency accidents or spills.
- Any small volumes of incidental wash generated from cleaning hand tools, cement mixers or other plant, as required, will be trapped on-site to allow sediment to settle out and reach neutral pH before clarified water is released to the surface water drains or allowed to percolate into the ground. Settled solids will need to be appropriately disposed of off-site.
- There will be one temporary construction compound, situated at least 25m from watercourses and drains.
- Temporary toilet facilities will be connected to a temporary underground storage tank with effluent removed by a licenced waste management contractor.

- A bunded containment area will be provided within the compound for the storage of fuels, lubricants, oils etc.
- Fuel and oil stores including tanks and drums will be regularly inspected for leaks and signs of damage.
- 12.5.11. While no otters were recorded on the camera traps placed during the site surveys, proposed mitigation measures to mitigate potential disturbance impacts on otters include:
 - Pre-construction survey to ensure that newly established holts do not occur
 within the works area before the commencement of construction. Should a
 holt be identified, additional surveys/enabling works will only be undertaken
 under the appropriate NPWS licence.
- 12.5.12. While no invasive species were observed during the site surveys, it is also proposed to undertake an invasive species survey prior to commencement of construction. Should newly established invasive species be identified, an Invasive Species Management Plan will be incorporated into the final CEMP. Other measures to ensure that invasive species and, in particular, White-clawed crayfish plague, are not introduced include:
 - Good site hygiene, including the washing of vehicles prior to arrival on site or prior to leaving any site.
 - Washing to be undertaken in area with no potential to result in spread of invasive species.
 - Soil and topsoil to be sourced from stock screened for invasive species.
- 12.5.13. I consider that the proposed mitigation measures outlined in the NIS generally comprise relatively standard good practice measures for construction works in the vicinity of watercourses. I consider that the proposed measures, as well as the construction methodology and Environmental Management Plans contained within the CEMP (refer to EIAR Appendix 4) are suitably detailed to remove any lack of clarity regarding potential adverse effects and that they are capable of being successfully implemented. I note that it is also proposed to appoint an Ecological Clerk of Works to ensure that the mitigation measures and best practice measures are fully implemented.

12.5.14. Integrity test

- 12.5.15. Following the appropriate assessment and the consideration of mitigation measures, I am able to ascertain with confidence that the project would not adversely affect the integrity of the River Barrow and River Nore SAC (Site Code 002162) in view of the Conservation Objectives of that site.
- 12.5.16. This conclusion has been based on a complete assessment of all implications of the project alone and in combination with plans and projects.

12.6. Appropriate Assessment Conclusion

- 12.6.1. The proposed development has been considered in light of the assessment requirements of Sections 177U and 177V of the Planning and Development Act 2000, as amended.
- 12.6.2. Having carried out screening for Appropriate Assessment of the project, it was concluded that it may have a significant effect on the River Barrow and River Nore SAC (Site Code 002162). Consequently, an Appropriate Assessment was required of the implications of the project on the qualifying features of that site in light of its conservation objectives.
- 12.6.3. Following an Appropriate Assessment, it has been ascertained that the proposed development, individually or in combination with other plans or projects would not adversely affect the integrity of European site Nos. 002162, or any other European site, in view of the sites' Conservation Objectives.
- 12.6.4. This conclusion is based on a full and detailed assessment of all aspects of the proposed development including proposed mitigation measures in relation to the Conservation Objectives of the River Barrow and River Nore SAC (Site Code 002162) and an assessment of likely in-combination effects with other plans and projects. No reasonable scientific doubt as to the absence of adverse effects on the integrity of the River Barrow and River Nore SAC (Site Code 002162).

