Inspector's Report

ABP-322078-25

Development	Proposed development of a 110kV electricity substation and approximately 8.8km of underground electricity line.
Location	Located at Shankill and Ballygorteen, County Kilkenny and Lacken, Moanmore and Baunreagh, County Carlow.
Planning Authority	Carlow County Council Kilkenny County Council
Applicant(s)	White Hill Wind Limited
Type of Application	Application for approval under section 182A of the Planning and Development Act, 2000 as amended.
Prescribed Bodies	Kilkenny County Council Carlow County Council Inland Fisheries Ireland Development Applications Unit Uisce Eireann

Observers	Denis & Paula McGrath Dermot & Orla Maher and Christine Kelly Martin Maher Roger & Marie McGrath Mary Foley Shankill GWS.
Date of Site Inspection	10th June 2025.
Inspector	Auriol Considine

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1.0 Introduction

1.1 Planning approval is sought under the provisions of section 182A of the Act for the construction of a 110kV electricity substation, underground electricity line and associated site development works in the townlands of Shankill and Ballygorteen, County Kilkenny; and Moanmore, Lackan and Baunreagh, County Carlow.

1.2 This case concerns an application for strategic infrastructure under section 182A of the Planning and Development Act, 2000, as amended. It is made on foot of pre-application discussions with the Board under ABP-319391-24 for a proposed development of a 110kV 'Loop In/Loop Out' electricity substation, 2 no. electrical control units, approximately 8.5km of underground electricity line and associated development works to facilitate the connection of the White Hill Wind Farm to the existing 110kV Carlow-Kilkenny overhead line, on 25th March 2024. The Board confirmed that it was of the opinion that the proposed development falls within the scope of section 182A of the Planning & Development Act 2000, as amended, in its direction dated 25th October 2024, and accordingly would comprise strategic infrastructure.

1.3 Submissions on the application were received from the following prescribed bodies - Kilkenny County Council, Carlow County Council, Development Applications Unit, Uisce Eireann and Inland Fisheries Ireland. Submissions were received from the following third parties – Denis & Paula McGrath, Dermot & Orla Maher and Christine Kelly, Martin Maher, Roger & Marie McGrath, Mary Foley and Shankill GWS.

1.4 The applicant has created a website for the proposed development and has provided all of the relevant information relating to the SID application at www.whitehillwindfarm.ie.

2.0 Site Location and Description

2.1 The permitted White Hill Wind Farm is located across two planning jurisdictions with the western area of the site being located in Co. Kilkenny

and the eastern area being located in County Carlow. The overall site lies approximately 13km to the southwest of Carlow town, 14km to the northeast of Kilkenny City and approximately 3km west of Muine Bheag, Co. Carlow and 1km northwest of Paulstown, Co. Kilkenny. These areas of both counties can be described as being quite rural with a high proportion of dispersed one-off housing noted in the area. In addition, there are a number of farm holdings, and associated farmyards and buildings in the wider area. The site of the proposed substation is currently used for agricultural purposes and includes mature hedgerow boundaries and lies approximately 70m to the west of the M9 motorway.

2.2 It was initially anticipated, as identified in the EIAR for the White Hill Wind Farm, that the wind farm would connect to the existing Kilkenny 110kV electricity substation. As part of the permitted windfarm development, the proposed location of the substation was identified (though not consented as part of that permission) immediately adjacent to the windfarm development side, fronting onto the L7117 and the grid connection infrastructure, from the proposed substation to the existing Kilkenny 110kV Substation, as to be located within the carriageways of the L7117, L5892, L5893, L1851, L6656, L6657, and R712. However, following further assessment of this proposal, it has been determined that this connection point to the grid is no longer optimal.

2.3 Following an appraisal of other existing 110kV substations in the region and an assessment of existing transmission lines to determine the potential to connect directly, the applicant has concluded that the most appropriate means of connecting the White Hill Wind Farm to the national electricity network is via a new electricity substation located along the Kellis-Kilkenny 110kV overhead transmission line. The assessment of alternatives presented in the EIAR notes that 2 locations were considered for detailed technical and environmental assessment, with the proposed site at Shanklill, Paulstown, Co. Kilkenny emerging as the most suitable location for the substation.

2.4 The proposed route of the grid connection proposes the installation of approximately 8.8km of underground electricity line between the proposed substation at Shankill and the proposed control unit at the permitted White Hill

Wind Farm within private lands and the L6673, L6738, L7117 and L71172 local public roads. The route will traverse the townlands of Shankill and Ballygorteen, County Kilkenny and Lacken, Moanmore and Baunreagh, County Carlow.

3.0 Proposed Development

3.1 The applicant is seeking a 10-year permission for the construction of the project described as follows:

In accordance with Section 182A of the Planning and Development Act 2000 (as amended), White Hill Wind Limited submitted an application to An Bord Pleanála for a ten-year permission in relation to a proposed development in the townlands of Shankill and Ballygorteen, County Kilkenny; and Moanmore, Lackan and Baunreagh, County Carlow; as follows:

i. A 110 kilovolt (kV) 'loop-in/loop-out' Air-Insulated Switchgear (AIS) electricity substation, including 2 no. single-storey control buildings (with a total gross floor area of 622 square metres [m^2]); transformers, busbars, insulators, circuit breakers, and lightning poles, within a secure compound (with a total footprint of approximately 10,600m^2);

ii. 2 no. lattice-type interface masts, each of which will be 16m in height, and approximately 320m of underground electricity line between the electricity substation and the interface masts to facilitate connection of the electricity substation to the existing Kellis-Kilkenny 110kV overhead electricity transmission line;

iii. A new site entrance from the L66732 and approximately 1.1km of access track to facilitate access to the electricity substation and interface masts;

iv. The demolition of an existing agricultural shed (with a total gross floor area of 210m^2) to accommodate the access track leading to the electricity substation;

v. The widening of the carriageway of the L66732 by approximately 1.5m over a distance of approximately 130m;

vi. An electrical control unit with a total gross floor area of 42m^2 located at the permitted White Hill Wind Farm (An Bord Pleanála Reference ABP-315365-22);

vii. A new site entrance from the L7117 and approximately 250m of access track to facilitate access to the electrical control unit;

viii. Approximately 8.8km of underground electricity line between the electricity substation and the electrical control unit to be installed within private lands and the carriageways of the L6673, L6738, L7117 and L71172 public roads; and,

ix. All associated and ancillary site development, excavation, construction, landscaping and reinstatement works; including a temporary construction compound and the provision of site drainage infrastructure and surface water protection measures.

The site of the proposed development has a total area of approximately 35 hectares. The proposed development will facilitate the export of renewable electricity generated at the permitted White Hill Wind Farm to the national electricity grid.

An Environmental Impact Assessment Report and Natura Impact Statement have been prepared in respect of the proposed development and accompany this planning application.

3.2 The application to the Board, seeking approval for planning approval under the provisions of Section 182A of the Planning and Development Act, 2000 (as amended) for the proposed development of a 110kV Electricity Substation and approximately 8.8km of underground electricity line connecting the permitted White Hill Windfarm to the national grid, was accompanied by the following documents:

- SID application form, site notices and relevant plans and particulars.
- Cover letter to An Bord Pleanala

- Letters to prescribed bodies
- Letter of Consent from Landowner
- Environmental Impact Assessment Report –
    - Volume I – Main Text
    - Volume II – Technical Annexes
    - Non-Technical Summary
- Natura Impact Statement

3.3 The application also included 2 no. hard copies and 8 no. electronic copies of all planning application plans and particulars have been provided, and details of the SID website link (www.whitehillwindfarm.ie).

4.0 Planning History

The following planning applications are relevant to the proposed development:

4.1 The applicant entered into pre-application consultation with ABP (**ABP-319391-24** refers). The Board confirmed that it was of the opinion that the proposed development falls within the scope of section 182A of the Planning & Development Act 2000, as amended, in its direction dated 25th October 2024.

4.2 **ABP-315365-22:** The Board granted a ten-year planning permission under Section 37E of the Planning and Development Act, 2000 as amended, on the 21st of November 2023 for a development comprising the following:

- 7 no. wind turbines with hub height of 104 metres, a rotor diameter of 162 metres and an overall tip height of 185 metres;
- All associated turbine foundations and crane hardstanding areas;
- All associated underground electrical and communications cabling;
- Construction of internal wind farm access tracks;
- Construction of a site entrance from the L3037 local road and upgrades to 2 no. existing agricultural entrances from the L7122 local road;

- 1 no. guy-wired meteorological mast with an overall height of 30 metres;
- 1 no. temporary construction compound;
- 3 no. borrow pits which, when exhausted, will be utilised to permanently store excess excavated material;
- The storage, as required, of excavated material at 2 no. further dedicated spoil deposition areas;
- Change of use of existing residential dwelling to wind farm site office;
- Felling of 15 hectares of commercial forestry plantation to facilitate the construction of wind farm infrastructure;
- The construction of a temporary access track (150m in length) between the N78 national road and L1834 local road;
- Carriageway strengthening works at 'Black Bridge' on the L1835 and L3037;
- All associated and ancillary site development, excavation, construction, landscaping and reinstatement works, temporary works to public roads along the turbine component haul route, the provision of site drainage infrastructure and environmental mitigation measures; and,
- A 35-year operational life from the date of commissioning of the entire proposed development.

4.3 The above SID application was subject to pre-application consultations with the Board under Section 37B of the Planning and Development Act, 2000 (as amended) (**ABP-312224-21** refers). One pre-application meeting took place with the Board on 13th April 2022.

4.4 **ABP-319903-24:** The Board approved, in accordance with section 146B(3)(a) of the Planning and Development Act, 2000, as amended, alterations to the above permission as follows:

1. Alter the location of turbine T6 by c170 metres (m) to the southwest of its permitted position
2. Alter the location of turbine T7 by c220m to the south of its permitted position

3. Alter the location on ancillary wind turbine infrastructure including foundations and crane hardstanding
4. Alter the alignment of access tracks and underground electricity and communications cabling associated with turbines T6 and T7, and
5. Undertake all associated ancillary site development works related to the above alterations including excavations and groundworks, drainage infrastructure, felling of existing commercial forestry plantation, watercourse crossing, landscaping and site reinstatement.

4.5 Full details of the planning history of the wider area are included in the Inspectors Report associated with ABP-315365-22.

5.0 Consultations

5.1 Prescribed Bodies

Details of the application to the Board were circulated to the following prescribed bodies:

- Minister for Housing, Local Government and Heritage.
- Minister for the Environment, Climate and Communications.
- Carlow County Council
- Kilkenny County Council
- Transport Infrastructure Ireland (TII).
- An Taisce.
- Failte Ireland.
- The Heritage Council.
- An Chomhairle Ealaíon (The Arts Council).
- Uisce Éireann (Irish Water).
- Commission for Regulation of Utilities, Water and Energy.
- EirGrid
- ESB
- Inland Fisheries Ireland (IFI).

6.0 Submissions Received by the Board

6.1 Carlow County Council

6.1.1 Carlow County Council submitted a Planning Report on the proposed development to the Board on the 23rd May 2025. The report notes the Boards previous decisions relating to the windfarm development noting no objection in principle to the enabling/supporting infrastructure which will allow for a connection to the national grid. The submission is summarised as follows:

6.1.2 Concerns are noted in terms of the co-ordination of the development with adjoining permitted development so as to minimise any impacts to residential amenity. Consideration should also be given to the potential cumulative impacts on the local road network. It is considered that the application should demonstrate that the proposal will not affect or alter local drainage systems, rivers or adjacent properties, and that the underground cables will not affect the drainage of local roads. In terms of the site location, the report notes the rural character and states that the proposed development should not unduly damage or detract from the character, distinctiveness or sensitivity of the rural area / landscape. The report further notes the proximity of the grid connection route to the River Barrow and River Nore SAC (Site Code: 002162), with the SAC considered to be within the zone of influence for the proposed development.

6.1.3 The report further sets out the Development Plan provisions relating to the area and project, and includes details of the relevant planning history for wind farm developments in the vicinity of the site. The Councils report sets out a number of conditions which the Board may consider suitable for attachment in the event of a grant of planning permission. The conditions relate to:

- Additional landscaping measures
- The appointment of a Traffic Management Coordinator
- Pre and post road surveys, and reinstatement costs
- Protection measures for existing water service infrastructure
- A detailed CEMP and Surface Water Management Plan.
- All mitigation measures in the NIS and EIAR to be implemented

- Development levies and bond to be agreed with the local authority.

6.2 Kilkenny County Council

6.2.1 Kilkenny County Council submitted a Planning Report on the proposed development to the Board on the 9th May 2025. The report is presented under a number of headings which includes a description of the proposed project and site location, details of internal referrals, the policy context and guidance, environmental reports, conditions, community gain and bonds and part VI presents an overall considered view of the project. The report is summarised as follows:

6.2.2 Internal Referrals:

- **Environment Section** of Kilkenny County Council raises questions in terms of –
  - Noise and vibration associated with the construction phase of the project. Questions noted in terms of proposed mitigation measures, noise guidelines followed and monitoring of vibrations as well as consideration of noise and vibration on SPAs and SACs.
  - Air Quality issues including dust generated from the stockpiling of excavated materials. Questions raised regarding monitoring plans.
  - Waste management during the construction phase.
  - Surface water and wastewater questions raised in terms of the storage of fuels and hazardous substances on site, discharges to streams and questions relating to procedures around concrete chute washout. Further, a question has been raised regarding the diversions, if any, of existing land/artificial drains and the potential impact on 3rd party lands.
  - Other observations note that
    - The substation and grid connection locations are on a regionally important karst aquifer
    - A section of the grid connection near Baunreagh is within an outer source protection area for the Paulstown PWS.

- Maintenance of the site and numerous drainage flows have not been noted.
- Waste management, including potential spillages.
- Fluid materials proposed to be used including final treatment and disposal of said material plans.
- Management of surface waters

A number of conditions are noted.

- **Roads Section** of Kilkenny County Council made the following comments on the project –
  - **Grid Connection**
    - The report notes that the proposed grid connection comprises approximately 5.9km of underground line in third party lands and 2.6km on the public road, with approximately 415m of underground ducting proposed within the public road in County Kilkenny.
    - It is proposed to install 5 sets of grid ducting, one for the White Hill Windfarm grid connection and the remaining sets for future use by the applicant and/or other third parties. It is not clear if the ducting is to remain in private ownership or will be transferred to Eirgrid/ESBN.
    - The arrangements for the management and operation of the facility in the public road asset is not clear, nor how the local authority will be able to carry out its statutory duties in relation to the maintenance and operation of public roads.
    - The public road network is of limited capacity and grid connection installations risk restricting or sterilising the network for future developments, impacting the Roads Authority and the grid connection on narrow public roads (c4m in width) is of concern to the Local Authority.
    - It is preferred that the ducting be provided in third party lands or via overhead lines.

- Clarification on the ownership of the ducting is required to be provided as are details of relevant consents to install the services in the public road.
- Justification for the number of spare ducts is required for approval and agreement with the LA.
- Indemnification of the LA will be required, and individual licence agreements are likely to be required.
- Concern is raised in terms of the vertical clearance from the road surface to the proposed ducting with respect to trench detail as well as potential joint pit chambers located in the public road. The construction details provided potentially limits the clearance for the installation of other services, drainage improvements and maintenance. Revised typical trenching details are required subject to consultation with Kilkenny County Council.
- Reference is made to the Interim Guidance to Road Authorities regarding the proposed placement of medium or high voltage electricity assets under public roads (DoT, Circular RW07 of 2025, dated 14th March, 2025) indicates that the depth of cover to the Transmission HV cable ducts should be no less than 950mm.
- Due to the width of the public road, full road reconstruction may be required to the bottom level of the trench over the full carriageway. A full assessment will be required.
- Further details of the HDD and identified water courses will be required.
- A structure/bridge specific design report on the condition of each is required and a determination on how the cable installation will impact the structure is required to be carried out by a Chartered Engineer with specific experience in the area.

- **Electrical 110kV Substation**
  - It is noted that the substation will become a node on the national electricity network and will be operated and maintained by ESB

Network and/or EirGrid. There is no specified operational period and no decommissioning is proposed.

- The Pre-application meeting record notes the proposal to include a containerised (batter) energy storage system which would be retained in the ownership of the applicant[1]. Concerns raised regarding the potential cumulative effects associated with the overall size of the development.

- **Substation Site Access**
  - The proposed entrance to the substation is via the L66732 local tertiary cul-de-sac road which is substandard in traffic capacity and width (3.5m). The proposal to widen the cul-de-sac road by c1.5m to accommodate construction and residual operational traffic is noted. No detailed survey or design of the road to demonstrate that the additional width can be provided without adversely impacting drainage and hedgerows has been provided.
  - The proposed use of 225mm diameter twin wall PVC pipe to pipe existing drainage ditches is considered wholly insufficient to cater for the existing drainage and spot flooding events on this section of the local road.
  - In the absence of a detailed survey drawing, sightlines have not been clearly demonstrated.
  - The development site also adjoins the improved section of the L6673 and it is requested that the applicant consult KCC with a view to agreeing a revised access from the L6673 or on the L66732 within approximately 25m of its junction with the L6673 in the vicinity of the existing field entrance to minimise the impact on the cul-de-sac.

[1] The Board will note that this element of the pre-application proposal was omitted before the pre-app consultation process was closed. Battery storage does not comprise part of the proposed development currently being assessed.

- **Construction Traffic Assessment & Management**
    - A detailed construction programme regarding construction traffic has not been provided.
    - The applicant indicates an average increase in HGV traffic of only 7 vehicles per day which is not considered an accurate reflection of the impact of development traffic.
    - A more detailed construction programme for the development is required which provides a more detailed traffic impact assessment for the construction phase.
    - The proposed haul route is noted, including the provision of a one-way system to minimise construction HGV traffic passing each other on the local road network. However, it has not been demonstrated that the un-improved sections of local roads are suitable for the movement of construction traffic.
    - In terms of the installation of the grid connection, the applicant is required to carry out a full assessment of the construction haulage routes to determine the suitability of the roads. Where deficiencies are identified, proposals for improvements, widening etc are required to be submitted to the Municipal District Office.
    - Pre and Post construction condition surveys will be required.
- **Road Opening Licences**
    - The installation of the grid connection will be subject to the Road Opening Licence process, management by the LA.
- **Abnormal Loads**
    - The development of the substation will require loads of up to 68 tonnes which will be subject to an abnormal load permit process.
    - The applicant is required to consult with KCC to agree arrangements for the assessment of structures on the delivery route.

- TII consider that a full assessment of all structures on the national road network along the haul route should be undertaken by the applicant.

- **Summary**
  - It is recommended that the observations and requirements presented by the Roads Section of Kilkenny County Council be satisfactorily addressed prior to the issuing of a planning decision.

6.2.3 The Councils report considers the NIS and EIAR as submitted. In terms of the EIAR, the report submits the following comments:

- Chapter 4 Population and Human Health – EIAR does not adequately assess all potential impacts at both construction and operational phases of the development in terms of residential amenity and public health, particularly in terms of impacts on groundwater given the presence of local source protection areas and the local public water supplies and noise and vibration given the proximity of neighbouring dwellings to the substation site.
- Chapter 5 Biodiversity –
  - It is considered that the EIAR does not clearly identify trees to be removed and if any of these trees are used as bat roosts. Concerns raised in terms of tree felling and loss of hedgerow.
  - With regard to other protected fauna and Aquatic Ecology, it is considered that the EIAR is unclear in terms of what, if any, impacts there might be on the groundwater bodies locally, particularly the Paulstown PWS.
- Chapter 7 Water –
  - Potential flood risk to local properties in the immediate vicinity of the substation site is of significant concern.
  - Approximately 1.6km of underground electricity line is located inside the Paulstown GWS outer source protection area.
  - The Shankill GWS abstracts from a spring which is located approximately 420m to the northeast of the proposed substation compound and the grid connection is approx. 500m northwest of the spring. Potential impacts on

this water supply is of significant concern and requires to be thoroughly assessed in the context of the proposed works.

- Chapter 9 Landscape – the Council consider that additional viewpoints, in addition to the limited number used in the photomontage report (Annex 9.1 of the EIAR) should be considered, including from the motorway and from the local road LP2625 to the south of the site, further east of VP6.
- Chapter 11 Noise and Vibration – the Council note the submission that the electricity substation site, where the vast majority of construction activity will take place, is deemed to be located a sufficient distance from dwellings such that 'significant noise effects are not assessed as likely to be significant'. The Council considers that the potential impacts on the residential amenity of these properties needs to be adequately assessed and protected.

6.2.4 Kilkenny County Council has recommended that in the event of a grant of planning permission for the development, that the Board include a number of conditions, including a condition requiring a bond, development contributions and a community benefit fund.

6.2.5 The KCC report presents an overall considered view of the project which concludes that the Council has concerns in relation to:

- the location of the project in terms of impacts on general residential amenities
- the potential flooding risk due to the lack of surface water management proposals
- potential impacts on groundwater bodies
- Viewpoints included in the LVIA are considered misleading and require to be reassessed.

It is requested that the applicant clarify their intentions regarding the additional lands located within the red line boundary in the vicinity of the proposed substation and outline any potential plans for these lands.

It is concluded that further information is required.

6.3 Prescribed Bodies

6.3.1 Development Applications Unit

The DAU made a submission on the proposed development, summarised as follows:

- The DAU notes that a desk-based AIA, informed by advance geophysical survey and test excavation (limited to the site of the proposed substation) was carried out, which acknowledges that there is a potential that previously unknown sub-surface archaeological features or deposits may be present.
    - It is requested that advance archaeological test excavation of all greenfield areas of the site should be carried out in advance of any development.
- The submission recommends the inclusion of 6 conditions in the event of planning permission being granted.

6.3.2 Inland Fisheries Ireland

IFI made a submission on the proposed development, summarised as follows:

- The development proposes horizontal directional drilling (HDD) at five sites underneath the Monefelim_030 and Moanmore_010 surface water bodies.
- The application also includes the installation of a culvert on a watercourse connected to the Monefelim_010 surface water body.
- IFI request that:
    - The storage, management and conveyance of materials must not permit deleterious matter to reach surface water systems either directly or indirectly.
    - No interference with the bed, gradient, profile or alignment of any watercourse on or adjacent to the site without prior notification and agreement of IFI.
    - All mitigation measures must be adhered to.

- Method statements for the HDD sites and the proposed bottomless culvert to be submitted to IFI for written approval prior to works.
- Any works with the potential to directly impact water quality must comply with IFIs *Guidelines on Protection of Fisheries during Construction Works in and Adjacent to Waters* 2016.
- Integrity testing and maintenance agreements to be in place for the foul holding tank and interceptor system on the surface water network.
- Details of the person(s) responsible for environmental monitoring and housekeeping on site to be provided to IFI
- In the event of any incident, the applicant / contractor is required to notify IFI immediately.

6.3.3 Uisce Eireann

UE made a submission on the proposed development, summarised as follows:

- The application is considered in the context of Uisce Eireanns obligations to provide public water services, its Capital Investment Plan to deliver the services and the protection of existing and future public infrastructure.
- UE reviewed the plans and particulars including the Planning Report and Chapter 7 Water and Chapter 12 Material Assets of the EIAR.
- It is noted that there is no connection to UE infrastructure proposed.
- The proposed cabling associated with the project crosses the Zone of Contribution for the Gowran-Goresbridge-Paulstown Water Supply.
- The abstraction is a spring source located 7.5km from where the cabling crosses the ZoC and the substation is not located within the ZoC or surface water catchment.