13.0 Recommendation

13.1. I recommend that permission be granted, subject to conditions, for the reasons and considerations set out below.

14.0 Reasons and Considerations

In coming to its decision, the Board had regard to:

- (a) the nature, scale and extent of the proposed development,
- (b) the characteristics of the site and of the general vicinity,
- (c) the national targets for renewable energy contribution,
- (d) national, regional and local policy support for developing renewable energy, in particular:
 - Government's Strategy for Renewable Energy, 2012-2020,
 - National Planning Framework, 2018,
 - Delivering a Sustainable Energy Future for Ireland the Energy Policy Framework, 2007-2020,
 - Government Policy Statement on the Strategic Importance of Transmission and Other Energy Infrastructure 2012,
 - Climate Action Plan, 2019
 - Regional Spatial and Economic Strategy for the Eastern and Midlands Region
 - Offaly County Development Plan, 2021-2027,
- (e) the location of the proposed development within an area identified in the Development Plan as a 'low sensitivity area' with the capacity to absorb a range of new development,
- (f) the distance to dwellings or other sensitive receptors from the proposed development,
- (g) the planning history of the immediate area including existing and permitted power station, wind farms, substations and 110kV overhead power lines,

- the submissions on file including those from prescribed bodies and the Planning Authority,
- (i) the Environmental Impact Assessment Report submitted,
- (j) the Natura impact statement submitted,
- (k) the report of the Inspector.

Environmental Impact Assessment

The Board completed an Environmental Impact Assessment of the proposed development taking into account

- (i) the nature, scale and extent of the proposed development,
- (ii) the Environmental Impact Assessment Report and associated documentation submitted in support of the application,
- (iii) the submissions made in the course of the application; and
- (iv) the Inspector's report.

The Board considered that the Environmental Impact Assessment Report, supported by the documentation submitted by the applicant, adequately considers alternatives to the proposed development and identifies and describes adequately the direct, indirect, secondary and cumulative effects of the proposed development on the environment.

The Board agreed with the examination, set out in the Inspector's report, of the information contained in the Environmental Impact Assessment Report and associated documentation submitted by the applicant and submissions made in the course of the application.

The Board considered, and agreed with the Inspectors reasoned conclusions, that the main significant direct and indirect effects of the proposed development on the environment are as follows:

Population and Human Health: Potential air quality, dust and noise impacts
on human health will be mitigated through compliance with a Construction
Environmental Management Plan, best practice construction methods and
distance to sensitive receptors.

- Biodiversity: Potential significant effects on bats, badgers and white-clawed crayfish during construction phase due, primarily, to disturbance, loss of habitats/roosts, or introduction of disease. These potential effects will be mitigated through standard good practice construction measures, timing of vegetation removal, water pollution prevention measures, provision of bat boxes, biosecurity measures and the implementation of a Construction Environmental Management Plan. Further pre-commencement badger and bat surveys are also proposed.
- Land, Soils, Water, Air and Climate: Potential significant effects on hydrology, hydrogeology and soils are identified, due to construction phase erosion, stockpiling of materials, sedimentation of the River Figile and potential contamination of hydrology and soils with hydrocarbons. These effects will be mitigated by a series of best practice construction management and pollution prevention measures and other specific measures outlined in the EIAR and Outline Construction Environmental Management Plan.
- Material Assets, Cultural Heritage and the Landscape: The location of the
 proposed development is of medium to high potential for unknown
 archaeological remains, due to the substantial number of recorded
 archaeological sites in Ballykilleen townland, within the study area. This will
 be mitigated through archaeological testing and monitoring during the
 construction phase.

The Board completed an environmental impact assessment in relation to the proposed development and concluded that, subject to the implementation of the mitigation measures set out in the Environmental Impact Assessment Report, and subject to compliance with the conditions set out below, the effects on the environment of the proposed development, by itself and in combination with other development in the vicinity, would be acceptable. In doing so, the Board adopted the report and conclusions of the Inspector.

Appropriate Assessment - Stage 1

The Board considered the Natura Impact Statement and all the other relevant submissions and carried out both an Appropriate Assessment screening exercise and an Appropriate Assessment in relation to the potential effects of the proposed

development on designated European Sites. The Board agreed with and adopted the screening assessment and conclusion carried out in the Inspector's report that the only European site in respect of which the proposed development has the potential to have a significant effect is the River Barrow and River Nore SAC (Site Code 002162).

Appropriate Assessment – Stage 2

The Board considered the Natura Impact Statement and associated documentation submitted with the application, the mitigation measures contained therein, the submissions on file, and the Inspector's assessment. The Board completed an Appropriate Assessment of the implications of the proposed development for the European Site, namely, the River Barrow and River Nore SAC (Site Code 002162), in view of the site's conservation objectives. The Board considered that the information before it was adequate to allow the carrying out of an Appropriate Assessment. In completing the Appropriate Assessment, the Board considered, in particular, the following:

- (i) the likely direct and indirect impacts arising from the proposed development both individually or in combination with other plans or projects,
- (ii) the mitigation measures which are included as part of the current proposal, and
- (iii) the conservation objectives for the European Site.

In completing the Appropriate Assessment, the Board accepted and adopted the Appropriate Assessment carried out in the Inspector's report in respect of the potential effects of the proposed development on the aforementioned European Site, having regard to the site's Conservation Objectives.

In overall conclusion, the Board was satisfied that the proposed development, by itself or in combination with other plans or projects, would not adversely affect the integrity of the European Site, in view of the site's Conservation Objectives.

Proper Planning and Sustainable Development

It is considered that, subject to compliance with the conditions set out below, the proposed development would accord with European, national, regional and local planning and related policy, would not have an unacceptable impact on the

landscape or biodiversity of the area, would not seriously injure the visual or residential amenities of the area or of property in the vicinity, and would be acceptable in terms of traffic safety and convenience. The proposed development would, therefore, be in accordance with the proper planning and sustainable development of the area.

15.0 Conditions

1. The proposed development shall be carried out and completed in accordance with the plans and particulars lodged with the application, except as may otherwise be required in order to comply with the following conditions. Where such conditions require details to be agreed with the planning authority, the developer shall agree such details in writing with the planning authority prior to commencement of development and the proposed development shall be carried out in accordance with the agreed particulars.

Reason: In the interest of clarity.

2. All of the environmental, construction and ecological mitigation and monitoring measures set out in the Environmental Impact Assessment Report, the Natura Impact Statement and other particulars submitted with the application shall be implemented by the developer in conjunction with the timelines set out therein, except as may otherwise be required in order to comply with the conditions of this order.

Reason: In the interest of clarity and the protection of the environment during the construction and operational phases of the development.

3. The period during which the development hereby permitted may be carried out shall be ten years from the date of this Order.

Reason: In the interest of clarity.

4. Water supply and drainage arrangements, including the attenuation and disposal of surface water, shall comply with the requirements of the planning authority for such works in respect of both the construction and operation phases of the proposed development.

Reason: In the interest of environmental protection and public health.

5. The developer shall comply with the transportation requirements of the planning authority for such works and services as appropriate.

Reason: In the interest of traffic and pedestrian safety.

- 6. Prior to commencement of development, a detailed Construction Environmental Management Plan (CEMP) for the construction phase shall be submitted to and agreed in writing with the planning authority, generally in accordance with the draft CEMP submitted with the application. The CEMP shall incorporate the following:
 - (a) a detailed plan for the construction phase incorporating, inter alia, construction programme, supervisory measures, noise, dust and surface water management measures including appointment of a site liaison officer, construction hours and the management, transport and disposal of construction waste:
 - (b) a comprehensive programme for the implementation of all monitoring commitments made in the application and supporting documentation during the construction period;
 - (c) traffic management and road safety procedures and measures for the duration of underground cabling works under public roads,
 - (d) an emergency response plan; and
 - (e) proposals in relation to public information and communication.

A record of daily checks that the works are being undertaken in accordance with the Construction Environmental Management Plan shall be kept for inspection by the planning authority.

Reason: In the interest of environmental protection and orderly development.