Given the distance and limited nature of the construction activity proposed, UE considers the risk to be low and that the sufficient mitigation measures have been proposed in the EIAR.

6.4 Third Party Observations

Six observations were submitted with regard to the proposed development from the following, with issues raised noted:

6.4.1 Denis & Paula McGrath:

- Objects to the installation of underground electric cables along the L7117 due to impacts on the well-being of residents and the future of homes.
- Issues raised in relation to the potential health implications associated with high-voltage underground cabling in close proximity to residential properties, including the long-term effects of EMFs.
- Issues raised relating to the disruption caused by the installation process.
- The road is small and digging it up will render it impassable, isolating residents and affecting daily life.
- The potential impact of the development on water drains which run on both sides of the road and underneath the road, including flooding.
- The potential impacts of the development on the existing and future plans for home improvements and development. The project may restrict homeowners due to the location of the underground cables and potentially impact property values.
- There has been inadequate consultation with regard to the project without proper opportunities for residents to raise questions and suggest alternatives.
- It is requested that the proposed development be refused, and that more suitable and less disruptive routes be identified.

6.4.2 Dermot & Orla Maher & Christine Kelly:

- Concerns raised regarding the lack of detail in the application, the inconsistency in terms of consideration of a number of issues and the location of the site within a rural area.
- The major infrastructure project will have a significant and negative impact on the environment and amenity of the area.

- The nature and extent of the proposed development should not require a 10-year permission as the construction period is indicated to be 18 months. Issues raised in terms of access to existing residential properties and farmlands, and flood risk has not been adequately addressed.
- The closest house is 240m from the substation and it is considered erroneous to claim that any deviations from the layout submitted (due to EirGrid specifications) will be immaterial when they are unknown, and therefore unassessed in the EIAR.
- Concerns are noted in terms of the removal of hedgerows which are considered to be significantly underestimated and mitigation measures proposed are considered inadequate.
- Concerns are raised regarding the provision of a water supply to the development. Shankill GWS has advised that a connection would not be available and any proposal to bore a well has not provided clarity that this will not negatively impact the water quality of the GWS.
- The interface masts will form a significant feature in the landscape.
- Roads and traffic issues noted in terms of the purported overengineered approach to the site access proposed. The design speed of the local road is considered exaggerated, and the use of the lane would create a traffic hazard.
- Concerns are raised regarding the temporary construction compounds and the potential for pollution of watercourses or groundwater as well as damaging existing infrastructure in the laneway.
- Noise issues raised and the submitted noise assessment is questioned given noted errors – the nearest house to the substation is to the north and not to the south as indicated.
- The consideration of alternatives is considered to be deeply flawed, with no consideration of alternative construction compound locations, substation locations, or connections to the grid.
- The development will negatively impact local biodiversity, contrary to the Kilkenny City & County Development Plan.

- The area has been subject to recent flooding which has not been addressed in the application.
- Inadequate bat survey was undertaken and there is no evidence to reach the conclusion in relation to the impact of the development on bats. No survey was carried out on the shed to be demolished.
- The correctness and robustness of the AA is questioned, with concerns raised in terms of stormwater outfall and proximity to Natura 2000 sites. The linear nature of the project makes assessment of the impact of the substation aspect unclear within the EIAR and AA submitted, and the cumulative impact of the proposal has not been adequately assessed.
- The project will reduce the residential amenity of properties and therefore the value of the properties. In the event of the Board granting permission, a structural survey is requested to be undertaken of the residential properties and the laneway prior to the commencement of the development and following its completion.

6.4.3 Martin Maher:

- Lack of consultation – Mr. Maher was not consulted, and no permission is given to locate the cables within his property.
- The proposed development will have a negative impact on the value of property.
- The construction phase will have significant impacts on access/egress on the local county roads and cul-de-sac road.
- The construction phase will have serious implications with regard to residential amenity and has not been addressed.
- There are significant bat roosts in Mr. Mahers house and farm buildings. The submitted bat survey fails to recognise the presence of bats on the proposed site and in neighbouring dwellings, farm buildings and lands.
- The EIS fails to adequately address the impact on water quality, surface run off, pollution mitigation measures, negative impact on groundwater and the watercourses downstream of the development.

- The application fails to define and mitigate noise disturbance during the construction and operational phases.
- It is requested that permission be refused.

6.4.4 Roger & Marie McGrath:

- Concerns raised in terms of the potential health implications associated with high-voltage underground cabling in close proximity to residential properties and the long-term effects of EMFs.
- The installation process will be completely disruptive including road closures, heavy machinery and prolonged construction noise. The digging up of the small road will render it impassible, isolating residents in their homes and affecting daily life.
- Impact of digging up the road on water drains and the potential for flooding.
- The development may interfere with existing or future plans for home improvement and development, restricting homeowners in terms of the location of extensions, driveways or landscaping, impacting on property values.
- Inadequate consultation. It is requested that full community consultation be initiated as there are more suitable or less disruptive routes which should be explored.

6.4.5 Mary Foley:

- Similar issues raised as per above including
    - Potential health implications
    - Disruption caused by installation process
    - Impacts of construction noise
    - Impacts on drainage and flooding
    - Impacts to future plans for homeowners
    - Inadequate consultation.

6.4.6 Shankill Group Water:

- The GWS was constructed in the 1930s, is gravity fed and forms a 3” cast iron pipe that feeds 13 dwellings in the area. The pipe infrastructure and water source are proximate to the project site and are vulnerable to contamination and damage to pipework given the age and volume of heavy goods traffic which requires to be addressed.
- No reference to adequate mitigation measures to avoid contamination of the groundwater source is set out in the application.
- The potential impacts could continue for up to 10 years of the construction period if granted by the Board.
- It is submitted that the project cannot be permitted and there are genuine concerns for the GWS and its clients.

7.0 Applicant’s Response to Submissions

7.1 The submission on the file from the PAs, prescribed bodies and public observers have been circulated to the applicant with a request to respond to issues raised therein. The response received from the applicant addresses each of the submission made as follows:

7.2 **Response to Kilkenny County Council:**

- Noise –
    - A construction noise threshold of 65dB LAeq,T at the external façade of the receptor is appropriate and is not likely to be reached or exceeded in the construction of the access tracks at 45m from NSLs.
    - At 35m, the threshold will be exceeded by 2dB LAeq,T in the absence of mitigation at the closest NSL, for a duration of c2-3 days.
    - The exceedance will not exceed the temporal thresholds contained within UK 2020 Guidance (being 10+ days or nights in a consecutive 15-day period or a total number of +40 days in a 6 month period, and therefore, a significant effect is not assessed as arising.

- Notwithstanding, best practice measures are proposed to be employed during the construction phase to limit noise emissions and ensure that significant effects do not occur.
- In terms of the installation of the underground cable, the appropriate construction noise threshold for construction activities associated with the underground electricity line is 70db LAeq,T for weekdays and 65dB LAeq,T on Saturdays (TII, 2014 guidance).
- At distances of 25m and 20m, noise levels are assessed as likely to be 74dB LAeq,T and 78dB LAeq,T respectively.
- Works will occur at a rate of 50-100m per day and therefore will be in the immediate proximity of the closest NSLs for a limited period – less than 1 day.
- Section 11.5.2.3 (Chapter 11 of the EIAR) assesses that a significant noise effect is not likely to arise and that any effects experienced will be of a short-term and temporary duration and mitigation measures are proposed.
- The drawing on guidance from the UK National Highways guidance document *Design Manual for Roads and Bridges (DMRB) Sustainability & Environment Appraisal LA 111 Noise and Vibration Revision 2* (UKHE, 2020) to assist in the further evaluation and interpretation of the construction noise thresholds as identified in accordance with the TII guidance.

- Vibration –
  - The electricity substation compound is located c. 165m south of the nearest residential dwelling while the electrical control unit compound is located c.200m from the nearest dwelling.
  - The access track leading to the electricity substation is located c.35m west of the nearest property; while the access track leading to the electrical control unit is located c.60m from the nearest property.
  - Vibration effects are not likely to be experienced at these properties.

- In terms of the underground electricity line, which will pass in close proximity to a number of properties, vibration is not assessed as likely to be experienced beyond the immediate works area.
- As part of the Construction Environment Management Plan (CEMP), a designated Community Liaison Officer will be appointed to liaise with local residents.
- Regarding the question relating to vibrations associated with piling, the applicant submits that no piling activities are not likely to be required.

- Working Hours –
  - The Applicant submits that working hours on Saturdays of between 07:00 and 13:00 are appropriate for a development of this type and at this location, and the proposed mitigation measures will ensure that significant effects on residential amenity are not likely to occur. Should the Commission consider otherwise, the applicant is satisfied to generally restrict construction activities to between the hours of 08:00 and 13:00 on Saturdays.
- Natura 2000 sites –
  - All SPAs and SACs located within 20km of the proposed development have been identified and mapped in the NIS.
  - The site is not located within any Natura 2000 site, the nearest such site being the River Nore and River Barrow SAC located c.2.7km to the southeast. The applicant acknowledges the error in referencing the River Nore and River Barrow SAC as a candidate SAC in the application documents, but notes that the full SAC status was conferred to the site on 20th November 2024. The error does not affect the full assessment that was undertaken.
  - Noise and vibration were assessed in the NIS in terms of disturbance to or displacement of species and result in a reduction in species populations and densities.
  - It was concluded that there is no risk of an adverse effect on the integrity or conservation objectives of the SAC.

- Dust –
    - Prior to mitigation, there is a Medium risk of nuisance dust arising and a Low risk to human health.
    - Following the implementation mitigation measures, it is assessed that the residual effects on air quality during the construction phase are likely to be imperceptible and short-term.
    - Having regard to the location of the site and the characteristics of the proposed development, it was assessed that baseline air quality monitoring is not warranted in this instance and same has not been undertaken.
    - In terms of dust monitoring, the Planning-Stage Dust Minimisation Plan provides for regular on-site and off-site monitoring including checks for dust soiling of surfaces.
- The proposed access tracks will be constructed of clean, well graded granular stone generally comprising 6F1 and 6F2, with Clause 804 used as the surface layer.
- The planning-stage design process estimated the volume of material to be excavated during the construction phase and estimated the volume of material to be re-used in landscaping and re-instatement. The spoil deposition areas were appropriately sized and designed for the quantity of excess material quantified.
- In terms of waste storage facilities, Section 3.4.1.6 of Chapter 3 of the EIAR and Section 3.4 of Annex 3.5 describes the temporary construction compound which will contain a dedicated waste management area where waste will be sorted, stored and collected by a licensed service provider.
- The temporary construction compound will provide for the safe and bunded storage of components and materials including fuels, lubricants and oils (Section 3.4.1.6 (Chapter 3) of the EIAR).
- Section 7.5.1.5 of Chapter 7 and Section 4.5.5 of Annex 3.5 set out procedures for the cleaning of chutes where concrete is delivered to site.
- Diversion of drains –

- The construction of the electricity substation compound will necessitate the diversion of a single agricultural drainage ditch – illustrated at Drawing No. 6607-JOD-SS-ZZ- DR-C-1011 enclosed within the Planning-Stage Surface Water Management Plan (SWMP) at Annex 3.5.
- Flows will be diverted to perforated land drains around the perimeter of the site and directed towards the wider proposed drainage network.
- There will be no adverse effect on the drainage regime at the proposed development site or its environs nor will there be any deterioration in downstream water quality.

- Regarding the question of aquifers, the applicant states that the characteristics of the hydrogeological environment and the likely effects of the proposed development on same have been assessed in full at Chapter 7 of the EIAR.
- Approximately 1.6km of the underground electricity line is located within the outer source protection area of the Paulstown Public Water Supply (PWS) (Section 7.3.12 (Chapter 7 of the EIAR)). The assessment of likely effects concludes that prior to the implementation of mitigation measures, the likely effect is indirect, negative, imperceptible and short-term; while no residual effect is assessed as likely.
- With regard to the question that drainage flows at the proposed development site have not been noted, the applicant confirms that the site has been fully surveyed and that all existing surface water channels have been recorded and the effects of the proposed development on same have been assessed. The design of the proposed development (e.g. horizontal directional drilling [HDD] of watercourse crossings and drainage of electricity substation site) has been prepared in this context. Monitoring of all excavations, earthworks, the surface water management system and discharge areas on a daily basis during the construction phase is provided for.
- The applicant confirms that all road pavement material will be treated as waste and disposed of at an approved waste management facility to prevent soil contamination. However, material from the lower horizons of the trench will not pose any risk of soil contamination and will be re-used in the backfilling of the trench or disposal at a soil deposition area.

- The EIAR provides a set of measures to prevent and manage the release of hydrocarbons at the proposed development site including those arising from accidental spillage and will be incorporated into the CEMP.
- The applicant confirms that bentonite will be used in the HDD process.
- The applicant confirms that the Councils requests with respect to the protection of surface waters shall be addressed in full prior to the commencement of development, and that the applicant has committed to many of the requirements in the EIAR.
- A Waste Management Plan has been prepared and is enclosed within the Planning-Stage CEMP at Annex 3.5 of the EIAR.
- Section 3.4.1.6 (Chapter 3 of the EIAR) provides for the storage of fuels, lubricants and oils within the temporary construction compound.
- The appointed contractor(s) shall prepare a set of Construction Method Statements (or Site Works Plans), including a Vehicle Inspection & Maintenance Plan, which shall be incorporated into the CEMP. Section 6.0 of Annex 3.5 of the EIAR also provides for the appointment of a Project Manager who shall act on behalf of the Applicant and liaise with the Council.
- In terms of the proposed installation of 5no. sets of ducts within the trench, 2 will be used to connect the White Hill Wind Farm to the proposed substation. The remainder will provide future capacity for other third-parties and their installation now avoids the need for future excavations along the route of the underground electricity line.
    - The underground electricity line, and associated ducting (2 no. sets), will form part of the private assets of the White Hill Wind Farm and shall not be transferred to EirGrid or ESB Networks.
    - Similarly, the remaining 3 no. sets of ducts will also remain in the Applicant's private ownership and will not be transferred to EirGrid or ESB Networks.
- Interactions with the local authority carrying out statutory duties and long-term maintenance of development within the public road network –

- The design of the proposed development has sought to maximise the extent of underground electricity line to be installed within private lands and to minimise the interaction with the public road network.
- approximately 430m of the overall underground electricity line is located within the corridor of the public road network in Co. Kilkenny, so the potential for interaction between the proposed development and the local authority's statutory duties is minimal.
- Following the installation of the ducting and electricity line, the excavated trench will be appropriately backfilled with excavated material and reinstated in accordance with the requirements of the Council.
- All public roads along the route will be subject to a full carriageway reinstatement (re-surfacing) of the section where the electricity line is installed thus ensuring that there are no long-term effects on the public road network.
- The presence of the underground electricity line will be appropriately marked and will not preclude Kilkenny County Council from carrying out future re-surfacing, or other, works to the public road network or maintenance of roadside drainage features, should they be required.
- It is assessed that there is no likelihood of significant effects on the ability of Kilkenny County Council to carry out its statutory duties.

- The decision of the Applicant to install additional/spare ducts was taken in response to the concerns of local authorities regarding the potential for multiple developments seeking to install electrical infrastructure along the same route resulting in the public road network being subject to extended periods of construction activity, road closures and traffic disruption. The installation of spare ducting is evidence of a proactive, future-proofing approach and will reduce or avoid the likelihood of cumulative effects on the road network and on road users.
- Noting the Councils preference for ducting to be installed in third-party lands or via overhead cables –
  - The applicant highlights that of the c.3.3km of underground electricity line to be installed within County Kilkenny, c.2.8km will be installed within

private lands with only c.430m being installed within the public road corridor. It was not possible to obtain the consent of all private landowners to enable such an approach.

  - In terms of the use of overhead lines, the applicant refers to Section 4.7.4 of the *Draft Revised Wind Energy Development Guidelines 2019*, which considers underground grid connections for wind energy projects are the most appropriate environmental and / or engineering solution. The Applicant submits that the design of the proposed development is the most appropriate technical/engineering approach.
  - The Applicant has agreed to increase the depth of cover to ducting located within the public road network in County Kilkenny from 750mm to 950mm.

- The Applicant confirms that all necessary indemnities and licence agreements shall be entered into with Kilkenny County Council in due course and prior to the commencement of development.
- The Applicant confirms that the electricity line trench, containing 5 no. ducts which will be installed within the public road network, will not be backfilled with concrete.
- The Applicant confirms that traditional joint bay chambers will not be required and are not proposed. All jointing plinths will, insofar as practicable, be installed within private lands and not within the public road network.
- The Applicant has committed, at Section 12.2.5.1 (Chapter 12), to further consultation regarding all works to be undertaken within the public road corridor, and has committed to the reinstatement of all public roads to the satisfaction of Kilkenny County Council (Section 3.4.2 (Chapter 3 of EIAR)).
- The underground electricity line will not be installed within or beneath any existing bridging structures. The proposed horizontal directional drilling (HDD) will be undertaken at watercourse crossings within private lands and no existing bridging structures are present at these locations.
- HDD will not be undertaken in the environs of any bridging structures and, therefore, significant effects are not likely to arise. HDD bore will be at a minimum

depth of 2.5m below the stream channels to avoid any impact on the watercourses.

- The development of 110kV electricity substations, such as that proposed, must conform with strict EirGrid specifications and requirements, including in respect of the footprint of the electricity substation compound, and a site which could enable future expansion. There is no known proposals for further development at the site, and any future proposed development would be subject to a separate consenting and environmental assessment process.
- In terms of the concerns raised with the use of the L66732 local road to access the substation site –
    - It is now proposed to avoid the use of the section of L66732 leading to the proposed operational site entrance by heavy-goods vehicles (HGVs) and other construction traffic during the construction phase.
    - The site entrance proposed in the planning application will provide access during the operation phase when construction traffic volumes are substantially reduced.
    - Works at the site entrance will comprise the removal of an existing agricultural gate, post-and-rail fencing and c.5m of hedgerow/trees. Following the completion of construction, the site entrance will be returned to its current condition with gates and fencing installed and hedgerow replanted.
    - While it will not be possible to provide visibility splays which accord with Section 13.22.1 of the Kilkenny City & County Development Plan 2021-2027, for the duration of the construction phase, comprehensive traffic management measures will be implemented to ensure that there are no adverse effects on public or road safety due to the reduced visibility splays.
    - The Applicant confirms that construction traffic and HGVs will not be required to utilise the L66732 leading towards the originally proposed site entrance. Accordingly, it is no longer required or proposed to increase the width of the carriageway of the L66732 by c.1.5m over a distance of 130m.

- The revised access proposals have been assessed in respect of each of the environmental topics/chapters set out in the EIAR, and it is assessed that the revised proposals:
    - the revised proposals will have no likely significant effect on population and human health.
    - the revised proposals will result in the temporary loss of hedgerow and improved agricultural grassland habitats; however, following the completion of construction, the site entrance will be returned to its current condition and access track removed and the affected area reseeded.
    - the site entrance and access track will necessitate an increased level of excavations of topsoil and subsoil, however, all excavated material will be used in the reinstatement of the site entrance and access track.
    - there are no natural surface water features within the alignment of the site entrance or access track. The implementation of all surface water control measures included in the EIAR will ensure that there are no adverse effects on water quality.
    - No significant effect on air quality or climate are assessed as likely.
    - Following the completion of construction and the reinstatement of the temporary site entrance and access track, there will be no long term evidence of its presence or effect on the landscape.
    - There are no cultural heritage features within the footprint of the site entrance or access track.
    - While the revised access proposals will necessitate an increased level of construction activities, significant noise effects are not assessed as likely to occur, and
    - The revised proposals are assessed as having a positive effect on transport and access due to a reduced likelihood of direct effects on the L66732 public road and reduced risk of disruption to users of the L66732.

    - The revised access proposals have also been assessed as having no effect on the conclusions reached in the NIS.

- A detailed Traffic Management Plan, informed by the detailed design process and the delivery schedule shall include a breakdown of daily, weekly and monthly traffic volumes, will be prepared prior to the commencement of development and agreed with Kilkenny County Council.
- During a meeting with Kilkenny County Council (Roads Design Office) on 24 June 2024, the Applicant was advised that, following a further review of the proposed construction material delivery routes, the provision of passing-bays would not be required.
- The Applicant confirms that Kilkenny County Council shall be consulted with as part of the identification of diversionary routes during the installation of the underground electricity line within the public road network.
- With regard to the Council intention to apply the requirements for Exceptional Abnormal Loads (2024) the applicant submits:
    - The maximum-weight load to be delivered to the proposed development site will have a weight of approximately 68-tonnes.
    - Exceptional Abnormal Loads are classed as “superloads greater than 180 tonnes” as per Circular RW18 of 2024, issued by the Department of Transport.
    - It is unclear why the Council is seeking to extend the scope of the circular to abnormal loads which do not exceed the 180-tonne threshold.
    - The applicant will liaise with the council to ensure that all required surveys and assessments are completed and, as per the normal course, that all relevant licences, permits and consents are in place prior to the delivery of any abnormal loads.
- The Applicant confirms that the proposed development will have no effect whatsoever on existing culverts or watercourse bridging structures and there will be no displacement of culverts. A single man-made agricultural drain (not an EPA marked watercourse) located within the footprint of the electricity substation compound will be diverted to accommodate the electricity substation.

- Chapter 7 of the EIAR assesses the likelihood of significant adverse effects on drinking water supplies, including describing the water supply sources and the their geographic context in terms of the proposed development.
- In terms of the visual impact assessment –
    - The Applicant does not accept any suggestion that the landscape and visual impact assessment is misleading, not sufficiently robust or deficient regarding the selection of viewpoints. It was undertaken by an experienced consultant and in accordance with best practice.
    - The viewpoints were selected following the completion of a zone of theoretical visibility analysis and representative views were deemed to be most appropriate in the case of the subject proposed development to represent views from main thoroughfares and pedestrian areas within the vicinity of the proposed development.
    - Viewpoints were selected to provide views from various perspectives, distances and contexts to ensure a comprehensive assessment of the likely visual effects in accordance with best practice.
    - The selected viewpoints provide short-range (VP2 and VP3), mid-range (VP5 and VP6) and long-range (VP1 and VP6) views of the proposed development from varying viewing angles and geographic contexts.
    - The Applicant submits that a broad range of viewing contexts have been provided for in the selected viewpoint locations and that an increased number of viewpoints would not introduce increased value to the assessment as all receptor category types (Section 9.3.3.3) have been appropriately accounted for.
    - The preparation of photomontages from additional locations is not warranted given the location of existing viewpoints provided.
- The likely effects of the proposed development on residential amenity, including the nearest dwellings, have been fully assessed throughout the EIAR. No significant effects have been assessed as likely to occur and, accordingly, a significant effect on residential amenity is similarly assessed to be unlikely.
- In terms of flooding, the applicant submits –

- The Council has not provided any evidence to support the suggestion that the proposed development will give rise to a risk of flooding.
- A dedicated Flood Risk Assessment has been prepared (Annex 7.1 of the EIAR) concluding that:
    - the proposed development is located in a low flood risk zone (Flood Zone C)
    - an existing surface flooding/ponding will not be exacerbated by the proposed development, and,
    - with the implementation of standard mitigation and surface water control measures, the proposed development will not result in any increased flood risk.
- Contrary to the contention of Kilkenny County Council, the Applicant has provided detailed surface water management proposals (refer to Annex 3.5 of the EIAR) to ensure that there is no deterioration in the quality of downstream surface waters or of groundwaters and to ensure that any surface water runoff arising from the proposed development is appropriately managed.

7.3 **Response to Carlow County Council:**

- The applicant confirms that the construction phase of the project will be appropriately coordinated with the construction of the White Hill Wind Farm to minimise any adverse effects on residential amenity.
- The cumulative impact assessment undertaken concludes, subject to the implementation of mitigation measures, effects are not likely to be significant.
- The proposed development, including the laying of the underground electricity line to be installed in the carriageways of the L6673, L6738, L7117 and L71172 will have no direct effect on roadside drainage features.
- Measures are proposed to ensure the protection of existing drains to ensure the maintenance of existing flows.

- Surface water management systems have been designed to ensure that any surface water arising is appropriately intercepted, treated and attenuated prior to its discharge to the existing drainage network at the electricity substation and electrical control unit sites.
- The visual impact of the project is assessed as not likely to exceed a significance of ‘slight-imperceptible’.
- The conditions recommended by Carlow County Council are noted are proposed as part of the project and detailed in the EIAR and CEMP. A condition in relation to contributions and/or securities shall be agreed prior to the commencement of development.

7.4 Response to Inland Fisheries Ireland

- Section 3.4.5 (Chapter 3), Section 7.5 (Chapter 7) and Annex 3.5 of the EIAR describe the comprehensive surface water management system proposed and the set of surface water control measures to ensure that there no deleterious matter is discharged from the proposed development site.
- The electricity line will, at watercourse crossings, be installed via HDD to prevent any direct effects on, or interaction with, the stream bed or channel.
- All measures set out in the EIAR, NIS and CEMP will be implemented in full.
- Method statements will be prepared for HDD works and the installation of the bridging structure over the unnamed watercourse and same shall be furnished to IFI.

7.5 Response to Uisce Éireann

- No specific issues raised and notes conclusion of low risk associated with the construction activity and sufficient mitigation measures.

7.6 **Response to Department of Housing, Local Government & Heritage**

- The assessments undertaken have not identified any likelihood of previously unrecorded features (additional to those identified through the geophysical survey and archaeological test trenching) being encountered during the construction of the proposed development.
- Archaeological monitoring of all excavations will be undertaken.
- On the basis of the assessments undertaken, it is assessed that additional archaeological test trenching is not warranted and that the proposed mitigation measures are sufficient in ensuring that any features encountered are protected and appropriately managed.
- A suitably qualified archaeologist will be appointed and will advise on the implementation of exclusion zones around recorded and identified heritage assets within the proposed development site.

7.7 **Response to Shankill Group Water Scheme**

- The likelihood of effects on groundwater and drinking water supplies are assessed in Chapter 7 of the EIAR.
- Mitigation measures are proposed to ensure the protection of all drinking water supplies.
- There is no evidence to support the contention that there are inconsistencies in the assessment of effects on groundwaters.
- The revised access arrangements for the construction phase (at the site of the proposed substation) diminishes significantly the potential interaction of the development with the GWS pipework. No construction traffic will travel along a significant portion of the L66732.
- The only likely interaction is at the revised site entrance and at the crossing of the private laneway to the north of the electricity substation. A concrete slab above the pipework to prevent any disturbance of the pipework or subsidence of the surrounding ground as per normal good construction practice is proposed.

- Mitigation measures to ensure the protection of the hydrological and hydrogeological environment are detailed in the EIAR which will ensure that the development does not pose a risk of likely significant effects on surface or ground waters, including the source of the Shankill GWS.

7.8 **Response to Dermot & Orla Maher and Christine Kelly**

- In terms of flooding, there are no recurring flood events recorded in the environs of the electricity substation.
- The FRA concludes that the proposed development is not at risk of flooding, will not exacerbate any flooding or surface ponding and, with the implementation of the proposed surface water management infrastructure, will not give rise to an increased risk of flooding.
- The installation of an appropriately designed bottomless culvert will avoid any restrictions to the hydraulic capacity of the channel.
- The details in terms of groundworks and 'cut and fill' are described in Chapter 3 of the EIAR and the spatial extent of the works are illustrated as part of the Planning-Stage SWMP provided at Annex 3.5.
- It is proposed that all hedgerow to be removed to accommodate the proposed development will be replanted (Section 3.4.6 of EIAR) to ensure that there is no net loss of hedgerow habitats, with a +25m net gain noted.
- The Applicant submits that the proposed development complies with the requirements of Sections 9.2.5.1, 13.29 and 13.22.1 of the Kilkenny City & County Development Plan 2021-2027 regarding the protection of hedgerows.
- It is proposed to develop a well to serve the electricity substation in the event that a connection to the Shankill GWS cannot be obtained, with an extremely low demand of c.60 litres per day, or c.5m^3 per annum, with no likely significant effect on water resources.
- Issues relating to the use of the L66732 by construction traffic is addressed in the proposed revised access arrangements submitted.

- Issues relating to contamination of surface water, groundwater and effects on the public road network are addressed in previous responses.
- A comprehensive assessment of the likely noise effects across all phases of the project has been undertaken, concluding that given the intervening separation distances between the electricity substation and the nearest residential dwelling(s), significant noise effects are not likely to be experienced.
- A Planning-Stage Environmental & Emergency Response Plan for the construction phase has been prepared and is enclosed at Annex 3.5 of the EIAR. An Environmental & Emergency Response Plan will also be prepared for the operation phase and will contain notification procedures in the unlikely event that a pollution event occurs.
- Alternatives have been assessed in Chapter 2 of the EIAR.
- Concerns raised with the use of the L66732 local road to access the site of the electricity substation have been addressed previously (Kilkenny Co. Co. Response).
- The Applicant does not accept the contention that the electricity substation has not had an adequate assessment of social and environmental impacts, and submits that the proposed development, as a whole, has been subject to a comprehensive assessment of the likelihood of significant effects on the environment.
- In terms of the concerns raised relating to bat surveys, the applicant confirms that the agricultural shed to be demolished has been surveyed for the presence of bats and bat roosts. Section 5.3.5.5 of the EIAR assesses the shed as having "*negligible*" roosting suitability and no evidence of roosting bats was observed.
- No evidence submitted to substantiate the claim of significant reduction in the value of property. The project has been designed to minimise the likely effects on residential amenity.

7.9 **Response to Denis & Paula McGrath**

- In terms of EMF concerns, the proposed development provides for medium-voltage electricity lines and high-voltage infrastructure will only be installed at the electricity substation.
- Section 4.5.2.2 of the EIAR notes that the development will operate in strict compliance with the ICNRP international guidelines, and EMF levels (at approximately 5-microteslas (μT)) will be substantially below the ICNRP accepted limit of 100μT. Significant effects are not assessed as likely.
- In terms of the construction phase disruptions, due to road closures, the presence of machinery and construction noise, the applicant responses as follows:
    - any adverse noise effects experienced will be of an extremely short-term duration during the installation of the electricity line – less than 1 day.
    - characteristics of the construction activities and noise generating equipment will be similar to standard road works or agricultural activities and are not likely to be perceived as unusual in this general location.
    - noise emissions will be intermittent and not continuous.
    - best practice measures to be employed during the construction phase to limit noise emissions.
    - Chapter 12 of the EIAR details the direct and indirect effects on transport and access during the construction phase. Full road closures will be implemented on a rolling basis, with c.100m of road closed at any particular time.
    - appropriate measures (such as diversionary routes and the maintenance of local access) will be implemented. Diversionary routes are readily available, while local access for residents, landowners, and business operators will be maintained at all times.
    - in the absence of mitigation measures, it is assessed that the effect on transport & access is likely to be slight, negative but short-term in nature. The implementation of mitigation measures, including a Traffic

Management Plan, residual effects will be slight-to-imperceptible, negative and short-term in duration.

- local access for residents, landowners, and business operators will be maintained at all times and specific provisions for access of emergency services will be set out in the Traffic Management Plan

- Flooding concerns are addressed previously.
- Details of the applicants approach to public consultation is detailed in Chapter 1 and Annex 1.8 of the EIAR.

7.10 **Response to Roger & Marie McGrath**

- Each of the matters raised by Mr. & Mrs. Roger & Marie McGrath have been addressed in responses Mr. & Mrs. Denis & Paul McGrath.

7.11 **Response to Martin Maher**

- In terms of the lack of consultation noted, the applicant confirms that the Community Liaison Officer for the project visited Mr. Mahers home and delivered information leaflets.
- Additional consultation opportunities were afforded through the public information event.
- The project is not located within any of Mr. Mahers private property.
- Additional issues raised have been addressed in previous responses.

7.12 **Response to Mary Foley**

The submission from Ms. Foley was received by the Commission on the 11th of June, the date the request to respond to submissions was sent to the applicant. As such, the applicant did not receive Ms. Foleys submission. However, I note that the content of Ms. Foleys submission reflects that as submitted by Mr. & Mrs. Roger & Marie McGrath and Mr. & Mrs. Denis & Paul McGrath. As such, I am satisfied that the concerns raised have been addressed by the applicant in their response to these observations.

8.0 Policy Context

8.1 EU, National and Regional Legislation/Policy

EU, national and regional policy documents are relevant in respect of the proposed development and include:

- **Europe 2030 Climate and Energy framework and Renewable Energy Directive 2009/28/EC & 2018/2001/EU**
    - The Framework and Directive sets out detailed requirements from members states for the achievements of overall increases in renewable energy and in the stabilisation of national and international grid networks.

8.2 National & Regional Legislation/Policy

- **Project Ireland 2040 - National Planning Framework, 2018, Revised April 2025**
    - 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).
    - The 2025 revised NPF includes policies in relation to renewable energy development, including the identification of regional renewable electricity capacity allocations in order to facilitate the accelerated roll-out and delivery of renewable electricity infrastructure for on-shore wind and solar generation development and to support the achievement of the 2030 national targets set out in the Climate Action Plan.
- **National Development Plan**
    - The National Development Plan, 2021-2030 (NDP) sets out the Government's investment strategy and budget up to 2030, committing to increasing the share of renewable energy up to 80% by 2030. The Plan acknowledges that this will require world-leading levels of wind and solar electricity penetration onto the national grid.

- **Climate Action Plan, 2025.**
    - The plan, the third update to Ireland's Climate Action Plan 2019 under the Climate Action and Low Carbon Development (Amendment) Act 2021, identifies that the electricity sector faces immense challenges to meet its requirements under the sectoral emissions ceilings and 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.
    - To meet the required level of emissions reduction, by 2030 it is required to increase electricity generated from renewable sources to 80% including up to 9 GW from onshore wind.
- **National Adaptation Framework 2018**
    - The Framework was developed under the Climate Action and Low Carbon Development Act, 2015. A number of Government Departments are required under this Framework to prepare sectorial adaptation plans to reduce the vulnerability of the country to the negative effects of climate change and to avail of the positive impacts. The Climate Change Adaptation Plan for Electricity and Gas Networks Sector has been prepared under the National Adaption Framework to identify the potential impacts of climate change on energy infrastructure, assess associated risks and set out an action plan for adapting to those impacts.
    - The Transmission System Operator, EirGrid, and the Distribution System Owner, ESB Networks have identified, categorised, and prioritised risks to the electricity infrastructure.
- **National Energy and Climate Plan for Ireland, 2021–2030**
    - The plan establishes key measures to address the five dimensions of the EU Energy Union: decarbonisation, energy efficiency, energy security, internal energy markets and research, innovation and competitiveness.
- **Energy Security in Ireland to 2030 – Energy Security Package (November 2023)**
    - This document is centred on continuing the progress and actions undertaken by government to strengthen Irelands approach to risk and

resilience in terms of energy security and seeks to contribute to achieving a more secure, sustainable and affordable energy system for the country.

  - The document includes 28 actions and focuses on achieving security through an electricity led system which maximises our renewable energy potential. Action 11 seeks to ensure a fit-for-purpose electricity grid that supports Ireland's energy and climate ambition, and it is noted that extensive reinforcement and expansion of the whole electricity transmission and distribution network will be critical to meeting our objective to decarbonise the economy through greater electrification.

- **National Energy Security Framework (April 2022)**
  - The National Energy Security Framework was prepared and adopted specifically in response to the situation in Ukraine and the implications for security of the EU and Irelands national energy security. The Framework notes that the level of dispatchable electricity generation capacity (i.e. capacity that does not rely on wind or solar energy) needs to increase significantly over the coming years due to reduced reliability of existing plants, anticipated new power stations not being developed as planned, expected strong growth in demand for electricity, and the closure of existing generation.
  - The Commission for Regulation of Utilities, which has statutory responsibility for ensuring security of electricity supply, is managing a programme of work to address this challenge. This includes a programme of actions for the security of electricity supply.
- **Policy Statement on Security of Electricity Supply (November 2021)**
  - Maintaining the security of electricity supply is considered a priority at national level and within the overarching EU policy framework in which the electricity market operates. It is expected that most renewable energy generated by 2030 will be from wind and solar.
  - As more wind, solar, storage and interconnection is added to the system, conventional generation is expected to operate less, but sufficient conventional generation capacity will still be required. This conventional

generation will spend much of its time in reserve for when needed – e.g., when required to balance the system in times of high demand and low wind/solar generation.

  - The Government has considered it appropriate for additional electricity transmission and distribution grid infrastructure, electricity interconnection and electricity storage to be permitted and developed in order to support the growth of renewable energy and to support security of electricity supply.

- **Ireland's Grid Development Strategy 2017: Your Grid, Your Tomorrow**
  - This provides a strategic overview for the development of the electricity transmission system. It confirmed the need for investment in the electricity transmission system. All practical technology solutions will be considered with a strategy of optimising the existing grid so as to minimise new grid infrastructure.
- **Ireland's Transition to a low carbon Energy Future 2015-2030**
  - This White paper on Energy policy published by the Department of Communications, Energy and Natural Resources in December 2015 sets out a vision to reduce greenhouse gas (GHG) emissions by between 80% and 95% compared to 1990 levels, by 2050, falling to zero or below by 2100. It states that as new energy solutions such as bioenergy, solar photovoltaic and offshore energy mature and become more cost effective they will be included in the renewable energy mix. The policy document recognises that solar photovoltaic technology is rapidly becoming cost competitive for electricity generation and that the deployment of solar power in Ireland has the potential to increase energy security, contribute to our renewable energy targets and support economic growth and jobs.
- **Government Policy Statement on the Strategic Importance of Transmission and Other Energy Infrastructure, July 2012**
  - 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 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.

- **Regional Spatial & Economic Strategy for the Southern Regional Assembly**
  - The Regional Strategic Outcomes contained in the Strategy include a 'Transition to Sustainable Energy' in support of Irelands transition to a low carbon energy future 2015-2030 and the transforming of Irelands fossil fuel-based energy sector into a clean, low carbon system by 2050.
  - Chapter 8 of the RSES deals with Water and Energy Utilities, setting out the water and energy utility infrastructure requirements to serve the targeted growth of the region. Chapter 5 or the RSES, which deals with Environment, also includes objectives for energy. Section 8.2 relates to Energy, and the goals include support for the development of a safe, secure and reliable supply of energy and system of transmission and distribution in accordance with EirGrid's (2017) Grid Development Strategy.
  - Regional Policy Objectives RPO 219, 220, 221, 222 and 223, support the development and strengthening of the electricity network, including renewable energy generation and transmission network (RPO 221).

The legislation and policy documents essentially promote, and set targets for, transition to a low carbon and climate resilient society and support the development of associated infrastructure, including the development of the electricity transmission system, to support this transition (e.g., to accommodate more diverse flows), subject to environmental safeguards.

8.3 Carlow County Development Plan

The Board will note that part of the subject site lies within County Carlow. The Carlow County Development Plan 2022-2028 was adopted by the Council's Elected Members on 23rd May 2022, and came into effect on the 4th July 2022. The Plan includes a number of policies and objectives which support and promote the development of renewable energy projects, including supporting electrical infrastructure. Including as follows:

- Chapter 6 – Infrastructure & Environmental Management:
  Section 6.7.3 – Energy Infrastructure
    - **Policy EI P1** – seeks to support and facilitate the reinforcement and development of enhanced energy infrastructure, and associated networks, to serve the existing and future needs of the County and Region. This will include the delivery of the necessary integration of transmission network requirements facilitating linkages of renewable energy proposals to the electricity and gas transmission grid, in a sustainable and timely manner, subject to proper planning and environmental considerations.
    - **Policy EI P2** - seeks to ensure that development proposals for energy transmission and distribution infrastructure follow best practice with regard to siting and design. Proposed high voltage overhead lines shall as far as possible, seek to avoid areas of sensitivity. Where avoidance is not possible, full consideration shall be given to undergrounding the lines where technically feasible, economically viable and environmentally appropriate.
- Chapter 7 – Climate Action & Energy:
  Section 7.10.2 – Infrastructural Facilitators
    - Policy IF P1 – seeks to support the development, reinforcement, renewal, and expansion of key supporting infrastructure to facilitate renewable energy developments, subject to compliance with proper planning and environmental considerations."

8.4 Kilkenny County Development Plan

The Kilkenny City & County Development Plan is one of the relevant development plans relating to the subject site. The Board will note that the KCDP 2021 to 2027 designated the subject site as “Acceptable in Principle” for wind energy developments. The Plan includes a number of policies and objectives which support and promote the development of renewable energy projects, including supporting electrical infrastructure. Including as follows:

- Chapter 10 - Infrastructure & Environment
    - Section 10.3 deals with energy and states that the council will “*support the development of a safe, secure and reliable supply of electricity and to support and facilitate the development of enhanced electricity networks and facilitate new transmission infrastructure projects that might be brought forward in the lifetime of this plan”.*
    - Section 10.3.2 deals with grid development management requirements and seeks to facilitate the provision of energy networks in principle provided it can be demonstrated that:
        - the development is required in order to facilitate the provision or retention of significant economic or social infrastructure;
        - the route proposed has been identified with due consideration for social, environmental and cultural impacts;
        - the design is such that will achieve least environmental impact;
        - the lines should be planned to avoid areas of high landscape sensitivity;
        - preference should be given to undergrounding services where appropriate;
        - the proposed infrastructure complies with all internationally recognised standards with regard to proximity to dwellings and other inhabited structures including best practice and new accepted research on the impacts on health;
        - new power lines and power installations should be sited in accordance with the requirements of the “Health Effects of Electromagnetic Fields”

Report issued by the Department of Communications, Marine and Natural Resources in 2007, and

- where impacts are inevitable, mitigation features have been included.
- where considered necessary by the Council, a Visual Impact Assessment and a Landscape Impact Assessment will be required for significant Grid Infrastructural projects.
- That existing grid infrastructure should be used where possible in preference to erecting new grid infrastructure.
- Any proposed development must avoid impact on any Special Area of Conservation.

8.5 Natural Heritage Designations

Nearest sites are:

- River Barrow and River Nore cSAC (Site Code: 002162) - 2.7km southeast
- Blackstairs Mountains SAC (Site Code: 000440) - 14.8km east
- River Nore SPA (Site Code: 004233) - 11.9km west

9.0 Planning Assessment

9.1 Introduction

9.1.1 Having regard to the requirements of the Planning and Development Act, 2000 (as amended), this assessment is divided into three main parts, the planning assessment, environmental impact assessment and appropriate assessment. In each assessment, where necessary, reference is made to issues raised by all parties. There is an inevitable overlap between the assessments, for example, with matters raised falling within both the planning assessment and the environmental impact assessment. In the interest of brevity, matters are not repeated but such overlaps are indicated in subsequent sections of the report.

9.1.2 Having examined the application details and all other documentation on file, including all of the submissions received in relation to the application, and inspected the site, I consider that the main issues in the planning assessment relate to the following matters:

- Principle of the development
- Issues raised in submissions
- Water Framework Directive

Issues raised in respect of EIA are addressed in section 10 of this report. Issues raised in respect of appropriate assessment are addressed in section 11 of this report. All three sections of this report should be read in conjunction to avoid repetition.

9.2 Principle of Development

9.2.1 The proposed development comprising a substation and grid connection seeks to serve the permitted White Hill Wind Farm (ABP-315365-22 refers). Permission for the substation and grid connection was not sought as part of the application for the wind farm, but were assessed within the EIAR and NIS associated with the project. As such, the project seeks to connect the renewable energy development to the national grid. In terms of the principle of the project, I note the Climate Action Plan 2024 and Climate Action Plan 2025 which sets out a roadmap to halve emissions by 2030 and reach net zero by no later than 2050. The CAP24/25 builds on CAP23 by

refining and updating the measures and actions required to deliver carbon budgets and sectoral emissions ceilings introduced under the Climate Action and Low Carbon Development (Amendment) Act, 2021.

9.2.2. The electricity sector will help to decarbonise the transport, heating and industry sectors and will face a huge challenge to meet requirements under its own sectoral emissions ceiling. A large-scale deployment of renewables will be critical to decarbonising the power sector and CAP24 and CAP25 seek to increase renewable generation to supply 80% of demand by 2030 through the accelerated expansion of onshore wind and solar energy generation, developing offshore renewable generation, and delivering additional grid infrastructure. CAP24 and CAP25 details the significant changes to enhance the electricity grid's capacity and flexibility and its ability to accommodate the significant upsurge in renewable energy while ensuring the system's reliability and efficiency. It is stated that grid delivery and a supportive planning framework are both critical drivers of the investment needed in the sector as Ireland is competing for international capital and in securing supply chains as global efforts to scale up renewables intensify.

9.2.3. The proposed development, therefore, complies with the overarching aim of CAP24 and CAP25 of tackling climate breakdown by reducing greenhouse gas emissions and by contributing towards the renewable energy target of 80% by 2030.

9.2.4. *Project Ireland 2040: The National Planning Framework, 2018* (NPF, 2018) sets out policies, actions and investment plans to deliver 10 National Strategic Outcomes and priorities of the National Development Plan, which include transitioning to a low carbon and climate resilient society and the management of environmental resources.

9.2.5. National Strategic Outcome 8: 'Transition to a Low Carbon and Climate Resilient Society' notes that new energy systems and transmission grids will be necessary to enable a more distributed energy generation system connecting established and emerging energy sources to the major sources of demand. In this regard, NSO 8 aims 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". The NPF supports the "… development and upgrading of the national electricity grid infrastructure, including to supporting the delivery of

renewable electricity generating development….” and therefore, it is reasonable to conclude that the proposed development is supported by the NPF.

9.2.6. The National Development Plan 2021-2030 (NDP) includes strategic investment priorities, one of which relates to energy and the decarbonisation of Irelands energy system. The focus of Irelands energy policy is on the three pillars of sustainability, security of supply, and competitiveness. The purpose of the proposed development is to connect a permitted renewable energy project to the national transmission network, which supports these policy objectives.