- 7. The developer shall facilitate the preservation, recording and protection of archaeological materials or features that may exist within the site. site. In this regard, the developer shall
 - (a) notify the planning authority in writing at least four weeks prior to the commencement of any site operation (including hydrological and geotechnical investigations) relating to the proposed development,

- (b) employ a suitably-qualified archaeologist who shall monitor all site investigations and other excavation works, and
- (c) provide arrangements, acceptable to the planning authority, for the recording and for the removal of any archaeological material which the authority considers appropriate to remove.

In default of agreement on any of these requirements, the matter shall be referred to An Bord Pleanála for determination.

Reason: In order to conserve the archaeological heritage of the site and to secure the preservation and protection of any remains that may exist within the site.

8. Site development and building works shall be carried out only between the hours of 0800 to 1900 Mondays to Fridays inclusive, between 0800 to 1400 hours on Saturdays and not at all on Sundays or public holidays. Deviation from these times will only be allowed in exceptional circumstances where prior written approval has been received from the planning authority.

Reason: In order to safeguard the amenities of property in the vicinity.

9. The site development and construction works shall be carried out such a manner as to ensure that the adjoining streets are kept clear of debris, soil and other material and cleaning works shall be carried on the adjoining public roads by the developer and at the developer's expense on a daily basis.

Reason: To protect the residential amenities of property in the vicinity.

10. The delivery of abnormal loads for the construction of the development shall be managed in accordance with a Traffic Management Plan, which shall be submitted to, and agreed in writing with the planning authority prior to commencement of development. This plan shall provide details shall of the road network to be used by construction traffic, including any over-sized loads, and detailed arrangements for the protection of bridges, culverts or other structures to be traversed, as may be required. The plan should also contain details of how the developer intends to engage with and notify the local community in advance of the delivery of oversized loads.

Reason: In the interests of public safety and residential amenity.

- 11. During the operational phase of the proposed development, the noise level arising from the development, as measured at the nearest noise sensitive location shall not exceed:
 - (i) An LAeqT value of 55 dB(A) during the period 0800 to 2200 hours from Monday to Saturday inclusive. [The T value shall be one hour.]
 - (ii) An LAeqT value of 45 dB(A) at any other time. [The T value shall be 15 minutes]. The noise at such time shall not contain a tonal component.

At no time shall the noise generated on site result in an increase in noise level of more than 10 dB(A) above background levels at the boundary of the site.

b) All sound measurement shall be carried out in accordance with ISO Recommendation R 1996 "Assessment of Noise with respect of Community Response" as amended by ISO Recommendations R 1996 1, 2 or 3 "Description and Measurement of Environmental Noise" as applicable.

Reason: To protect the amenities of property in the vicinity of the site.

12. The developer shall pay to the planning authority a financial contribution in respect of public infrastructure and facilities benefiting development in the area of the planning authority that is provided or intended to be provided by or on behalf of the planning authority in accordance with the terms of the Development Contribution Scheme made under section 48 of the Planning and Development Act 2000, as amended. The contribution shall be paid prior to commencement of development or in such phased payments as the planning authority may facilitate and shall be subject to any applicable indexation provisions of the Scheme at the time of payment. Details of the application of the terms of the Scheme shall be agreed between the planning authority and the developer or, in default of such agreement, the matter shall be referred to An Bord Pleanála to determine the proper application of the terms of the Scheme.

Reason: It is a requirement of the Planning and Development Act 2000, as amended, that a condition requiring a contribution in accordance with the Development Contribution Scheme made under section 48 of the Act be applied to the permission.

13. Prior to commencement of development, the developer shall lodge with the planning authority a bond of an insurance company, a cash deposit, or other security to secure the provision and satisfactory completion of the development, coupled with an agreement empowering the planning authority to apply such security or part thereof to the satisfactory completion of any part of the development.

Reason: To ensure the satisfactory completion of the development.

Niall Haverty Senior Planning Inspector

27th October 2021