9.2.7. The Regional Spatial and Economic Strategy is a 12-year strategic regional development framework and aims to support the delivery of the programme for change set out in the NPF and the NDP, through 10 Regional Strategic Outcomes. The RSES identifies that a safe, secure and reliable supply of energy, as well as a system of transmission and distribution of electricity, is critical to meet future needs. RPO 96 states that *“It is an objective to support the sustainable development, maintenance and upgrading of electricity and gas network grid infrastructure to integrate renewable energy sources and ensure our national and regional energy system remains safe, secure and ready to meet increased demand as the regional economy grows.”* The proposed development will contribute to the development of the grid in the region to enable the transmission system to safely accommodate more diverse power flows from renewable generation and also to facilitate future growth in electricity demand.

9.2.8. At a local level, the proposed development lies within the administrative areas of both Kilkenny County Council and Carlow County Council.

- The Kilkenny County Development Plan 2021-2027 includes a strategic aim to generate 100% of the county’s electricity demand from renewables by 2030 and Section 10.3.1 of the Plan indicates that the PA will *“support the development of a safe, secure and reliable supply of electricity and to support and facilitate the development of enhanced electricity networks and facilitate new transmission infrastructure projects that might be brought forward in the lifetime of this plan”,* subject to the development management provisions in Section 10.3.2 (and detailed above in Section 8.4 of this report).

- The Carlow County Development Plan 2022-2028 recognises the potential that renewable energy developments can play in achieving national targets in terms of reducing fossil fuel dependency and greenhouse gas emissions. It is the policy of the council, Policy EI P1, "…*to support and facilitate the reinforcement and development of enhanced energy infrastructure, and associated networks, to serve the existing and future needs of the County and Region….".* Policy EI P2 requires that developments follow best practice with regard to siting and design and Policy IF P1 supports the development of key infrastructure to facilitate renewable energy developments.

9.2.9. I note that a question was raised in terms of the consideration of alternatives for the proposed development in a third-party observation. I have considered the content of Chapter 2 of the submitted EIAR and acknowledge that the potential connection to the existing Kilkenny 110kV electricity substation as discussed in the application for the windfarm is no longer optimal due to available electrical capacity within the existing substation. I accept that the applicant considered existing 110kV substations to determine the feasibility of connection as well as assessing existing transmission lines with a view to connect directly. The consideration of alternative locations for the proposed substation in this regard was restricted to along the Kellis-Kilkenny 110kV overhead transmission line. I have no objection in principle to the assessment of alternatives as presented in the EIAR.

9.2.10 I am satisfied that the proposed development is acceptable in principle and accords with national policy in terms of the transition to a low carbon and climate resilient society. It is further clear that there is substantial policy support at regional and local level for the development of the electricity network, such as that which would be facilitated by the proposed development. I therefore consider the proposed development to be acceptable in principle.

9.3 Issues raised in submissions

9.3.1 In total, the Commission received 11 submissions relating to the proposed development. Two were submitted from the Planning Authorities – Kilkenny County Council and Carlow County Council, three were from prescribed bodies – DAU, Inland Fisheries and Uisce Eireann and six were from third parties. The Commission will note that many of the substantive issues raised are addressed under the EIA (Section 10 of this report) and AA (Section 11 of this report) Assessments below. Issues raised relate to:

Issues Raised	Planning Authorities		Prescribed Bodies			Third Party Observers					
	Kilkenny Co. Co	Carlow Co. Co.	DAU	IFI	UE	Denis & Paula McGrath	Dermot & Orla Maher & Christine Kelly	Martin Maher	Roger & Marie McGrath	Shankill Group Water	Mary Foley
Traffic & Transport	√	√				√	√	√	√	√	√
Access	√	√				√	√	√	√		√
Residential amenity	√					√	√	√			√
Visual Amenity	√						√				
Noise	√						√	√			√
Air Quality	√										
Flooding	√	√		√		√	√		√		√
Surface Water	√	√		√			√	√			

Issues Raised	Planning Authorities		Prescribed Bodies			Third Party Observers					
	Kilkenny Co. Co	Carlow Co. Co.	DAU	IFI	UE	Denis & Paula McGrath	Dermot & Orla Maher & Christine Kelly	Martin Maher	Roger & Marie McGrath	Shankill Group Water	Mary Foley
Health	√					√			√		√
Water Supply	√				√		√			√	
Property Value						√	√	√	√		√
Biodiversity	√			√			√	√			
Archaeology			√								
Consultation						√		√	√		
Waste Mgt	√										
Alternatives							√				
Cumulative		√									
Conditions	√	√									
Levies / Bond	√	√									
AA issues							√				

Table 1 – Summary of Issues Raised in Submissions

9.3.2 The report from Carlow County Council notes no objection in principle to the enabling/supporting infrastructure which will allow for a connection to the national grid. I note the concerns raised by Kilkenny County Council, prescribed bodies and third parties in terms of impacts on residential amenity, surface water management and flooding, impacts on groundwater, visual impacts and the future use of lands within the redline boundary. Many of these issues are further addressed across the EIA and AA sections of this report, and flooding and surface water management matters are dealt with below in Section 9.4 Water Framework Directive of this report.

Traffic & Transport

9.3.3 The proposed development is located in a rural area which includes a variety of road types include motorway (M9), regional (R912, R712 and R448) and local roads (L6674, L6673 and L66732 to the substation site). The EIAR, Chapter 12, includes a description of the roads to be used in the delivery of the project, and the Commission will note that the local roads to be used generally comprise single-lane carriageways, with general widths of approximately 4-5m. The substation is to be accessed via the Local Tertiary cul-de-sac road, the L66732, which initially required widening over a length of 130m in order to accommodate the proposed development. The underground electricity line will be located within private lands, for c.5.9km, and within the L6673, L6738, L7117 and L71172 for a combined distance of c.2.9km.

9.3.4 Following the concerns of Kilkenny County Council regarding the use of the L66732, including the increased width of same, to accommodate heavy goods vehicles and other construction traffic, the applicant has submitted an alternative proposal which would avoid this proposal. The alternative proposal would see the use, and upgrade, of an existing agricultural access at the junction of the L6673 and the L66732 and the construction of a temporary track inside the hedgerow line to accommodate construction traffic only. The originally proposed entrance on the L66732 will be used for the operational phase of the project only. The revised proposal will comprise the removal of an existing agricultural gate, post-and-rail fencing and c.5m of hedgerow/trees. Access gates will be set back 18m from the road edge to allow HGVs pull off the public road before accessing the site which will prevent any disruption to local road users. Following the completion of construction, the site

entrance will be returned to its current condition with gates and fencing installed and hedgerow replanted. In addition, the additional length of track (approximately 160m in length) will be removed and the area soiled over and reseeded.

9.3.5 In terms of potential effects, the most significant traffic and transport impacts will arise during the construction phase of the project, over a 15–18-month period. The majority of the traffic trips will be associated with the construction of the substation, electrical control unit and the laying of the underground cable. Predicted traffic movements estimate 2,736 no. loads being delivered to the site equating to 152 vehicular trips per month and an average of 7 HGV movements per working day. 15 no. light goods vehicles are expected in terms of construction personnel. In terms of the laying of the underground cable, it is indicated that this process will be undertaken on a rolling basis, affecting approximately 100m of road at a time. The installation of the cable will involve the temporary closure of roads. Third parties have raised concerns in terms of the effects these impacts will have on their daily lives, including restricted access to their homes, farms and businesses during the construction phase.

9.3.6 Having regard to the context of the project site and existing traffic levels on the local road network, this represents a significant increase in traffic volumes on the local road network during the construction phase. During the operational phase, the project will require an average of 1-2 visits per week by maintenance personnel. As the substation will remain *in-situ* following the life expectancy of the wind farm, the effects of the decommissioning phase will be significantly reduced when compared with the construction phase.

9.3.7 The proposed development includes a suite of mitigation measures for all phases and elements of the project. A traffic management plan will be agreed as part of the CEMP with each Planning Authority and appropriate traffic management will be implemented to facilitate the continued public use of roads where temporary traffic restrictions, including rolling road closures, are in place. While I accept that there will be impacts associated with the construction phase of the project, I note that the majority of the cable laying route lies on third-party lands. I am satisfied that adequate commitments have been made to ensure that residents and public road users will continue to have access to homes, farms and businesses during the construction phase. While there will be an impact, it will be temporary and the

appointment of a traffic management coordinator, as well as other mitigation measures proposed, should minimise the negative effects.

9.3.8 The Commission will note the concerns of Kilkenny County Council in terms of the proposal to underground the electricity cable in approximately 430m of the local road network on the basis of limited capacity and the risk of restricting or sterilising the road network for future development. It is the preference of the Roads Authority that the cable ducting be provided in third party lands or via overhead lines. Carlow County Council have noted no objection in principle to the proposed development, subject to conditions.

9.3.9 As noted above, the original plan to widen a section of the L66732 (Co. Kilkenny) to the north and northwest of the existing houses on the lane, has been superseded with an alternative proposed access to the substation site for the construction phase only. I consider the updated proposal to be acceptable and a measure which removes many traffic concerns raised in the context of the L66732. During the operational phase of the project, the proposed entrance to the substation will be as originally proposed but without the need to widen the lane. Should the Commission be so minded to grant permission for the proposed development, I consider that the proposed construction phase access to the substation site should be in accordance with the details submitted on the 16th of July and associated drawings included in Annex 2 of said submission.

9.3.10 The laying of the underground cable will occur within third-party lands and not on the lane itself. It is further noted that traditional joint bay chambers will not be required and are not proposed. The electricity line will be joined at ‘jointing plinths’ which will be located within private lands and not on the public roads and all works within the public road corridor will be in agreement with the planning authority and following receipt of all necessary licences, permits and consents. I further note that, in response to the submissions on the application, and in consultation with Kilkenny County Council, the applicant now proposes to increase the depth of cover to ducting within the public road from 750mm to 950mm to ensure that the development does not result in a sterilisation of the public road. Other services can be installed above the proposed ducting at the revised duct level.

9.3.11 I note the comments of Kilkenny County Council in relation to the obtaining a Road Opening Licence and accept that said matters are for that process. In acknowledging the constraints identified, and having regard to all of the submissions and concerns raised, I am satisfied that the direct and indirect impacts of the construction phase in particular, have been considered in the EIAR. I am satisfied that the temporary significant effects arising in relation to traffic and transport are acceptable.

9.3.12 Concerns regarding the cumulative impacts of the proposed works in conjunction with other permitted development on the local road network are noted. Both County Councils have identified a series of requirements for the undertaking and reinstatement of road works including the appointment of a traffic management coordinator to liaise with other projects to coordinate construction timelines and road openings to minimise the impacts to road users. Pre and post road surveys are also required and the costs of reinstatement to maintain the structural integrity of the public road network are to be borne by the applicant. These requirements are considered to be reasonable in the interests of road safety and, I am satisfied that these can be appropriately dealt with by way of condition of permission, should the Commission be minded to grant permission in this instance.

9.3.13 Finally, I note that Kilkenny County Council, in their description of the development, include the construction of a temporary access track (150m in length) between the N78 and L1834, and Carriageway strengthening works at ‘Black Bridge’ on the L1835 and L3037. The Commission should note that these elements do not form part of the current application and are associated with the previously permitted wind farm project. These elements lie to the north and northwest of the current application site and no element of the current application are proximate to the locations identified.

Residential Amenity

9.3.14 A number of submissions raise concerns regarding the potential impacts of the project on the residential amenity of the area. Such matters include construction effects in terms of noise, air quality, access to farms, homes and businesses, health implication of the high-voltage cabling and impacts on the value of property.

9.3.15 In terms of **noise** associated with the development, there is no doubt but that there will be an impact on existing residential amenity in the area during the construction phase of the project. The subject site lies within a rural area environment with the primary background noise sources identified as 'distant traffic movements and wind generated noise from local foliage'. At the location of the proposed substation, there are 3 houses which are accessed off the same 'lane', with the closest noise sensitive receptor located at 35m from the proposed access track and 165m from the proposed substation. The EIAR assesses a predicted construction noise level of 67dB during the construction phase, which would indicate a likely significant noise effect. The installation of the underground cable will also give rise to a predicted construction noise level of 74dB at a distance of 25m, which is potentially significant within the immediate vicinity of the works. The project includes standard best practice construction methodologies with inherent mitigation to comply with the recommendations of BS 5228-1:2009+A1:2014 Code of practice for noise and vibration control on construction and open sites.

9.3.16 I accept that there is the potential for temporary nuisance to the local population during the construction period, however given the low density of residential dwellings in the area, the limited duration of works and the separation distances involved, I am satisfied that no significant construction phase noise impacts will arise. I further accept that there will be short-term impacts associated with the installation of the underground cable which will affect a number of properties along the route. Subject to the implementation of standard good practice methodologies as indicated in the EIAR and the CEMP, I am satisfied that noise impacts have been sufficiently addressed in the documentation received and can be further dealt with by way of condition requiring the final CEMP to be submitted and agreed with the Planning Authority. I am satisfied, having regard to the information presented, that operational noise is not likely to be significant.

9.3.17 In terms of **air quality** I would note that construction works will include excavation activities, drilling, stripping of soil and the storing of spoil material, which have the potential to result in the generation of dust over the duration of the construction works. Impacts will be temporary, and a Planning Stage Dust Minimisation Plan has been prepared to mitigate dust emissions. The Plan will be reviewed regularly and procedures monitored and assessed. I am satisfied that the

impacts in terms of dust arising from the construction phase of the project are acceptable given the temporary nature and the mitigation measures proposed.

Visual Amenity

9.3.18 The subject site is located within a rural area and within the Killeshin Hills Uplands Character Area as identified in the Carlow CDP. This landscape has a sensitivity rating of 5 in the County Carlow Landscape Character Assessment (LCA), and requires that developments will not impact negatively on the visual amenity of the area. This landscape is classified as having a moderate capacity for windfarm development and a low capacity for industrial development. There are no scenic routes or viewpoints within the project site. It is the LCA policy objective that new developments maintain the integrity of landscape character area though careful location, siting and design.

9.3.19 The elements of the project which run through Co. Carlow include the grid connection route and the electrical control unit (adjacent to the permitted wind farm). The electrical control unit will occupy a floor area of 42m² and will have an overall height of 4.5m. The building will be set back from the public road by approximately 250m and will be screened from view by existing trees and mature site boundaries. I am satisfied that these elements of the project do not represent significant visual impacts in the landscape.

9.3.20 In terms of Co. Kilkenny, the site of the proposed substation lies within the 'Transition Zone' landscape type and the 'B1: Castlecomer Plateau Southern Transition Zone' landscape character area. A short section of the underground electricity line also traverses the 'LCA B: Castlecomer Plateau' landscape character area. The closest landscape area of 'highly scenic and significant visual amenity value lies approximately 4km to the southeast of the substation site. The development management requirements of the Kilkenny City & County CDP 2021 seek to 'continue to permit development… and to direct new development whenever possible towards the vicinity of existing structures and mature vegetation in the Lowland Areas, River Valleys and Transitional Areas'. While I would acknowledge the scale of the proposes substation, I note the visual impact assessment undertaken by the applicant as part of the EIAR.

9.3.21 The proposed buildings and infrastructure associated with the 110 kilovolt (kV) 'loop-in/loop-out' Air-Insulated Switchgear (AIS) electricity substation include 2 no. single-storey control buildings (with a total gross floor area of 622m² and an overall height of approximately 5.54m (Independent Power Provider Building) and 8.55m (EirGrid Building)); transformers, busbars, insulators, circuit breakers, and lightning poles, 2 no. lattice-type interface masts which will have an overall height of 16m and security fencing with an overall height of 2.6m.

9.3.22 I have carefully considered this issue, and note Kilkenny County Councils submission that further viewpoints should be considered as part of the Visual Impact Assessment. In addition, I acknowledge the expertise of the consultant who prepared the VIA for the project, and I am satisfied that the assessment was undertaken in accordance with best practice. I am satisfied that the assessment undertaken adequately represents the project as proposed and the associated visual impacts arising. Given the nature of the receiving landscape, and the proximity of the substation site to the M9 motorway, approximately 70m to the east, and other anthropogenic features, including the railway line between Dublin and Kilkenny approximately 200m to the east and the existing Kellis-Kilkenny 110kV overhead electricity transmission line which runs to the northwest of the substation site in a northeast to southwest direction, together with the nature of the existing site boundaries which envelop the project site, I am generally satisfied that the residual visual effects are not so significant as to warrant a refusal of permission.

Biodiversity

9.3.23 The issue of biodiversity is addressed in Chapter 5 of the submitted EIAR, while habitat maps, bird surveys and other data are provided in Annexes 5.1, 5.2, 5.3, 5.4, 5.5 and 5.6 of said report. A Natura Impact Statement was also submitted, and I have addressed issues relating to Appropriate Assessment separately in Section 11 below.

9.3.24 The habitats recorded in the field surveys (including Fossitt Name and Code) are listed in Section 10.7.7 of this report as are the invasive plant species identified. There are no previously mapped Annex I habitats, records of Floral Protection Order species, protected bryophytes or important habitats such as semi-natural grasslands

or ancient woodlands (AW) present within the project site (NPWS, 2019). The proposed substation and control unit sites generally comprise improved agricultural grassland (GA1) and mosaic of improved agricultural grassland x scrub (GA1 x WS1), predominantly used for grazing cattle. The substation site includes a network of drainage ditches (FW4), Hedgerows (WL1) and Treelines (WL2), while the substation site includes Buildings and Artificial Surfaces (BL3). Other habitats in the vicinity of the project site, including along the route of the grid connection cable include *inter alia* Flowerbeds and borders (BC4), Amenity Grassland (Improved) (GA2), Stone walls (BL1) Earth banks (BL2), Spoil and bare ground (ED2) recolonising bare ground (ED3) and scrub mosaic (WS1), Wet Grassland (GS4), Mosaic of Wet Grassland x Scrub (GS4 x WS1) while the proposed electricity cable will cross Depositing/lowland rivers (FW1).

9.3.25 The proposed development will result in the permanent loss of improved agricultural grassland GA1 and buildings and artificial surfaces BL3. There will also be some permanent loss of some hedgerows WL1 (including hedgerow trees but not treelines themselves) and drainage ditches x treelines mosaic FW4 x WL2 to accommodate the entrance to the substation and the substation itself. There will be some temporary loss of other habitats, ED3, FW4 x WL2, GA1, GS4, WL1, WL1 x WL2, WL2, WS1 and WS5 which are assessed to be of low biodiversity value as they are either highly modified/artificial or do not provide important habitat for animals. No aquatic habitats will be lost. In general, the affected habitats are plentiful within the wider landscape and the impact on biodiversity is considered to be not likely significant. Hedgerows WL1, treelines WL2, watercourses FW1 and drainage ditches FW4 (or mosaics of these habitat types), however, all act as ecological corridors which will be temporarily affected, including the loss of c.4-5m sections of hedgerows or treelines (local higher value) where they intersect with the underground electricity line. Reinstatement of hedgerows or treelines, as well as some replacement for any permanently lost at the substation and control unit sites, will be carried out post construction.

9.3.26 NBDC data for 1 km grid squares overlapping the project site identified records of 6 no. species of threatened and/or protected mammal (see Annex 5.3 of the EIAR) including Eurasian badger *Meles meles*, otter *Lutra lutra*, west European hedgehog *Erinaceus europaeus*, Irish stoat *Mustela erminea subsp. hibernica,*

Eurasian red squirrel *Sciurus vulgaris* and pine marten *Martes martes*. While the downstream otter population is of local higher importance, field surveys found no otter holts or couches within 150m of the watercourse crossings and while a badger latrine was recorded c.290m northwest of the electricity line route, no evidence of badgers was recoded within 50m of any aspect of the project. Several burrows were identified along the route and in hedgerows bounding the substation site used by 3 no. species of non-volant mammals including bank vole *Myodes glareolus*, brown rat *Rattus norvegicus* and rabbit *Oryctolagus cuniculus*. No significant direct or indirect effects on Important Ecological Feature (IEF) mammals are assessed as likely. In terms of IEF aquatic species, there are no desktop records for any threatened or protected aquatic receptors within 1km any of the watercourse crossings. There was no evidence of white-clawed crayfish within 150m of any watercourse crossing, with limited habitat suitability present in terms of instream refugia for all watercourses. With no instream works proposed, there is no direct effects assessed in terms of aquatic ecology. Indirect effects relate to sedimentation and impacts on water quality.

9.3.27 The EIAR acknowledges that no access was possible to third-party lands near the on-road component of the underground electricity line and therefore, a potential bat roost assessment could only be undertaken for trees and structures from the public road. Data from Bat Conservation Ireland (BCI) were examined to locate previously identified roosts within the receiving environment. The assessment in this regard, focused on habitat suitability due to the limited reduction of linear connectivity as a consequence of the project. A desk study was used to compile information on potential bat roosts and foraging habitats within and nearby the project site and a field survey was walked in August 2024. No evidence of roosting bats was observed in any of the trees or structures surveyed. All potential bat roost features identified on site were of low suitability with no active roost field signs recorded and, therefore, no additional bat surveys were undertaken. Bat Conservation Ireland (BCI) data show the closest roosts are c.2km northwest and c.2.2km northwest of the control unit, respectively. Both are roosts for Daubenton's bat. There is no strong ecological connection between the closest nursery roost of Natterer's bat *Myotis nattereri* at Mothel Church, Coolcullen pNHA (Site Code: 000408) which is located c.4.3km from the site, and disturbance/displacement

effects on bats from the pNHA can be excluded. The agricultural building to be demolished has a negligible suitability for roosing bats and 5no. trees, all located outside the project footprint, were evaluated as being suitable for only individual bats or a very small number of bats due to size or lack of suitable surrounding habitats. There are no bridges or culverts along the Paulstown Stream, Moanmore 14 and unnamed tributary, or Shankill 14 watercourse crossings, and the shallow culvert nearby the unnamed watercourse crossing has no suitability for roosting bats due to its low height and lack of suitable crevices.

9.3.28 The applicant submitted a Baseline Bird Survey Report (Annex 5.2 of the EIAR) prepared SLR Environmental Consulting (Ireland) Ltd and dated 4 October 2024. The survey identified 12 bird species were recorded included Common Buzzard, Common Crossbill, Common Kestrel, Common Linnet, Common Snipe, Common Starling, Cuckoo, Eurasian Sparrowhawk, Goldcrest, Meadow Pipet, Northern Raven and Willow Warbler. Within the substation site, a Kestrel was observed flying west across the site of the proposed substation, non-breeding Willow Warbler was observed singing or calling in breeding season in suitable breeding habitat on one visit and 2 Buzzard were observed in breeding season in suitable nesting habitat. At the site of the proposed control unit, 2 sightings of non-breeding Willow Warbler was observed singing or calling in breeding season in suitable breeding habitat on one visit, to the north and south of the control unit building site. In the breeding season, confirmed breeding was identified for linnet *Linaria cannabina* present along the route of the electricity line in wet grasslands, hedgerows and scrubby areas; and probable breeding for meadow pipit *Anthus pratensis* along the route and in adjacent fields, especially in wet grasslands and scrubby areas. During the extended habitat survey, juvenile common buzzard *Buteo buteo* were heard calling in nearby conifer plantation. The likely potential for impacts to birds during the construction phase is nest damage or destruction, disturbance/ displacement to IEF common kestrel, common linnet, common snipe, common starling, goldcrest, meadow pipit and willow warbler and loss of suitable habitat for breeding linnet and meadow pipets.

9.3.29 Whilst no significant impacts on biodiversity are predicted, the applicant has submitted a suite of compensation and enhancement measures as well as mitigation measures to ensure that no significant impact arises in terms of biodiversity. The

measures, included in the EIAR relate to the protection of water quality in watercourses in the vicinity of the site, as well as measures to mitigate impacts on hedgerows and treelines, bats, birds, reptiles and amphibians, and invertebrates. Monitoring of the measures and the project during the construction phase is also proposed to prevent accidental disturbance to resting/breeding/hibernating places of mammals. Specific measures are also proposed with regard to the management of identified invasive non-native plant species across the project site.

9.3.30 I do not consider the proposed substation site, control unit site and grid connection cable route to be particularly sensitive from a biodiversity perspective and consider that potential impacts can be effectively mitigated through the implementation of the measures set out in the EIAR, the majority of which comprise relatively standard good practice construction methods and approaches. I note in this regard that it is proposed to appoint an ECoW to oversee implementation of the identified measures. Subject to compliance with the identified mitigation measures, I am satisfied that the proposed development will not have a significant effect on the biodiversity of the area. As noted above, the issue of Appropriate Assessment is addressed separately in Section 11 below.

Water Environment & Flooding

9.3.31 The Commission will note the concerns raised by third-parties and Kilkenny County Council in terms of flood risk. While the Council indicates that a surface water management proposal has not been provided, this is not the case (Annex 3.5: Planning-Stage Construction & Environmental Management Plan of the EIAR refers) and a Surface Water Management Plan has been prepared for the development (Annex 4 of the CEMP). In addition, the EIAR submitted with the applicant included a site-specific stage 2 Flood Risk Assessment for the project (Annex 7.1). There are no areas identified on the OSI maps of the project site area that are identified as being ‘liable to flood’ or ‘benefitting lands’ and no recurring flood events are noted on or near the substation site or the control unit site. A recurring flood event is mapped along the L7117 local road at Lacken (Flood ID: 2959), noting that the road is periodically impassable (Bagenalstown Area Engineer Meeting – Minutes 04/11/2005).

9.3.32 The majority of the proposed development will occur in excess of 50m from any nearby watercourse with the exception of the 5no. crossings identified and proposed. No instream works are proposed, and the construction methodology provides for HDD at the small lower order streams. A bottomless culvert/bridging structure will be installed at the unnamed watercourse to the north of the substation site to facilitate the construction of the access track. Chapter 3 of the EIAR indicates that the underground electricity line will be installed in the carriageways of a number of local roads and will have no direct effect on existing roadside drainage features. During the construction phase, mitigation measures are proposed to ensure all such roadside drainage features will be protected against any incidences that might result in flow restrictions with the potential to cause flooding.

9.3.33 I am satisfied that the proposed works on the site, including the installation of the underground electricity line, have little or no potential to give rise to impacts on the surface water environment or give rise to any increased flood risk. It is further noted that the proposed development site across its entirety, lies within a Flood Zone C and is identified as a low flood risk zone.

9.3.34 In terms of potential impacts to the water environment, the primary causes of any deterioration in water quality would relate to emissions of sediment or other contaminants to waterbodies and the potential impact of spillages or discharges during construction activities. These are fully considered in the EIAR and NIS. Subject to the identified construction and surface water management and mitigation measures, including the proposed design of the watercourse crossings, it is considered that the development would not negatively impact on the quality or status of waterbodies. Identified mitigation includes adherence to best practice published guidance, including Construction Industry Research and Information Association (CIRIA) guidelines and Inland Fisheries Ireland (IFI) guidelines of protection of fisheries.

9.3.35 At operational stage, mitigation for stormwater is embedded in the design of the project. In addition, wastewater generated at the substation site will be tankered and removed off site and no mitigation is required. Matters relating to the Water Framework Directive are considered further in Section 9.4 of this report.

9.3.36 Kilkenny County Council, and a number of third-party observations, raise concerns in terms of the impact of the project, including the management of existing road drainage ditches, on existing road drainage. It is contended that the proposed piping of the existing ditches using min. 225mm diameter twin wall PVC pipe and backfilling with 38mm-50mm clean stone is insufficient to cater for the existing drainage and spot flooding events on the cul-de-sac road – L66732 Local Tertiary Road. I note the response from the applicant to the submissions raised on the proposed development which indicates that 'all roadside drainage ditches requiring piping shall be piped using minimum 600mm diameter T/W PVC pipe, back filled with 38mm-50mm clean stone and capped with concrete slabs.' I am satisfied that this matter can be appropriately addressed by way of condition requiring agreement between the applicant and the local authority.

9.3.37 A method statement for the five proposed HDD sites is required to be provided to both Kilkenny County Council and Inland Fisheries Ireland, for agreement and approval. It is to be noted that all 5 HDD sites are located at water crossings within private lands. Section 3.4.2 (Chapter 3 of the EIAR) states that the HDD bore will be at a minimum depth of 2.5m below the stream channels to avoid any impact on the watercourses. The proposal will also include the installation of a bridging structure over the unnamed watercourse. I am satisfied that this can be appropriately dealt with by way of condition of permission, should the Commission be so minded to grant permission in this case.

Water Services Infrastructure

9.3.38 The submissions of Carlow County Council and Marston Planning Consultancy, on behalf of their client the Shankill GWS, require that measures to ensure the protection of existing **water service infrastructure** during the construction works are provided. Uisce Eireann has noted the 7.5km distance between the project and the abstraction source for the Gowran-Goresbridge-Paulstown Water Supply and raised no objections.

9.3.39 The Shankill GWS, noted to be constructed in the 1930s, is a gravity fed scheme which serves 13 residential properties in the Shankill area. The source is a surface water and shallow spring that is approximately 2m below ground and

therefore, is considered to be vulnerable to contamination. This source does not have a GSI source protection area mapped and is noted to be located approximately 420m to the northeast of the substation. Third parties, including the Shankill GWS itself, consider that adequate mitigation measures should be required to avoid contamination of the source and to protect the schemes infrastructure under the road due to the level of heavy goods traffic using the laneway.

9.3.40 In terms of the above concerns, I would accept that the EIAR considers and assesses the likelihood of effects on groundwater and water supply sources in Chapter 7 of the EIAR. In addition, I note the proposed mitigation measures to ensure the protection of water supply sources at Section 7.5.1.7, which I consider to be appropriate for the protection of the hydrological and hydrogeological environments.

9.3.41 With regard to the potential effects of construction traffic on the aged infrastructure, I would note the submitted revisions to the proposed construction phase access to the substation site. In the context that construction traffic will not use the L66732, there is reduced potential for effects to arise to infrastructure installed under the road. The potential for heavy traffic crossing above the installed pipework will only arise at the proposed revised construction entrance off the L6673 and at the crossing of the private laneway, to the north of the proposed substation site. At these locations, the applicant proposes to install a concrete slab above the pipework to prevent any disturbance of the pipework or subsidence of the surrounding ground as per normal good construction practice.

9.3.42 In light of the above, I am generally satisfied that the proposed development is acceptable, and the application has appropriately considered and assessed the potential impacts and effects of the project on the existing water services infrastructure in the area.

Other Issues

9.3.43 A number of third-parties raise concerns in terms of the potential for the project, if permitted, to affect the **value of property** and interfere with existing or future plans for home improvements and development. While it is submitted that the location of the underground cables may restrict such developments, I would note that

no element of the project is proposed within private property that has not been approved by the relevant landowners. No element of the project requires access to private residential property and a perusal of the on-line planning systems of both local authorities, suggests that pressure for residential development along the project route and sites appears to be low. I would also note that the site is located within an area under Urban Influence (within both local authorities), which are described as displaying the greatest pressure for development due to the commuter dependence of these areas on urban areas for employment, social and economic functions. Persons applying for permission in such locations are required to comply with certain criteria and stipulations. I am therefore satisfied that the project, while having a temporary negative effect on existing residential properties in the vicinity of the works during the construction phase, is unlikely to impact on property values of use of private lands.

9.3.44 A number of third-parties consider that inadequate **consultation** was undertaken by the applicants, without adequate opportunities for residents to raise questions and discuss alternatives. I note that the applicant undertook public consultation during the project design and EIAR process. The EIAR notes that door-to-door visits and leaflet drops were carried out in August 2024, and a public information event was held over two days. Brochures providing an overview of the proposed development and details of the project team, including contact details were also dispersed. These consultations were managed by a dedicated Community Liaison Officer and a website was established to inform the public about the project. The website also provided updates and contact details for the developer. The public information event was advertised in local newspapers in both Kilkenny and Carlow, as well as on the local radio station. Annex 1.8 of Volume II of the EIAR includes a Community Consultation Report, and notes that elected members of the councils and local TDs were also contacted and invited to the public information event. Posters were also noted to be erected at local shops, businesses, post offices and petrol stations advertising the public event. I am satisfied that the applicant engaged in an appropriate level of consultation in advance of the application being submitted to the Commission and that third parties have had the opportunity to comment on the proposed development and engage with the application process in advance of decision making.

9.3.45 Third parties have raised concerns in terms of the potential **health implications** associated with high-voltage underground cabling given the proximity to residential properties. It is noted that the high-voltage infrastructure will be located solely within the substation and medium voltage electricity lines will connect the wind farm to the substation. The EIAR, Chapter 4, provides that the development will operate in strict compliance with ICNIRP[2] Guidelines for EMF. The ESB information document entitled 'EMF & You: Information about Electric & Magnetic Fields and the electricity network in Ireland' (ESB, 2017), provides that electric fields arising from underground electricity lines are negligible while magnetic fields directly above a 110kV underground electricity line is 0.13-microteslas (µT). At the electricity substation, it is predicted that EMF levels will be approximately 5µT, significantly below the accepted limit of 100µT as set out by the ICNRP. The EIAR assesses that EMF levels at residential properties will be imperceptible. I am satisfied that the issue of EMF has been appropriately addressed, and significant effects are not assessed as likely to arise.

9.3.46 Marston Planning Consultancy, on behalf of their clients Mr. & Mrs. Maher and Mrs. Kelly, questions the need for a **10-year permission** given that the construction period is indicated to be 18 months. In this regard, the applicant has sought a 10-year permission based on the nature of the project, predicted construction timeframes and to ensure that all other required statutory consents and licences are in place, including:

- an electricity transmission network connection agreement from EirGrid
- construction authorisation from the Commission for Regulation of Utilities
- road opening licences from the respective planning authorities.

I am satisfied that a 10-year permission in this instance would be consistent with the duration of permission for other previously granted energy generating and transmission network infrastructure projects, and I consider it to be appropriate for the proposed development, should the Commission be minded to grant permission.

9.3.47 Kilkenny County Councils submission makes reference to the **pre-application proposal** which included a containerised (battery) energy storage system to be

[2] International Commission on Non-Ionizing Radiation Protection (ICNRP)

located within the site of the proposed substation. This element no longer forms part of the project, and is not considered further. Other references to other future uses of lands within the landholding are also a matter for future, if any, applications for development and will be considered at that time. Any future applications would be subject to a consenting process and environmental assessment process which would include an assessment of cumulative effects.

9.3.48 The Council further require that a report on the structural condition of bridges / structures be submitted to determine how the cable installation and HDD will impact individual bridges or structures in terms of the ground conditions. It is to be noted that the proposed electricity line route does not include installation within or under any existing bridge structure.

9.3.49 Both Kilkenny County Council and Carlow County Council have recommended the inclusion of conditions relating to development **contributions and bonds** which are to be agreed with the local authority prior to commencement of the development. In addition, Kilkenny County Council also recommends an inclusion of a condition relating to the Community Benefit Fund associated with the Whitehill Wind Farm. I refer to condition 18 attached to the parent permission for the windfarm – ABP-315365-22 refers – which requires that prior to the commencement of development, the community gains proposals shall be submitted to and agreed in writing with the planning authorities. As such, this has already been applied as part of the windfarm permission and, as the current proposal is not a commercial project with the substation ultimately becoming an asset of the state, is unnecessary in this instance. The Commission will note that there is no provision to include a condition requiring the payment of a development contribution in S182A cases. I consider it reasonable to include a condition in relation to the submitting of a bond as requested.

9.4 Water Framework Directive Assessment

9.4.1 The dominant water feature in this area is the River Barrow which lies approximate 3.5km to the east of the proposed electricity substation site. There are a total of 19 no. waterbodies located downstream of the project which include 12 river bodies, 5 transitional waterbodies and 2 coastal waterbodies. There are also 3 groundwater

bodies which underlie the project site. A number of Protected Areas are also identified within the vicinity and downstream of the project site.

9.4.2 In terms of surface waterbodies, the electricity substation, electrical control unit and electricity line are located entirely within the River Barrow surface water catchment within Hydrometric Area 14. More specifically:

- The substation is located in the Barrow_SC_120 sub-catchment and within the Moanmore_010 river waterbody sub-basin (Moanmore Stream catchment)
- The electrical control unit is also mapped within the Barrow_SC_120 sub–catchment, whilst being situated more locally in the Monefelim_010 river sub-basin (Monefelim River catchment), and
- The majority of the electricity line is also located in the Barrow_SC_120 sub–catchment with the exception of 1.3km which is located in the Barrow_SC_110 sub-catchment and more locally within the Old Leighlin Stream_010 river waterbody sub-basin (Old Leighlin Stream catchment).

The electricity line passes through 4 no. sub-basins, including approximately 1.4km within the Monefelim_010 (High Status – up from Good in previous WFD Cycle – and not at risk of failing to meet its WFD objectives), approximately 2.1km within the Monefelim_030 / Paulstown Stream (Moderate Status – no change from previous WFD Cycle - and at risk of failing to meet its WFD objectives) , approximately 1.3km within the Old Leighlin Stream_010 (Good Status – no change from previous WFD Cycle - and not at risk of failing to meet its WFD objectives) and approximately 4km within Moanmore_010 (Under Review – previously Good Status in previous WFD Cycle - and not at risk of failing to meet its WFD objectives).

9.4.3 In terms of groundwater bodies, the electrical control unit and the northern section of the electricity line route are located in the Castlecomer GWB (IE_SE_G_034). The central section of the electricity line route is mapped in the Shanragh GWB (IE_SE_G_124). The substation location and southernmost section of the electricity line route are mapped within the Bagenalstown Lower GWB (IE_SE_G_157). All three Groundwater Bodies are assigned Good Status – no change from previous WFD Cycle – and are not at risk of failing to meet their WFD objectives.

9.4.4 The substation overlies a Regionally Important Aquifer – Karstified (diffuse) (Rkd), while the electrical control unit and northern section of the cable route overlie a Poor Aquifer - Bedrock which is Generally Unproductive (Pu) and Locally Important Aquifer – Bedrock which is Generally Moderately Productive (Lm). The central section of the cable route overlies a Poor Aquifer – Bedrock which is Generally Unproductive except for Local Zones (Pl) and Bedrock which is Generally Unproductive (Pu). The submitted Water Framework Directive Assessment (Annex 7.3 of the EIAR) also identifies bathing waters, nutrient sensitive areas, shellfish areas and drinking water protected areas in their assessment of the proposed development. A flood risk assessment (Annex 7.1 of the EIAR) indicates that no past flood events are mapped near the electricity substation or the electrical control units. A recurring flood event is however mapped along the electricity line route at the L7117 local road in the townland of Lacken (Flood ID: 2959). The flood source is not specified but as there is no watercourse nearby, it is considered to be related to surface water runoff.

9.4.5 The route of the proposed underground electricity line crosses 5 watercourses, 4 of which are mapped by the EPA:

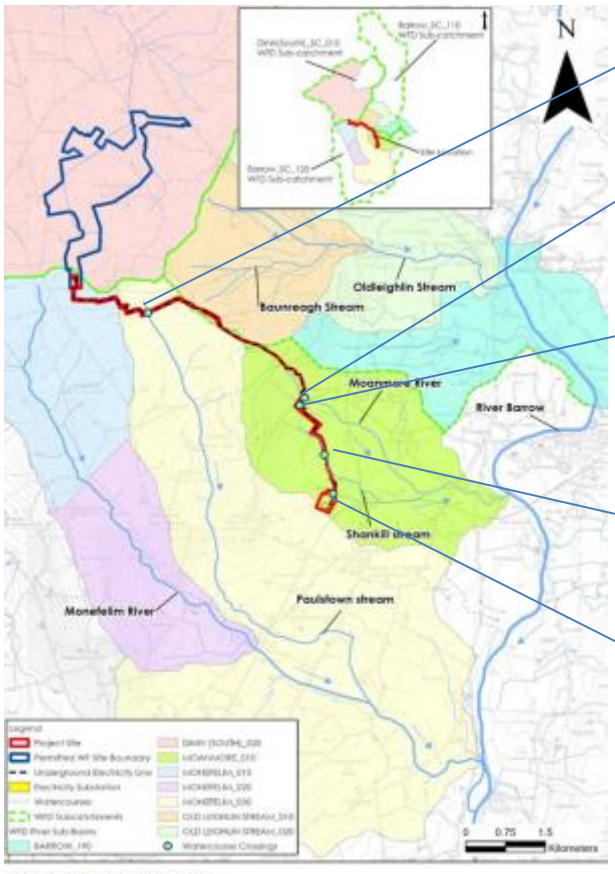


Figure 8: Local Hydrology Map

- Paulstown Stream (EPA Code: 14P06) within the Monefelim_030 river sub basin;
- Moanmore Stream (EPA Code: 14M24) within the Moanmore_010 river sub basin;
- An unmapped watercourse that flows into the Moanmore Stream approximately 1km downstream of the above crossing location;
- Shankill (14) Stream (EPA Code: 14S30) within the Moanmore_010 river sub basin; and;
- The unnamed watercourse / headwater north of electricity substation location within the Moanmore_010 river sub basin

The crossings will be carried out using horizontal directional drilling methods and therefore, no instream works are proposed. The crossing of the unnamed watercourse / headwater north of the electricity substation will utilise a bottomless culvert/bridging structure which will also accommodate the construction of the access track. The installation of the culvert will require a Section 50 license application to the OPW in accordance with the Arterial Drainage Act 1945. As a result of the proposed watercourse crossing methodology to be employed, there is a risk of surface water quality effects during the construction phase and installation of the electricity line, and construction of the substation and electrical control unit. Such risks relate to accidental emissions of sediments or other contaminants to the waterbodies. The potential impact of spillages, release of hydrocarbons and cement-based products or sediment discharges during construction activities and are considered in the EIAR and NIS.

9.4.6 The project documentation includes a suite of mitigation measures which relate to the protection of waters, including both surface and groundwater bodies, for all phases of the project, including the WFD Assessment included in Annex 7.3 of the EIAR. I refer the Commission to Appendix 1 of this report which sets out my WFD Assessment and considers the details of the mitigation measures required to comply with WFD Objectives in relation to both surface waterbodies and groundwater bodies. Having regard to the construction methodology proposed by the applicant, particularly in terms of the proposed design of the crossings of the Paulstown, Moanmore and Shankill Streams, and the two unnamed streams identified, together with the surface water management and mitigation measures detailed, and commitments to comply with relevant guidance and guidelines (including CIRIA guidelines and IFI guidelines of protection of fisheries), it is considered that the construction phase of the development would not negatively impact on the quality or status of waterbodies.

9.4.7 At operational stage, mitigation for stormwater management and pollution prevention measures are embedded in the design of the project and includes that surface water runoff will flow through an oil interceptor and stormwater will be discharged to local drains or to ground via soakaways following attenuation, and at greenfield runoff rates. Wastewater arising will be stored in a sealed sub-surface foul holding-tank and

will be removed from site as required by a local licensed waste collector. The IFI has requested that a condition requiring the inclusion of a condition requiring integrity testing and the putting in place of maintenance agreements for the foul water holding tank and interceptor system on the surface water network. I consider this to be reasonable.

9.4.8 I have assessed the proposed development and considered the objectives as set out in Article 4 of the Water Framework Directive to protect and, where necessary, restore surface (in terms of ecological and chemical status) and ground (in terms of chemical and quantitative status) waterbodies in order to reach good status, and to prevent deterioration. I have further had regard to the proposed mitigation measures as detailed in the application documentation, and in particular, those measures relating to surface water management and the protection of waters. I further note the designed in measures, including the proposed site drainage system and the procedures for the management of spillages or the release of chemicals, hydrocarbons and cement-based products to watercourses during all phases of the project set out in the application. Subject to the implementation of such mitigation, a significant risk of impacts on water quality is not considered to arise. In having considered the nature, scale and location of the project, I am satisfied that it can be eliminated from further assessment because there is no conceivable risk to any surface and/or ground waterbodies.

9.4.9 I conclude that on the basis of objective information, that the proposed development will not result in a risk of deterioration on any waterbody (rivers, lakes, groundwaters, transitional and coastal) either qualitatively or quantitively, or on a temporary or permanent basis, or otherwise jeopardise any waterbody in reaching its WFD objectives, and consequently can be excluded from further assessment.

10.0 Environmental Impact Assessment

10.1 Statutory Provisions

10.1.1. This application was submitted to the Board after the commencement of the European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018 which transpose the requirements of Directive 2014/52/EU into Irish law. The Environmental Impact Assessment Directive requires that projects that are likely to have significant effects on the environment must be suitably assessed prior to any consent decision being made.

10.1.2 The application was accompanied by an Environmental Impact Assessment Report (EIAR), prepared by Gaeltech Energy Services. An EIAR is not mandatory for the type of development proposed, however, the proposed development will serve a permitted wind farm development (ABP315365-22 refers) which comprised a class of development where mandatory EIA is prescribed. As EIA includes consideration of cumulative effects with other permitted and planned development in the area, the applicant has submitted an EIAR with this current application.

10.1.3 This section of my report comprises an Environmental Impact Assessment (EIA) of the proposed development and should be read in conjunction with the planning and appropriate assessment sections of my report. This EIA is also based on my site inspection of 10th June 2025, and the other documentation on file including the planning authority reports, planning history, and third-party submissions and observations.

10.2 EIA Structure

10.2.1 This EIA of the proposed development is undertaken in accordance with Planning and Development Act 2000 (as amended) and the associated Regulations, which incorporate the European Directives on Environmental Impact Assessment (Directive 2011/92/EU as amended by 2014/52/EU). Section 171A of the Planning and Development Act, 2000 (as amended) defines EIA as:

a. consisting of the preparation of an Environmental Impact Assessment Report (EIAR) by the applicant, the carrying out of consultations, the examination of the EIAR and relevant supplementary information by the

Board, the reasoned conclusions of the Board and the integration of the reasoned conclusion into the decision of the Board, and

b. including an examination, analysis, and evaluation, by the Board, that identifies, describes and assesses the likely direct and indirect significant effects of the proposed development on defined environmental parameters and the interaction between these factors, and which includes significant effects arising from the vulnerability of the project to risks of major accidents and/or disasters.

10.2.2 Article 94 of the Planning and Development Regulations, 2001 and associated Schedule 6 set out requirements on the contents of an EIAR.

10.2.3 This EIA report is therefore divided into two sections. The first section assesses compliance with the requirements of Article 94 and Schedule 6 of the Regulations. The second section provides an examination, analysis and evaluation of the development and an assessment of the likely direct and indirect significant effects of it on the following defined environmental parameters, having regard to the EIAR and relevant supplementary information:

- population and human health,
- biodiversity, with particular attention to species and habitats protected under the Habitats Directive and the Birds Directive,
- land, soil, water, air, and climate,
- material assets, cultural heritage, and the landscape,
- the interaction between the above factors, and
- the vulnerability of the proposed development to risks of major accidents and/or disasters.

10.2.4 It also provides a reasoned conclusion and allows for integration of the reasoned conclusions into the Board's decision, should they agree with the recommendation made.

10.3 Issues Raised in Respect of EIA

10.3.1 Issues raised in respect of EIA by parties to the application are summarised as follows:

- Kilkenny County Council notes concerns with regard to the following chapters of the EIAR

- Chapter 4: Population & Human Health – it is considered that the EIAR does not adequately assess all potential impacts at both construction and operational phases in terms of residential amenity and public health in terms of noise and vibration given the proximity of neighbouring dwellings and the protection of local source protection areas at the local public water supplies.
- Chapter 5: Biodiversity – the EIAR does not clearly identify what trees are to be removed and whether or not said trees are used as bat roosts. The felling of trees and loss of hedgerows needs further investigation.
- Chapter 7: Water – potential impacts on water supplies is of concern and requires to be thoroughly assessed.
- Chapter 9: Landscape – additional viewpoints should be considered.
- Chapter 11: Noise & Vibration – the EIAR considers that the substation is located a sufficient distance from dwellings that significant noise effects are not assessed as likely to be significant. This requires to be adequately assessed, and residential amenity protected.

- Inadequate consideration of flood risk, referring to generic intentions with a lack of detail.
- There is no assessment of effects in relation to any deviations of layout of the substation compound.
- Inadequate assessment of impact associated with noise during operational phase and a flawed noise assessment undertaken.
- The EIAR fails to adequately consider the potential impacts on water quality, surface run off, pollution mitigation measures, and the impacts on groundwater and water courses.
- Impacts on the Shankill GWS, constructed in the 1930s, and the source of the spring has not been adequately considered or addressed in the EIAR.
- The consideration of alternatives is unclear and there has been an inadequate consideration of the impact on the local environment and residential amenity.

- The EIAR lacks clarity in terms of construction traffic and an inadequate consideration of the impact on the laneway.
- The Bat Survey submitted is inadequate.
- Inadequate assessment of impacts associated with hedgerow removal.
- It is considered that the development has failed to have adequate regard to EIA Directives, EU Regulations EC Regulations, Planning & Development Act 2000 (as amended) and the Planning and Development Regulations 2001 (as amended).
- Cumulative impact has not been adequately assessed.
- Inadequate public consultation.

These issues are elaborated on in the assessment below.

10.4 Compliance with the Requirements of Article 94 and Schedule 6 of the Regulations 2001

10.4.1 The EIAR accompanying the application contains two volumes. Volume 1 comprises the main EIAR text, presented in a grouped format structure, and Volume 2 contains the Annexes and technical data and reports. Environmental mitigation measures are also presented in a stand-alone Annex (Annex 1.9) as part of Volume 2 and a Non-Technical Summary is also included.

10.4.2 Chapter 1 of Volume I sets out an introduction to the EIAR and provides an overview of the purpose, structure and scope of the EIAR, as well as details of consultation and public participation. Chapter 2 outlines an assessment of the alternatives considered. Chapter 3 provides a description of the proposed development.

10.4.3 The likely significant direct and indirect effects of the proposed development are considered in the remaining chapters of Volume I, which address the following headings, in accordance with Article 3 of the EIA Directive 2014/52/EU:

- Chapter 4: Population and Human Health
- Chapter 5: Biodiversity
- Chapter 6: Land & Soils
- Chapter 7: Water
- Chapter 8: Air Quality & Climate
- Chapter 9: Landscape

- Chapter 10: Cultural Heritage
- Chapter 11: Noise & Vibration
- Chapter 12: Material Assets
- Chapter 13: Interactions of the foregoing

10.4.4 Major Accidents or Natural Disasters are considered in Chapter 4 of the EIAR, while the risk of flooding is addressed in Chapter 7. In terms of cumulative impacts, the EIAR considers the likelihood of the project, in its totality and including secondary and off-site developments, and acting in combination with existing, permitted and proposed developments, and the likely cumulative effects in Chapter 1. Such cumulative effects have been considered as part of the cumulative impact assessment within each chapter.

10.4.5 I assess compliance of the EIAR submitted to the Board with the requirements of Article 94 and Schedule 6 (paragraphs 1 and 2) of the Regulations below.

Article 94(a) Information to be contained in an EIAR (Schedule 6, paragraph 1)	
A description of the proposed development comprising information on the site, design, size and other relevant features of the proposed development (including the additional information referred to under section 94(b).	A description of the proposed development is contained in Chapter 3 of the EIAR and associated annexes and drawings. The information presented includes details on the site location and context, together with its main physical characteristics, including design, size, scale and land-use requirements of all relevant phases of the existence of the project from its construction through to operation and decommissioning. The details include the electricity substation, underground lines, electricity control unit, earthworks, drainage management and disposal, landscaping plans as well as details of the sources of aggregates, haul routes and quantiles. The EIAR also describes the construction, operational and decommissioning phases of the development. I consider the description adequate and provides a detailed overview of its scale, design, construction aspects and environmental impacts to enable decision-making.
A description of the likely significant effects on the environment of the proposed development (including	An assessment of the likely significant direct, indirect, and cumulative effects of the development is carried out for each of the technical chapters of the EIAR (Chapters 4-12). Each chapter also includes details of measures to be

the additional information referred to under section 94(b).	implemented to mitigate the impacts and risks to the environment identified. I am satisfied that the assessment of significant effects, together with the details of mitigation measures proposed, is comprehensive and robust and enables decision making.
A description of the features, if any, of the proposed development and the measures, if any, envisaged to avoid, prevent or reduce and, if possible, offset likely significant adverse effects on the environment of the development (including the additional information referred to under section 94(b).	Each technical Chapter of the EIAR describes the measures envisaged to avoid, prevent, reduce or, if possible, offset any identified significant adverse effects on the environment. A summary of impacts, mitigation measures and residual effects, some in tabular form where relevant, is also provided at the end of each of the technical chapters. Annex 1.9 presents a Schedule of Mitigation Measures while Annex 3.5 includes the Planning Stage CEMP and Annex 8.1 which presents the Planning Stage Dust Minimisation Plan for the development. Mitigation measures comprise standard good practices.
A description of the reasonable alternatives studied by the person or persons who prepared the EIAR, which are relevant to the proposed development and its specific characteristics, and an indication of the main reasons for the option chosen, taking into account the effects of the proposed development on the environment (including the additional information referred to under section 94(b).	A description of the alternatives considered is contained in Chapter 2 of the EIAR. The alternatives considered include, do nothing', alternative substation locations, substation designs and alternative electricity line route options and construction material delivery routes. The EIAR acknowledges that as the purpose of the project is to provide a means of connecting the permitted White Hill Wind Farm to the national electricity grid in order to export renewable electricity generated by the wind farm, the consideration of the range of possible alternatives is limited by this circumstance. The main reasons for opting for the current proposal were based on minimising environmental effects. The process and selection of the preferred alternative for each project element is summarised in Tables within Chapter 2, and Annexes 2.1 to 2.4 of the EIAR. I consider, therefore, that the applicant has studied reasonable alternatives in assessing the proposed development and has outlined the main reasons for opting for the current proposal before the Board and in doing so

	the applicant has taken into account the potential impacts on the environment.
Article 94(b) Additional information, relevant to the specific characteristics of the development and to the environmental features likely to be affected (Schedule 6, Paragraph 2).	
A description of the baseline environment and likely evolution in the absence of the development.	A description of the baseline environment is provided in each of the technical chapters of the EIAR. I am satisfied, is sufficient to enable the assessment of likely effects and to enable decision making.
A description of the forecasting methods or evidence used to identify and assess the significant effects on the environment, including details of difficulties (for example technical deficiencies or lack of knowledge) encountered compiling the required information, and the main uncertainties involved	Forecasting methods and/or evidence to identify and assess significant effects are included in the EIAR, as required for relevant environmental topics. The applicant has indicated in the different chapters of the EIAR where difficulties have been encountered (technical or otherwise) in compiling the information to carry out EIA. I comment on these, where necessary in the technical assessment below. I am satisfied that forecasting methods are adequate to facilitate decision making.
A description of the expected significant adverse effects on the environment of the proposed development deriving from its vulnerability to risks of major accidents and/or disasters which are relevant to it.	Major Accidents or Natural Disasters are considered in Chapter 4 of the EIAR, while the risk of flooding is addressed in Chapter 7. The EIAR considers that there is limited likelihood for significant natural disasters to occur at the project site, limited to flooding and fire. The EIARs assessment of risk of major accidents identifies the proximity of the high-pressure gas pipeline along the L6673 (located at a depth of 3.2m) for consideration, while it is noted that the project is not regulated by or connected/proximate to any site regulated under the Control of Major Accident Hazards Involving Dangerous Substances Regulations (COMAH/SEVESO Directive) and there is no likelihood of effects on, or interactions with, any such site.

	These risks are reasonably described and are assessed in my report.
Article 94 (c) A summary of the information in non-technical language.	This information has been submitted as a separate standalone document titles Non-Technical Summary. I have read this document, and I am satisfied that the document provides a concise, detailed description of the proposed development, the baseline environment, the potential impacts associated with the project on the environment, proposed mitigation measures, and monitoring where deemed necessary. I am further satisfied that the NTS is written in accessible and non-technical language.
Article 94 (d) Sources used for the description and the assessments used in the report	The EIAR uses a range of information and data sources to inform the description, and the assessment of the potential environmental impact and all of which, are set out in each chapter of the EIAR, and relevant Annexes. I consider the sources relied upon are generally appropriate and sufficient.
Article 94 (e) A list of the experts who contributed to the preparation of the report	Chapter 1 includes details of the EIAR project team including a list of the contributors to each chapter and sets out their relevant qualifications and experience. Each chapter also includes a Statement of Authority setting out the persons involved in the preparation of the chapter and their relevant qualifications and experience.

Table 2 - Compliance of the EIAR with the requirements of Article 94 and Schedule 6 (paragraphs 1 and 2) of the Regulations

Consultations

10.4.6 The application has been submitted in accordance with the requirements of the Planning and Development Act 2000 (as amended) and the Planning and Development Regulations 2001 (as amended) in respect of public notices. I note that the public notices, both newspaper and site notices, refer to all of the townlands in which the development is proposed. The applicant has further submitted details of the project including details relating to the pre-application consultation with the Board, the SID determination, 11 letters of consent from relevant landowners, SID application form, public notices and letters to prescribed bodies.

10.4.7 The Board will note the concerns raised by third-parties regarding the consultation undertaken with regard to the project. The applicant submitted details of the public consultation carried out as described in Chapter 1 of the EIAR, with a full Community Consultation Report presented at Annex 1.8 (Vol. II) of the EIAR. The consultation effort included:

- Door-to-door visits in August and September 2024, together with leaflet drops.
- A public information event was held on 28 and 29 August 2024 at the Lord Bagenal Inn, Leighlinbridge, County Carlow where members of the public and community groups were afforded the opportunity to discuss the project directly with the project team.
- A website was established for members of the public

The public consultation was managed by a dedicated Community Liaison Officer, and members of the public could contact the Developer via email or a freephone number.

10.4.8 I would further advise that submissions have been received from statutory bodies and third parties and are considered in this report, in advance of decision making. I am satisfied, therefore, that appropriate consultations have been carried out and that third parties have had the opportunity to comment on the proposed development advance of decision-making.

Compliance

10.4.9. 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, adequately identifies and describes the direct, indirect and cumulative effects of the proposed development on the environment, and complies with article 94 of the Planning and Development Regulations 2000, as amended.

10.5 Assessment of Likely Significant Effects

10.5.1 This section of the report sets out an assessment of the likely environmental effects of the proposed development under the following headings, as set out in Section 171A of the Planning and Development Act 2000, as amended:

- Population and human health
    - Chapter 4
- Biodiversity, with particular attention to the species and habitats protected under the Habitats and Birds Directives (Directive 92/43/EEC and Directive 2009/147/EC respectively)
    - Chapter 5 – Biodiversity
- Land, soil, water, air and climate
    - Chapter 6 – Land & Soils
    - Chapter 7 – Water
    - Chapter 8 – Air & Climate
    - Chapter 11 – Noise & Vibration
- Material assets, cultural heritage and the landscape
    - Chapter 9 – Landscape
    - Chapter 10 – Cultural Heritage
    - Chapter 12 – Material Assets
- The interaction between these factors
    - Chapter 13 – Interactions

10.5.2 In accordance with section 171A of the Act, which defines EIA, this assessment includes an examination, analysis and evaluation of the application documents, including the EIAR and submissions received and identifies, describes and assesses the likely direct and indirect significant effects (including cumulative effects) of the development on these environmental parameters and the interaction of these. Each topic section is therefore structured around the following headings:

- Issues raised in the appeal/application.
- Examination, analysis and evaluation of the EIAR.
- The Assessment: Direct and indirect effects.
- Conclusion.

10.6 Population & Human Health

Issues Raised

10.6.1 Issues have been raised in terms of population and human health by Kilkenny County Council and third parties with regard to the impacts on residential amenity due to noise and vibration and disruption during the construction and operational phases of the project. Further concerns are raised with regard to the protection of local water supply source protection areas.

10.6.2 Third parties also consider that the noise assessment undertaken is flawed. Concern is raised by the Shankill GWS that the potential impacts to this group water scheme, which serves houses in the area, has not been adequately considered. Third parties also consider that adequate public consultation was not undertaken

Examination, Analysis and Evaluation

10.6.3 Chapter 4 of the EIAR considers the project in terms of Population and Human Health. Other chapters and annexes of the EIAR which also consider the effects on population and human health include:

- Chapter 8: Air Quality & Climate
- Chapter 9: Landscape
- Chapter 11: Noise & Vibration
- Chapter 13: Interactions between environmental factors
- Annex 1.4: Kilkenny City & County Council Scoping Response
- Annex 1.5: Carlow County Council Scoping Response
- Annex 8.1: Planning Stage Dust Minimisation Plan
- Annex 9.1: Photomontages
- Annex 9.2: Landscape & Ecological Mitigation Plan

Issues specifically examined in Chapter 4 include:

- Economic Activity – will the development stimulate additional development and/or reduce economic activity and, if either, what type, how much and where?

- Social Consideration – will the development change patterns and types of activity and land use?
- Land-uses – will there be severance, loss of rights of way or amenities, conflicts, or other changes likely to ultimately to alter the character and use of the surroundings?
- Tourism – will the development affect the tourism profile of the area? and,
- Health and Safety – will there be risks of death, risks to public health, disease, discomfort or nuisance?

10.6.4 The baseline environment is described in terms of the Wider Study Area (WSA), which extends to the counties of Kilkenny and Carlow, and the Local Study Area (LSA), which extends to 5km from the project site. The EIAR includes an overview of the population, labour market, education & skills, business diversity & supply chains and the visitor economy associated with both counties. The LSA baseline is considered under the following headings:

- Community
- Recreation
- Visitor Economy Assets
- Land Use

10.6.5 The settlements and nucleated clusters are identified with Paulstown, c1km, Oldleighlin, c3km and Muine Bheag, c3km, notable settlements. In terms of recreational facilities, the EIAR identifies the proximity of the Barrow Valley Greenway and Blueway, c3km to the east, and a number of facilities at Muine Bheag, Paulstown, Shankill and Old Leighlin. In terms of tourism, a small number of self-catering and rental properties are noted, while the primary land use in the LSA is predominantly agricultural/forestry and quarrying.

10.6.6 Limitations of the assessment were noted in terms of information regarding capital expenditure and construction employment.

10.6.7 Table 10.6 below presents a summary of the likely effects of the proposed development on population & human health as identified in the EIAR.

Potential Population & Human Health Impacts	Potential Effects in the absence of Mitigation	Mitigation & Monitoring Measures	Residual Impacts
Construction Phase – Wider Study Area			
Employment & Local Investment	• A workforce of c40 people will be required over the 15–18-month period. • The total investment comprises approximately €15m. • Supply chain companies in the area are likely to benefit. • Local businesses likely to experience indirect benefits. • No likely significant adverse effect on the equine industry is anticipated.		No significant residual adverse construction effects are assessed as likely to occur
Tourism Economy	• Accommodation providers may see temporary enhanced levels of occupancy through the low-season. • Tourists may be unable to find local accommodation where the accommodation is occupied by construction workers. This is considered to be a temporary negative effect.		As above
Construction Phase – Local Study Area			
Population Sustainability & Residential Amenity	• The EIAR considers the findings in other chapters relating to noise, transport & access, land & soil, water and landscape in		Slight to moderate negative, and of a temporary nature.

	determining the overall impact of the project on amenity • Construction noise will be temporary in nature and will not give rise to any likely significant noise effects. • Temporary impacts to residential properties during the laying of cable will not be significant. • Increased traffic on the local roads is assessed as ranging from moderate-slight to imperceptible, negative effect of short-term duration and high probability. • No likely significant effects on population sustainability are anticipated • Likely effects on residential amenity are expected to be slight to moderate negative, and of a temporary nature.		
General Amenity & Well Being	• Construction works are temporary in nature and will occur within daytime hours and not on Sundays or Public Holidays. • The substation will be located on private lands and no rights-of-way are affected. • The installation of the underground electricity line will result in disruption to local residents, landowners and business owners. • Delivery of materials will involve additional traffic movements through small	• CEMP will be in place. • Traffic management measures will be in place. • Alternative access routes will be provided. • Adequate provision for access, including pedestrians, will be maintained.	Construction traffic movements are assessed to have a moderate-slight negative effect of a temporary nature.

	communities, construction traffic is assessed to have a moderate-slight negative effect of a temporary nature on general amenity and well-being. • The route of the underground electricity line intersects with a high-pressure gas pipeline along the L6673. In the event of an accidental release of gas, the effect on population and human health is assessed as likely to be moderate-slight, indirect and short-term.		
Land Use	• The project site generally comprises improved grassland, small pockets of forestry and semi-natural areas as well as public roads. • There will be temporary disruption to road users along the route of the electricity line.	• Measures are designed to minimise any likely land use effects. • Lands subject to works will be clearly identified. • Disturbed lands will be reinstated and returned to agricultural use insofar as possible.	Temporary
Tourism & Recreation Assets	• The sensitivity of all but 1 receptor is assessed as low. • The magnitude of any adverse effects is also low. • The effect on receptors in the LSA is negligible. • The Barrow Way Greenway & Blueway has a medium level of sensitivity due to regional	• The CEMP will set out measures to ensure local residents/businesses are informed of the construction works.	Negligible

	importance. The magnitude is assessed as being negligible and overall significance is imperceptible. • The effect on businesses is assessed as beneficial, sensitivity low and magnitude negligible.		
Major Accidents or Natural Disasters	• The project is not identified to be a likely source of pollution. • Site investigations indicate that the ground conditions show no evidence of any likely ground instability. • There is limited likelihood for significant natural disasters to occur, limited to flooding and fire. • The site is not regulated by or connected/proximate to any COMHA/SEVESO site, with no likelihood of effects on or interactions with any such site.	• Mitigation by design feature which maximises the distance to residential dwellings limits a likelihood of significant human health effects.	
Cumulative Effects	• Given the distance from the permitted White Hill WF, cumulative effects in respect of noise and traffic will not arise. • Positive cumulative effects could be experienced by suppliers of construction materials, accommodation providers and other tourism service providers.		

Operational Phase – Wider Study Area			
Categories as detailed above	• The project will contribute 0.25 full time equivalent jobs. • No effects on the equine industry are likely • Landscape and visual effects are assessed as not significant to imperceptible.		Neutral
Operational Phase – Local Study Area			
Categories as detailed above	• No likely significant effects identified. • Noise levels during the operational phase of the project are not determined to be sufficient to cause noise induced hearing damage or sleep disturbance. • In terms of electric fields and magnetic fields, the predicted levels are substantially below the limits set out by the ICNIRP[3]. • At the electricity substation, it is predicted that EMF levels will be approximately 5µT. Given the distance between the substation and nearest dwellings, EMF levels at the dwellings are assessed as imperceptible. • The project will have no effect on the GNI gas pipeline and no risks to population and human health are assessed.	• Mitigation measures already proposed in the EIAR with respect of water protection, noise minimisation and protection of the GNI gas pipeline.	No significant population or human health effects likely to occur.

[3] The International Commission on Non-Ionizing Radiation Protection (ICNRP)

	• No significant cumulative effects are determined and will be avoided through mitigation measures		
Decommissioning Phase			
	• The electricity substation will form part of the national electricity network and decommissioning will not occur. • The underground cables will be removed on the decommissioning of the White Hill Wind Farm. • The electrical control unit will be decommissioned and removed from site for re-use or recycling. • Minor traffic disruption and noise emissions may be experienced by local residents; however, significant effects are not likely to arise.	• Other than the implementation of standard best practice procedures, no decommissioning phase mitigation measures are required.	No significant residual adverse effects are assessed as likely to occur.
Cumulative Effects - Summary			
• No significant effects on population and human health are determined with regard to the proposed development. • Cumulative effects are possible in relation to the construction of other projects if the construction phases overlap. However, given the separation distance between the core construction area of the windfarm and the subject project, adverse cumulative effects in terms of noise and traffic are assessed as not arising. • The existing, permitted or proposed developments within the WSA and LSA are not of a scale or nature to result in an in-combination effect on population and human health during the operational phase of the project.			

Table 10.6 - Consideration of Impacts, Significance & Mitigation Measures for Population & Human Health

Assessment of Direct and Indirect Effects

10.6.8 I have examined, analysed, and evaluated Chapter 4 of the EIAR, and all of the associated documentation and submissions on file in respect of effects on population and human health. I am satisfied that the applicant has presented a good understanding of the baseline environment, and that the key impacts in respect of likely effects on population and human, have been identified.

10.6.9 I am further satisfied that the key direct and indirect effects will be the short-term effects on people living, working, and travelling on the public road network in the area of the site during construction, for example by way of noise, dust, additional traffic, and short-term road closures. Construction noise and dust will affect nearby dwellings with no local community facilities noted to be directly proximate to the project site. Traffic diversion will also result in noise increases along the routes affected. Some direct and indirect positive effects will also arise, with local economic effects, including potential employment opportunities. Pockets of agricultural land will be affected during the construction phase, with the agreement of landowners, however, I note the mitigation measures proposed to ensure that the land will be returned to agricultural use following the construction phase. Overall, I am satisfied that the proposed development is not likely to have any significant adverse health effects. The construction phase effects will be short term, and the provision of a community liaison officer has been engaged as a point of contact for those who have concerns about construction works.

10.6.10. During the operational phase, the proposed underground cable will be buried within both private agricultural land and along the public road network. As indicated, the land take areas will be returned to the original use following the construction phase.

10.6.11. Mitigation measures typically comprise standard good construction practices, which if implemented will negate any significant effects. No mitigation or monitoring measures are necessary during the operational phase. It can be concluded, therefore, that the proposed development will have no significant negative impact on people and communities. There will be no significant effects on population and human health with any existing, permitted or proposed project/plan. Projects assessed for cumulative effects are identified in Table 1.4 of the EIAR (Chapter 1,

page 1:21-1:22) and include a number of wind energy projects as well as electricity projects, as well as large scale agricultural developments and one-off houses.

10.6.12 In a do-nothing scenario, I am satisfied that there would be no changes to employment and local investment or the tourism economy, population sustainability and residential amenity, general amenity and well-being, land use, tourism and recreation assets. The health status of the local population would be expected to change over time in accordance with current trends across Ireland.

Conclusion

10.6.13 Having regard to the foregoing, it is considered the main significant direct and indirect effects on population and human health are as follows:

- Short term adverse impact arising from the construction phase on residential amenity in terms of general disturbance, noise, dust and potential traffic disruptions on the public road network.
  Construction phase impacts will be mitigated by standard good construction practices. Diversions will be temporary in nature and appropriate traffic management arrangements will be put in place. A community liaison officer has been engaged as a point of contact during construction.

10.7 Biodiversity

Issues Raised

10.7.1 Issues have been raised in terms of biodiversity by Kilkenny County Council with regard to the impacts due to the removal of trees and on other protected fauna and aquatic ecology. It is contended that there is a lack of clarity in terms of the identification of trees to be felled and if they are suitable bat roosts.

10.7.2 Carlow County Council raised concerns in terms of the proximity of the grid connection route to the River Barrow and River Nore SAC (Site CodeL 002162), with the SAC considered to be within the zone of influence for the proposed development.

10.7.3 Third parties consider that the proposed development will negatively impact local biodiversity, contrary to the Kilkenny City & County Development Plan and raises issues in terms of impacts on bats.

Examination, Analysis and Evaluation

10.7.4 Chapter 5 of the EIAR considers the project in terms of Biodiversity. Associated annexes include:

- Annex 5.1: Figures
- Annex 5.2: Baseline Bird Survey Report
- Annex 5.3: Desktop Study Data
- Annex 5.4: County Development Plan Extracts
- Annex 5.5: Site Synopses
- Annex 5.6: Bat Roosts

10.7.5 Chapter 5 of the EIAR provides an assessment of the likely effects of the project on biodiversity. The study areas applied in the assessment of biodiversity are detailed in Annex 5.1: Figures and Annex 5.2: Baseline Bird Survey Report of the EIAR, and the baseline assessment was established from surveys with areas allocated in terms of habitats, flora, terrestrial mammals (including bats) and other protected fauna, birds and fisheries and aquatic ecology. The terrestrial habitat survey area included lands within the substation and electrical control unit boundaries plus 50m either side of the electricity line (excluding areas that could not be accessed. Survey areas for birds differed according to the receptor and the fisheries and aquatic ecology survey area comprised the bankside 150m either side of the watercourse crossings at the Paulstown Stream, Moanmore 14 and unnamed tributary, Shankill 14 and an unnamed watercourse. No in-stream surveys were undertaken as no in-stream works are proposed. The desk study included the collation of information on the environment from a number of relevant sources of data as detailed in Section 5.2.2 of the EIAR, as well as consulting with relevant statutory bodies. Field surveys were undertaken between March 2024 and January 2025 (Table 5.2 of the EIAR refers). The surveys included mammal and bird surveys, with an extended habitat survey carried out to map other ecological features such as terrestrial mammals (including bats), invertebrates, amphibians, reptiles and plants (including invasive and non-native species or 'INNS').

10.7.6 Three European Sites (2 no. SACs and 1 no. SPA) were noted to be potentially within the Zone of Influence of the proposed development (within 15 and

20km of the site site). These sites include the River Barrow and River Nore cSAC (Site Code: 002162), Blackstairs Mountains SAC (Site Code: 000440) and River Nore SPA (Site Code: 004233). There are 14 no. national nature conservation sites within 15km of the project (1 no. NHA and 13 no. pNHAs).

10.7.7 No records of threatened, protected or non-native flora were yielded from the data search, and no such species were recorded within the study areas during surveys. The habitats recorded in the survey (including Fossitt Name and Code) include:

- flower beds and borders (BC4),
- Stone Walls and Other Stoneworks (BL1),
- Earth Banks (BL2),
- Buildings and Artificial Surfaces (BL3),
- Spoil and Bare Ground (ED2),
- Mosaic of Spoil and Bare Ground x Recolonising Bare Ground x Scrub (ED2 x ED3 x WS1),
- Recolonising Bare Ground (ED3),
- Other Artificial Lakes and Ponds (FL8),
- Eroding/Upland Rivers (FW1),
- Drainage Ditches (FW4),
- Mosaic of Drainage Ditches x Hedgerows (FW4 x WL1),
- Mosaic of Drainage Ditches x Treelines (FW4 x WL2),
- Improved Agricultural Grassland (GA1),
- Mosaic of Improved Agricultural Grassland x Scrub (GA1 x WS1),
- Amenity Grassland (Improved) (GA2),
- Dry Meadows and Grassy Verges (GS2),
- Wet Grassland (GS4),
- Mosaic of Wet Grassland x Scrub (GS4 x WS1),

- (Mixed) Broadleaved Woodland (WD1),
- Conifer Plantation (WD4),
- Scattered Trees and Parklands (WD5),
- Hedgerows (WL1),
- Mosaic of Hedgerows x Treelines (WL1 x WL2),
- Treelines (WL2), Scrub (WS1) and
- Recently-Felled Woodland (WS5).

In terms of invasive plant species, during the field surveys, Himalayan balsam *Impatiens glandulifera* was located near a tributary of the Shankill 14 (unnamed watercourse) just north of the electricity substation site. Salmonberry *Rubus spectabilis* was recorded within hedgerows adjacent to the proposed electricity line route (local road L7117). Other non-native species recorded include box honeysuckle *Lonicera pileate* and snowberry *Symphoricarpos albus* along the L7117, and montbretia *Crocosmia x crocosmiiflora* adjacent to Shankill 14 first-order watercourse, north of the proposed substation site.

10.7.8 Of the 12 bird species recorded during the bird surveys, none were Annex 1 listed, 3 no. were red-listed, 4 no. were amber listed, and 5 no. were green-listed under the latest BoCCI 4 scheme. Of the 12 species, two were confirmed breeding, common buzzard and common linnet, and the common crossbill *Loxia curvirostra*, was noted as non-breeding. The remaining species are considered to be possibly breeding. In terms of mammals, evidence of 3 no. species of non-volant mammals was recorded during the field surveys. There were no otter sightings within 150m of watercourse crossings while a badger latrine was recorded c.290m northwest of the electricity line route. While there was no evidence of badger within 50m of the project site, there were burrows identified relating to bank voles *Myodes glareolus*, Brown rat *Rattus norvegicus* and Rabbit *Oryctolagus cuniculus*. No reptiles or threatened and/or protected species were recorded during the surveys and common frog *Rana temporaria* was recorded in the damp field containing the electrical control unit. Suitable habitat for common frog and smooth newt *Lissotriton vulgaris* is present is places across the site.

10.7.9 Bat Conservation Ireland (BCI) data show that 11 no. recorded bat roosts are located within 10km of the site, with the closest roosts for Daubenton's bat, being located approximately 2km and 2.2km northwest of the control unit, and likely to have ecological connectivity to the site. The remaining roosts are located +4.5km from the site, and therefore have no connectivity to the site. The agricultural structure to be demolished and is of negligible suitability for roosting bats. 5 no. trees were evaluated as having PRF-I suitability (only suitable for individual bats or a very small number of bats due to size or lack of suitable surrounding habitats) for roosting bats (poplar, oak, poplar, ash and oak) and 1 no. cluster of ash trees with the same level of suitability. All trees are located outside of the project site and there are no bridges or suitable culverts identified along the Paulstown Stream, Moanmore 14 and unnamed tributary, or Shankill 14 watercourse crossings.

10.7.10 The aquatic ecology baseline environment was established by way of a desktop study which identified records for threatened or protected aquatic receptors downstream of the watercourse crossings of the unnamed stream. These receptors include:

- White-clawed Crayfish *Austropotamobius pallipes*, with records of the species at c.4.5km.
- Juvenile brook *Lampetra planeri* or river lamprey *Lampetra fluviatilis* ammocetes, and a small sample of sea lamprey *Petromyzon marinus* c.8km.
- Brook or river lamprey c.11.5km.
- Twaite Shad *Alosa fallax* c.32km.
- Salmon *Salmo salar* c.11km.
- Freshwater Pearl Mussel c.15km (Article 17 data (NPWS, 2019) exists for this species).

10.7.11 In terms of the aquatic surveys undertaken, the baseline Q-values of the Barrow and Monefelim watercourses are recorded at 3-4 (moderate) and the habitats following aquatic surveys are described as semi-natural, upland eroding watercourses (FW1). There is evidence of poaching by cattle in the Paulstown Stream and Shankill 14 and the watercourses surveyed had moderate to fast flows and were between 5cm and 20cm in depth. There was no evidence of white-clawed

crayfish within 150m of any watercourse crossing with limited habitat suitability present in terms of instream refugia (i.e. small cobbles) for all watercourses. No non-native or invasive aquatic species were recorded.

10.7.12 Table 5.8 of the EIAR provides an evaluation of ecological features within the ZoI. The Appropriate Assessment of European Sites is carried out in Section 12 of this report.

10.7.13 Limitations of the biodiversity assessment were noted in terms of:

- Bats, Terrestrial Mammals and Habitats – no access was possible to third party lands near the on-road component of the underground electricity line.
    - Potential bat roost assessment could only be undertaken for trees and structures that intersected the route and that could be viewed from public roads. This was not considered to be a significant limitation as data from Bat Conservation Ireland (BCI) were examined to locate previously identified roosts within the receiving environment.
    - No activity surveys were undertaken for bats.
    - The same applies for other terrestrial mammals and habitats i.e. only areas that were immediately adjacent to the in-road component of the route could be surveyed.
    - Extended habitat and breeding bird surveys were completed in summer 2024 prior to the finalisation of the project design process. A small section of the off-road component of the underground electricity line no longer forms part of the project. A new in-road assessment was undertaken in January 2025 which is not an optimal period for survey.
- Birds –
    - Breeding bird surveys were conducted at the control unit, electricity substation site and along the off-road component of the underground electricity line. The area of in-road survey noted above also applied to birds.

10.7.14 Table 10.7 below presents a summary of the likely effects of the proposed development on biodiversity as identified in the EIAR.

Potential Biodiversity	Potential Effects in the absence of Mitigation	Mitigation & Monitoring Measures	Residual Impacts
Construction Phase			
Nature Conservation Sites (European Sites assessed in NIS)	• The NIS has concluded that, with mitigation measures, the project, either alone or in combination with the other projects, would not undermine the conservation objectives or have an adverse effect on the integrity of any European site. • The Whitehall Quarries pNHA (Site Code: 000855) is the only nationally designated site which is hydrologically connected to the project. • Unlikely indirect effect is short-term smothering of flora of acidic habitats from the pNHA due to dust.	• No specific mitigation proposed.	No significant residual effects are likely to occur.
Habitat & Flora	• In terms of habitat loss - ○ There will be minor felling of trees at the entrance to the substation site and along the underground electricity line. ○ Hedgerow will be removed at the substation site and the entrance to the control unit. ○ Direct permanent habitat loss of improved agricultural grassland	• Work corridors within the project will be established to avoid widespread disturbance to habitats. • An Ecological Clerk of Works will be employed throughout the construction phase. • During dry weather (i.e. no rainfall), dust generated will be managed using dust suppression bowsers.	No significant residual effects are likely to occur. Significant, positive effect at the local higher scale in terms of hedgerows and treelines.

	and buildings and artificial surfaces associated with infrastructure. ○ Temporary habitat loss potential due to construction facilities – compound etc and activities. • Negative, permanent loss of habitats - Improved agricultural grassland (1.6ha) and hedgerows (44.43m) - only significant in the local lower value scale. • Negative, temporary loss of wet grassland, hedgerows, hedgerows x treelines mosaic, treelines, recently-felled woodland, and scrub, likely to be significant at the local higher value scale. • Potential indirect effects include: ○ Habitat smothering due to sediment ○ Compaction and excavation of area adjacent to trees and hedgerows ○ Dust ○ Accidental spread of non-native invasive species.	• Biosecurity measures for non-native invasive species including prevention measures, containment measures and recommended treatment options for Himalayan balsam, Montbretia, Salmonberry and Snowberry.	

Birds	• Potential for nest damage or destruction
	  ○ Linnet is confirmed as breeding, but no nests were recorded.
	  ○ Potential nests within scrub habitats along the underground electricity line.
	  ○ Other bird species could begin nesting within the project footprint prior to construction.
	  ○ Potential significant negative temporary effects for nesting linnet.
	• Habitat loss
	  ○ Loss will occur due to the development.
	  ○ IEF bird species Linnet and meadow pipits were recorded close to the project to suffer direct habitat loss, but not assessed as significant.
	  ○ No significant habitat loss effects are likely for other sensitive receptors including common kestrel, common snipe, common starling, goldcrest and willow warbler.
	• Disturbance / Displacement
		• To avoid widespread disturbance to birds, access will be restricted to the footprint of the proposed works corridor.
		• Measures to be implemented to reduce the possibility of damage and destruction (and disturbance to sensitive species) to occupied bird nests.
		• Checks for nesting birds will be required for construction undertaken during the bird breeding season.
			No significant residual effects are likely to occur.

	○ Noise and visual disturbance could lead to temporary displacement or disturbance of foraging/roosting/ breeding birds. ○ Effects unlikely to be significant beyond typical traffic levels or agricultural activities on the electricity line route. ○ Effects likely to be greatest at the substation and control unit sites. No sensitive aggregation of birds recorded, however. ○ Disturbance to common kestrel, common linnet, common snipe, common starling, goldcrest, meadow pipit and willow warbler is assessed to be temporary and not significant. • Potential indirect effects arise in terms of pollution of wetland habitat and/or dewatering of groundwater-dependent habitats on sites designated for birds. No pathways for such effects are identified.		
Terrestrial Mammals (Excluding Bats)	• No direct effects to IEF mammals are assessed as likely as there were no dwelling places for IEF mammals identified within the project site or	• Measures proposed above will prevent deterioration of water quality and adverse effects on mammals relying on downstream habitats, such as otter.	No significant residual effects are likely.

	species-specific ZoI during the field surveys. • Potential indirect effects on mammals include ○ loss of potential foraging, commuting and sheltering habitat ○ disturbance from noise, vibration, machinery, increased human presence could displace foraging mammals ○ disturbance as above could cause breeding mammals to abandon natal sites. • No evidence of mammals using the habitats and no natal sites were recorded.	• Habitat features important for mammals will be retained (e.g. hedgerows and treelines). • A pre-construction walkover survey of the project will be undertaken.	
Bats	• The only known (or suspected) bat roost with ecological connectivity to the project is a roost of Daubenton's bat, c.2km northwest of the control unit. • The effects of the project at the control unit are not significant. • Direct effects on bats during construction of the project include: ○ vegetation removal or removal/modification of existing	• Replacement of trees and hedgerows lost due to construction to ensure no net loss of commuting and foraging routes for bats. • Trees and structures within the works corridor will be re-assessed for bat roosting potential. • A precautionary working method statement (PWMS) will be prepared prior to felling any trees to ensure	No significant residual effects are likely.

	structures which could result in a loss of potential roost sites. No roosts were identified within the construction footprint and no signs of activity were recorded within or proximate to the works footprint. • No significant direct effects are assessed as likely. • Indirect effects could include ○ the loss of foraging/commuting habitats or features. ○ Lighting for night-time working No night-time working is proposed, and permanent removal of linear features is minimised. Effects are temporary with no overall net loss of habitat types.	work methods and timings avoid any effects on bats.	
Other Protected Fauna	• Potential significant, negative and permanent direct effects to amphibians, reptiles and terrestrial invertebrates include: ○ destruction of breeding sites and mortality from construction activities. ○ Impacts to breeding habitats	• Pre-construction checks will be undertaken for spawning frogs in drainage ditches adjacent to the underground electricity line. • Amphibian-proof fencing close to any ponds/pools will be used. • To prevent accidental disturbance to resting/breeding/hibernating places of mammals (badgers, red squirrel, pine marten, otter and hedgehog),	No significant residual effects are likely.

	• Potential significant, short-term negative indirect effects to amphibians include: ○ Accidental pollution of drainage ditches and watercourses.	an ecological walkover survey will be undertaken prior to any construction activities within the project footprint.	
Aquatic Ecology	• Significant short-term negative effects at regional scale for sea lamprey, freshwater pearl mussel, Twaite shad and salmon; • At county scale for brook lamprey, river lamprey; and lower higher value for white-clawed crayfish otter, common frog and smooth newt. • Not significant for eroding/upland rivers FW1. • Significant permanent negative at local low scale for drainage ditches FW4 as part of hedgerow WL1 mosaic. • Direct effect identified as the permanent loss of small section of drainage ditch FW4 as part of hedgerow WL1 mosaic at the substation site. • Indirect effects are noted in terms of potential short-term deterioration in surface and groundwater water quality due to pollution or suspended solids.	• Mitigation measures include best practice construction methods to prevent water pollution by reducing risk, sediment management and the management of surface water runoff rates and volumes.	No significant residual effects are likely.

	Such effects are assessed as significant, negative and temporary.		
Operational Phase			
Nature Conservation Sites	• The NIS has concluded that, with mitigation measures, the project, either alone or in combination with the other projects, would not undermine the conservation objectives or have an adverse effect on the integrity of any European site. • No pathway for effects at the pNHA site is likely		No significant residual effects are assessed as likely to occur.
Disturbance / Displacement, Barrier Effect, Pollution of Habitats, Loss of Breeding Sites	• Potential disturbance / displacement and barrier effects as well as collision with substation and interface masts assessed in the EIAR. • Indirect effects assessed in terms of accidental hydrocarbon spills and pollution of habitat, as well as increased human activity at the site. ○ No significant direct or indirect effects are anticipated. ○ No indirect effects on brook, river and sea lamprey, Twaite shade, salmon, freshwater pearl mussel, and otter are assessed as likely.	• Embedded mitigation proposed including an extensive drainage control system will prevent the release of suspended solids or hydrocarbons into watercourses. • Maintenance of the drainage system will ensure the system is operating effectively. • Ecological mitigation measures will be reviewed during the operational phase.	Significant long-term positive effect at the local higher scale in terms of birds, amphibians and Gooden's nomad bee. No significant residual effects are assessed as likely to occur.

Bats	• Collision with substations, power lines and other electrical infrastructure is a very low risk for Irish bat species. • Operational lighting could disturb or displace roosting or foraging bats.	• Cowled lighting will be used at the substation, directing light inwards to minimise disturbance of any commuting or foraging bats. • Appropriate luminaire specifications will also be used for lighting at the substation.	Significant long-term positive effect at the local higher scale.
Decommissioning Phase			
Biodiversity	• The substation will form part of the national electricity network, and no decommissioning is proposed. • The electrical control unit and electricity line will be removed. • Likely effects will be similar, but of a much-reduced magnitude, to the construction phase.	• Mitigation measures will be the same as for those for the construction phase. • Surface runoff control measures will be put in place during decommissioning works. • Following decommissioning, re-vegetation of excavated areas will be implemented and monitored.	No significant residual adverse effects are assessed as likely to occur.
Cumulative Effects - Summary			
Aquatic Ecology • Risk slightly increased due to other projects and plans. • Without mitigation, short-term negative cumulative effects on freshwater ecology may occur at the regional scale for salmon, Twaite shad, sea lamprey and freshwater pearl mussel; county scale for white-clawed crayfish, brook lamprey and river lamprey; and local higher scale for otter.			

Compensatory & Enhancement Measures
Compensatory Measures: • Reinstatement of any treelines or hedgerows (or mosaics of the same including drainage ditches) temporarily or permanently lost due to construction works as required in the Kilkenny County Development Plan and Carlow County Development Plan. **Enhancement Measures:** • Bolster existing hedgerow habitats • Provide 1 no. bat box • Installation of 1 no. bird box • Construct 1 no. amphibian hibernaculum • Manage existing area of grassland as meadow to provide invertebrate foraging habitat and hibernacula
Monitoring
• Pre-construction confirmation surveys to be undertaken. • Water quality monitoring during and post construction
Do Nothing
• No changes to the existing managed agricultural practices, including commercial forestry.

Table 10.7 - Consideration of Impacts, Significance and Mitigation Measures for Biodiversity

Assessment of Direct and Indirect Effects

10.7.15 I have examined, analysed, and evaluated Chapter 5 of the EIAR, and all of the associated appendices, documentation and submissions on file in respect of effects on biodiversity. I am satisfied that the applicant has presented a good understanding of the baseline environment, and has presented sufficient survey data to enable an assessment of the likely effects of the proposed development on biodiversity. I am further satisfied that the key impacts, both direct and indirect in respect of likely effects on biodiversity, have been identified. Mitigation measures proposed comprise standard good practice measures which are noted to be effective. As such, I am satisfied that no significant, adverse direct, indirect, or cumulative effects on the environmental factors will occur in the long term.

10.7.16 The proposed development is primarily located within public roads and on agricultural lands. The main ecological receptors are described above in section 10.7.7 of the report and include, amongst others, improved grassland, water courses, hedgerows and treelines and associated flora and fauna. The main significant direct and indirect effects include:

- Loss of grassland, hedgerows and treelines within the direct footprint of the project.
- Direct nest damage or destruction.
- Destruction or disturbance of bat roost sites or loss of foraging and commuting habitat.
- Disturbance / displacement of bats due to operational lighting.
- Destruction of sensitive badger breeding or resting sites or indirect disturbance / displacement or loss of key foraging or breeding habitats.
- Short-term smothering of flora or acidic habitats from the pNHA due to dust.
- Short-term deterioration in surface and groundwater water quality due to pollution or suspended solids and Indirect effects on water quality dependent habitats and species downstream.
- Indirect effects arising due to accidental spread of invasive and non-native plant species.

10.7.17 I note the mitigation measures proposed as part of the project, including the application of standard best practice measures as set out in the EIAR, together with the specific measures proposed in terms of compensatory and enhancement measures, including the replacement of hedgerow, and measures for bats, birds, reptiles, amphibians and invertebrates, I am satisfied that the proposed development is not likely to have any significant adverse effects on biodiversity. The amended access proposals included in the applicants response to the submissions received on the proposed development will reduce further, the proposed hedgerow loss with the need to remove 130m of hedgerow associated with the previously proposed widening of the L66732.

10.7.18 With regard to aquatic ecology, I note that the key direct and indirect effects of the project have been clearly identified and relate to changes in water quality due to sediment runoff, spillages, discharges or physical modification. The suite of mitigation measures is detailed within the EIAR to avoid, prevent, or reduce any significant adverse impacts on the water environment during construction, and the agreement of a Water Quality Inspection & Monitoring Plan (WQIMP) as part of the CEMP will result in minimised any residual effects on aquatic habitats and species.

10.7.19 No significant cumulative impacts are noted following the implementation of mitigation. Overall, I am satisfied that the project is unlikely to give rise to any significant effects on biodiversity.

10.7.20 A condition should be included in any grant of planning permission in relation landscaping and planting in terms of the locations, species, timescales, replacement planting and potential for measures to support the Local Biodiversity Action Plans for both Kilkenny and Carlow Local Authorities. Any scheme should have regard to the All-Ireland Pollinator Plan and the need for an Invasive Species Eradication and Management Strategy.

Conclusion

10.7.21 Having regard to the foregoing, it is considered the main significant direct and indirect effects on biodiversity are as follows:

- Direct impacts will arise due to the permanent loss of -
    - 0.004ha of buildings and artificial surfaces

- 150m of drainage ditches x Hedgerows mosaic
- 1.9ha of improved agricultural grassland
- 44.43m of hedgerows

- Compensatory and enhancement measures will result in a net gain of +25.57m of hedgerows.
- Potential for impacts on water quality during the construction phase due to run-off, spillages, accidental discharges or modifications. A Water Quality Inspection & Monitoring Plan (WQIMP) will be agreed with the Planning Authority as part of the CEMP.
- Potential for residual effects in terms of dust arising which will be short-term during the construction phase.

10.8 Land, Soil, Water, Air & Climate

Issues Raised

10.8.1 Carlow County Council recommend the inclusion of conditions which require a detailed CEMP and Surface Water Management Plan to be submitted, and that all mitigation measures included in the NIS and EIAR be implemented.

10.8.2 The Environment Section of Kilkenny County Council raise questions in terms of air quality, surface water management and notes that a section of the grid connection lies within an outer source protection area for the Paulstown PWS. The potential impacts on the Shankill GWS which abstracts from a spring in proximity to the substation site is also raised as a concern. The Roads section of KCC also notes the proposal to HDD under watercourses and raises the risk of potential flooding to local properties in the immediate vicinity of the substation site as a concern. The issue of noise and vibration in terms of the construction phase of the project are also noted, in terms of the adjacent dwellings and on sensitive habitats.

10.8.3 Inland Fisheries Ireland require that any works with the potential to directly impact water quality must comply with IFIs *Guidelines on Protection of Fisheries during Construction Works in and Adjacent to Waters* 2016, and in the event of any incident that they be notified immediately.

10.8.4 Uisce Eireann notes that the project will not connect to its infrastructure. Noting the location of the cabling crossing the Zone of Contribution for the Gowran-Goresbridge-Paulstown Water Supply, given the distance and limited nature of the construction activity proposed, the risk is considered low and that sufficient mitigation measures have been proposed.

10.8.5 Third Parties have also raised concerns in terms of the potential impacts on water bodies and in particular the Shankill GWS source and pollution of watercourses or groundwater. It is submitted that the EIS fails to adequately address the impact on water quality, surface run off, pollution mitigation measures, negative impact on groundwater and the watercourses downstream of the development. The potential impacts to the GWS infrastructure are also noted (and addressed in Section 10.9 of this report). Third parties also consider that noise during the construction and operational phases have not been defined or mitigated.

Examination, Analysis and Evaluation

10.8.6 Chapters of the EIAR which consider the project in terms of land, soil, water, air & climate include Chapter 6 – Land & Soil, Chapter 7 – Water, Chapter 8 – Air Quality & Climate and Chapter 11 – Noise & Vibration. Associated annexes include:

- Annex 3.5: Planning Stage CEMP
- Annex 7.1: Flood Risk Assessment
- Annex 7.3: Water Framework Directive Assessment
- Annex 8.1: Planning-Stage Dust Minimisation Plan

In addition to the above, Chapter 12 – Material Assets is also considered in the consideration and assessment of effects.

Examination, Analysis and Evaluation – **Land & Soil**

10.8.7 Chapter 6 of the EIAR provides an assessment of the likely effects of the project on the land, soil and geological environment. The study area is limited to within the project site boundary as there is no likelihood of effects outside of this area. The assessment included a desk study, a walkover survey and site investigations (August 2021 and March 2022), with trial pits undertaken as part of the

windfarm in October 2021 at the location of the electrical control unit. A walkover of the offroad sections of the electricity line route and a trial pit investigation at the location of the substation were undertaken in October 2024.

10.8.8 In terms of land use, Corine land cover maps (2018) indicates that the project site is largely mapped by Agricultural Areas and Forestry and Semi-Natural Areas, with no significant land changes noted from previous mapping cycles. In terms of soils and subsoils, the location of the electricity substation is overlain by poorly drained, mainly basic mineral soils (BminPD). The location of the electrical control unit is mapped as shallow acid poorly drained mineral soils (AminSP). No ground stability issues were identified by the trial pit investigation and all subsoils were found to be firm to very firm and cohesive which is generally typical of shale, sandstone and limestone tills. There are no known areas of soil contamination within the project site or surrounding lands, no licenced waste facilities or historic mines likely to have contaminated tailings.

10.8.9 In terms of bedrock geology, the location of the electricity substation is underlain by Dinantian aged Limestones, and more specifically by the Ballyadams Formation and the electrical control unit by Westphalian aged shales of the Coolbaun Formation, which is described by the GSI as consisting of shales and sandstone with thin coals. There are no mapped faults within the electricity substation site or the location of the electrical control unit. However, there is 1 no. fault that is mapped to intercept the electricity line route.

10.8.10 Land use in the area is predominantly agricultural and the project will result in the direct loss of 1.6ha of agricultural land. Soils and subsoil at the project site are classified as ‘high to moderate’ importance with the former relating to agricultural land and the latter to forestry, and the local bedrock underlying the project site is of ‘medium to high’ importance. There are no geological heritage sites within the project site, the closest site being Bannagagole Quarry (Site Code CW004), a large and deep working quarry in the limestones of the Ballyadams Formation, which is located approximately 2km northeast of the underground electricity line at its nearest point. The closest Natura 2000 site is Whitehall Quarries pNHA (Site Code: 000855) which is situated c.500m to the southwest of electricity line at its nearest point and is c.1.5km northwest of the substation.

Examination, Analysis and Evaluation – **Water**

10.8.11 Chapter 7 of the EIAR deals with water and notes that the assessment consisted of a desk study, baseline monitoring and site investigations undertaken in August 2021 and March 2022 as part of the White Hill Wind Farm EIAR. Site specific investigations associated with the subject project were undertaken in October 2024 involving trial pits, field hydrochemistry measurements and surface water sampling. The applicant also consulted with statutory consultees and other bodies detailed in Chapter 1 of the EIAR with responses summarised in Table 7.6 of the EIAR (full responses are provided in Annex 1.7). The study area for the water environment includes the Monefelin River, Paulstown Stream, Moanmore Stream and Old Leighlin Stream sub-catchments. On a regional scale, the project elements are located within the River Barrow surface water catchment within Hydrometric Area 14.

10.8.12 On a local scale -

- the substation is located within the Barrow_SC_120 subcatchment and within the Moanmore_010 river waterbody sub-basin (Moanmore Stream catchment)
- The electrical control unit is also mapped within the Barrow_SC_120 sub–catchment, whilst being situated more locally in the Monefelim_010 river sub-basin (Monefelim River catchment)
- The majority of the electricity line is also located in the Barrow_SC_120 sub– catchment with the exception of 1.3km which is located in the Barrow_SC_110 sub-catchment and more locally within the Old Leighlin Stream_010 river waterbody sub-basin (Old Leighlin Stream catchment)

  The electricity line passes through 4 no. sub-basins;

  - the Monefelim_010 (c.1.4km),
  - Monefelim_030/Paulstown Stream (c. 2.1km),
  - Old Leighlin Stream_010 (c. 1.3km) and
  - Moanmore_010 (c. 4.0km).

10.8.13 The route of the underground electricity line crosses 5 no. natural watercourses, 4 no. of which are EPA mapped watercourses –

- Paulstown Stream (EPA Code: 14P06) within the Monefelim_030 river sub basin;
- Moanmore Stream (EPA Code: 14M24) within the Moanmore_010 river sub basin;
- An unmapped watercourse that flows into the Moanmore Stream approximately 1km downstream of the above crossing location;
- Shankill (14) Stream (EPA Code: 14S30) within the Moanmore_010 river sub basin; and;
- The unnamed watercourse north of electricity substation location within the Moanmore_010 river sub basin.

There are no culverts existing at the proposed crossing locations and it is proposed to use HDD at all locations.

10.8.14 There are no issues in terms of flooding noted within the project site with a recurring flood event mapped along the electricity line route at the L7117 local road in the townland of Lacken (Flood ID: 2959) which makes the road periodically impassible. A large surface water flood event is mapped on the GSIs Winter 2015/2016 Surface Water Flood Map, but this event does not record any flood zone in the area of the proposed development. The EPA Biological Q-rating data for the Monefeilm River downstream of the electrical control unit and electricity line route ranges from Moderate to High with the River achieving a Q-rating of 4-5 at Castlewarren Bridge. This status reduces to 3-4 Q-rating in the Monefelim_030 river segment. The latest Q-rating data (2020) for the Old Leighlin Stream range from Q3-4 to Q4-5. The chemical conditions from two surface water samples taken (from the Monefelim River downstream of the electrical control unit (SW1) and one from the Shankill Stream along the route of the electricity line (SW2)) indicate that all are below the relevant thresholds achieving Good or High Status.

10.8.15 In terms of groundwater, aquifers in the area range from poor to regionally important – Karstified, which are generally unproductive or moderately productive. In terms of local Groundwater Bodies (GWBs), the electrical control unit and the northern section of the electricity line route are located in the Castlecomer GWB (IE_SE_G_034). The central section of the electricity line route is mapped in the

Shanragh GWB (IE_SE_G_124). The substation location and southernmost section of the electricity line route are mapped within the Bagenalstown Lower GWB (IE_SE_G_157). The GSI mapped groundwater vulnerability rating at the electrical control unit is Extreme (X) which reduces to Low towards the substation site. All Groundwater Bodies in the area of the project are assigned 'Good Status', which is defined based on quantitative status and chemistry. A WFD Compliance Assessment report for the project is attached as Annex 7.3 of the EIAR, which identify the status of the river waterbodies ranging from moderate status to good status to high status.

10.8.16 There are three public water supplies – 1 public water supply and 2 group water schemes – identified within the study area. Approximately 1.3km of the electricity line route is located inside the Castlewarren GWS source protection area and approximately 1.6km of the underground electricity line is located inside the Paulstown GWS outer source protection area. The Shankill Group Water Scheme (GWS) abstracts from a spring which is located approximately 420m to the northeast of the electricity substation compound. No private wells were identified within 1km of the project site and Uisce Éireann noted that there is an abstraction point on the River Barrow at Bagenalstown. The main risk to groundwater is deemed to be from construction activities using contaminants such as hydrocarbons and cement-based products which might be accidentally released. Surface water bodies are also sensitive to potential contamination. Designated sites that are hydraulically connected (surface water flow paths only) to the project include the River Barrow and River Nore cSAC.

Examination, Analysis and Evaluation – **Air & Climate**

10.8.17 Chapter 8 of the EIAR sets out the methodology for assessing air quality in terms of construction dust and traffic and climate in terms of forestry and peat removal. The existing environment is described in terms of meteorological data and available background data. The EIAR uses weather records from Oak Park Meteorological Station, County Carlow, which is located approximately 19km north-east of the site to identify prevailing wind direction and average speeds. Long-term information collected from Kilkenny Meteorological Station (the closest

representative station with long-term historical data) identified that typically 193-days per annum are ‘wet’ (Met Eireann 2022, 30-year averages). The site is located within the Rural Ireland air quality zone (Zone D).

10.8.18 In terms of noise and vibration (Chapter 11 of the EIAR refers), the existing environment is described as a quiet noise environment. A background noise survey undertaken at a noise sensitive receptor location, both attended (5 no. on the route of the electricity cable) and unattended (1 no. at the site of the substation), found that the primary noise sources include ‘distant traffic movements and wind generated noise from local foliage’, with no perceptible source of vibration noted.

10.8.19 Table 10.8 below presents a summary of the likely effects of the proposed development on land, soil, water, air quality and climate as identified in the EIAR.

Potential Land, Soil, Water, Air & Climate Impacts	Potential Effects in the absence of Mitigation	Mitigation & Monitoring Measures	Residual Impacts
Construction Phase			
Land & Soil – **Land & Land Use**	• The development will result in the loss of 1.6ha of agricultural land. • Negative, slight, direct, likely, permanent/long-term effect on land and land use.	• No mitigation	The level of effect associated with loss of land is assessed as likely to be moderate-slight to imperceptible and not likely to be significant. No significant residual effects are likely to occur.
Land & Soil – **Soil, Subsoil and Bedrock Excavation**	• The development will result in the removal of topsoil and subsoil resulting in a direct, permanent physical effect. • Negative, slight to moderate (moderate-slight), direct, likely, permanent effect on soil, subsoil and bedrock.	• Mitigation measures include industry best practice and pollution prevention measures are included in the CEMP. • Designed in measures mean that the development is not located within sensitive habitat areas, is located on suitable ground and to ensure minimal excavation. • Specific measures are set out with regard to the spoil deposition areas.	The level of effect in terms of direct excavation of soil/subsoil is assessed as likely to be moderate-slight to imperceptible and not likely to be significant. No significant residual effects are likely to occur.

Land & Soil – **Erosion of Exposed Soil and Subsoil**	• Exposure of soil and subsoil at construction locations will increase the likelihood of erosion resulting in a direct physical effect. • Negative, direct, imperceptible to slight (not significant), likely effect on soil and subsoils.	• Excavated soil will be side cast and used for reinstatement/landscaping. • Silt fences installed. • Construction will not occur during periods of intense or prolonged rainfall. • Bog mats used. • Detailed Spoil Management Plan to be prepared as part of CEMP.	No significant residual effects are likely to occur.
Land & Soil – **Contamination of Soil**	• Accidental spillage during refuelling of construction plant with hydrocarbons is a pollution risk. • Accumulation of small spills of fuel and lubricants during plant use a potential significant pollution risk. • Negative, direct, slight, short term, unlikely effect on soils, subsoils and bedrock.	• Volume of fuels/oils stored on site will be minimised. • Bunded areas will have a 110% capacity. • Oil interceptors will be installed. • Spill kits to be made available. • Waste arising to be removed from site. • Emergency Plan is included in the CEMP.	No significant residual effects are likely to occur. The likely residual effects associated with soil or ground contamination and subsequent health effects are assessed to be imperceptible.

Water - Earthworks (Removal of Vegetation Cover, Excavations, Cable Trenching and Stock Piling) Resulting in Suspended Solids	• Potential release of suspended solids to surface waters from
	  ○ Excavation
	  ○ Stockpiling of excavated material
		• Mitigation measures relate to the management of surface water runoff and subsequent treatment prior to release off-site.	The residual effect is assessed to be a negative, indirect, imperceptible, short term, and likely effect.

Entrainment in Surface Water)	○ Construction of electricity line trench and HDD works ○ Erosion of sediment from emplaced site drainage channels. • Potential for runoff at the 5no. watercourse crossings.	• The site drainage system will be constructed in the first instance, and prior to other activities. • No infrastructure is located within 50m of a natura surface water feature. • No in-stream works required.	Significant adverse effects on water quality are not assessed as likely.
Water - Excavation Dewatering and Likely Effects on Surface Water Quality	• Minor surface water seepages and direct rainfall input will likely occur in excavations and trenching creating additional volumes of water to be treated by the runoff/surface water management system.	• Works programme will take account of weather forecasts, and predicted rainfall. • Measures will be implemented in terms of the management of excavation dewatering (pumping) and treatment prior to discharge.	The residual effects are assessed to be indirect, imperceptible, short term and are not assessed as likely to be significant.
Water - Release of Hydrocarbons	• Accidental spillages during refuelling of plant are a potential pollution risk to groundwater, surface water and associated ecosystems and terrestrial ecology • Pathways for a rapid transport of any spilt chemicals are limited due to the absence of any surface water drainage network.	• Mitigation measures are also proposed to avoid the release of hydrocarbons at the site. An outline Emergency Plan for the construction phase has been included in the CEMP (Annex 3.5 of the EIAR).	The residual effect is assessed to be indirect, negative, imperceptible, short term and unlikely. No significant effects are likely.
Water - Groundwater and Surface Water	• Release of effluent from wastewater treatment systems has the potential to	• Mitigation measures to avoid contamination of ground and surface waters by wastewater included.	No significant residual effects

Contamination from Wastewater	affect groundwater and surface waters if not properly contained.		are assessed as likely to occur.
Water - Release of Cement-Based Products	• Entry of cement-based products into the site drainage system, into surface water runoff, and hence to surface watercourses or directly into watercourses represents a risk to the aquatic environment. • The washing out of transport and placement machinery are the activities most likely to generate a risk of cement-based pollution.	• Measures are proposed to ensure that the release of cement-based products is avoided, including, ○ No batching of wet-cement products on site, ○ Where concrete is delivered the chute will be cleaned at a lined cement wash-out pond.	The residual effects are assessed to be negative, indirect, imperceptible, short term and unlikely.
Water - Morphological Changes to Surface Watercourses & Drainage Patterns	• Diversions, culverting and crossing of watercourse may result in morphological changes, changes to drainage patterns and alteration of aquatic habitats. • The installation of the culvert at the unnamed watercourse will require a Section 50 Licence from the OPW.	• Temporary silt fencing/silt trap arrangements (e.g. straw bales) will be placed within existing roadside/field drainage features along the electricity line route to remove any suspended sediments from the works area.	The residual effects are assessed to be negative, indirect, imperceptible, short term and unlikely.
Water - Hydrological Effects on Designated Sites	• The site is hydrologically connected to the River Barrow and River Nore cSAC (Site Code: 002162).	• Measures in respect of the installation of the culvert over the unnamed stream to the north of the substation are included.	No significant residual effects are assessed as likely to occur.
Water - Effects on Drinking Water Supplies (i.e. Castlewarren GWS,	• Electricity line route passes through groundwater protection areas of the Castlewarren GWS and Paulstown	• Measures associated with HDD included. A Fracture Blow-out (Frac-	No significant residual effects are assessed as likely to occur on

Shankill GWS, Paulstown PWS and Bagenalstown IW Abstractions	source, and through the groundwater catchment to the Shankill GWS. • The infrastructure will require a shallow trench to be installed but not to a depth to result in negative effects on groundwater flows. • Potential for accidental hydrocarbon spills within the protection zones.	out) Prevention and Contingency Plan will be prepared. • No fuel storage will be permitted along the electricity line located within the Monefelim River catchment.	the Castlewarren GWS, Paulstown PWS or Bagenalstown abstraction.
Water - Effects on the WFD Status	• All GWBs are currently assigned 'Good Status'. • There may be a requirement for an on-site water supply well, with a yield akin to a domestic well. • The development is not anticipated to give rise to significant effects in terms of potential WFD status changes to SWBs and no effects on GWSs are identified.	• Mitigation for the protection of surface and groundwater during the construction phase of the project will ensure the qualitative and quantitative status of the receiving waters is not likely to be significantly affected.	No significant residual effects are assessed as likely to occur on either Groundwater Body or Surface Water Body status.
Air Quality & Climate	• Dust emissions associated with construction activities including earthworks, excavation, construction of substation and movement of vehicles. • The likelihood of significant nuisance dust effects, prior to mitigation, is Medium with the overall likelihood of	• Dust Minimisation Plan to be minimised dust emissions. • Roads and tracks will be cleaned / watered regularly. • A wheel washing system will be installed in the event of a dust nuisance persisting. • Trucks will be covered when moving materials and materials will be	Subject to the implementation of the Dust Minimisation Plan (Annex 8.1), residual effects are assessed as imperceptible, short-term effect on air quality

	human health effects also predicted to be Low	stored and laid out to minimise exposure to wind. • Procedures will be monitored and assessed to ensure efficacy. • In terms of noise and vibration, specific noise abatement measures will be undertaken. • Best practice in terms of site operations and machine maintenance will be applied. • Where plant such as generators or pumps are required to operate outside of the general working hours, acoustic enclosures or portable screes will be used. • The hours of construction activity will be limited to avoid unsociable hours where possible.	during the construction phase.
Air Quality & Climate – Noise & Vibration	• Increased noise associated with construction activities and vehicular movements to and from the site. • Construction of access track in the vicinity of the nearest dwelling house (35m to the east) with a predicted construction noise level of 67dB – a likely significant noise effect.	• Specific noise abatement measures will be undertaken. • Best practice in terms of site operations and machine maintenance will be applied. • Where plant such as generators or pumps are required to operate outside of the general working hours,	The residual effects are assessed to be likely, negative, not significant, and temporary.

	• Effect will be short-term and temporary, with construction occurring over 2-3 days. • The construction of the underground electricity line will give rise to short-term and temporary significant noise effect at NSLs along the route.	acoustic enclosures or portable screes will be used. • The hours of construction activity will be limited to avoid unsociable hours where possible. • Measures proposed in the unlikely event that rock breaking is necessary.	
Operational Phase			
Land & Soil	• Directly effects may include vehicles used during routine maintenance (1-2 times/ week), emergency repair works or spills/leaks of oils from the transformer. • Indirect effects include the potential that a small amount of granular material may be required to maintain access tracks during operation which will place intermittent minor demand on local quarries.	• Hydrocarbon storage area will be located in a concrete bund. • In the event of aggregates being required for maintenance of the access track, they will be locally sourced.	The residual effects are assessed to be likely, negative, not significant, and temporary during the operational phase
Water – as above	• The replacement of vegetated surfaces with impermeable surfaces could result in an increase in the proportion of surface water runoff reaching the downstream surface water drainage network. • The primary risk to surface water and groundwater quality during the	• Stormwater control measures are included in the form of local drains or soakaways, with runoff limited to greenfield runoff rates. • Runoff will pass through an oil interceptor.	The residual effect is assessed to be direct, neutral, long term and likely; however, significant effects on surface water

	operational phase will be from hydrocarbon/chemical spillage. • Pre-mitigation effects on surface water flows from site runoff are likely to result in a likely, indirect, negative, long term, reversible, slight effect.	• Storage of fuels and chemicals to be mitigated in accordance with best practice and weekly inspections.	features are not likely.
Air Quality & Climate	• The project is assessed as having an imperceptible effect on air quality during the operational phase. • The project will support the exportation of 150GWh of renewable energy p/a to the national grid resulting in a net benefit in terms of GHG emissions – offsetting c55,000T of CO_2 equivalent p/a.	• No specific mitigation proposed.	No significant residual effects are assessed as likely to occur.
Air Quality & Climate – Noise & Vibration	• The substation will operate 24/7. • Noise effects are assessed to be negative, not significant and long-term.	• No specific mitigation proposed	Residual effects are assessed as likely to be negative, not significant and long-term.
Decommissioning Phase			
Land & Soil	• The substation will form part of the national electricity network, and no decommissioning is proposed. • The electrical control unit and electricity line will be removed.	• Measures applied will be similar to those during the construction phase where relevant. • Effects will be avoided by leaving elements of the project in place	No significant residual adverse effects are assessed as likely to occur.

	• Likely effects will be similar, but of a much-reduced magnitude, to the construction phase. • Other likely effects, such as erosion and contamination by fuel leaks, will remain but will be of reduced magnitude.	(substation and underground electricity line ducts). • Electricity control unit hardstanding areas to be rehabilitated.	
Water – as above	• No decommissioning is proposed for the electricity substation. • The electrical control unit and electricity line will be removed. • Effects on surface water quality could result from the increase in suspended solids from demolition site runoff and chemical effects may arise from pollutants such as hydrocarbons and chemicals. • Pre-mitigation effects on surface water quality are likely to result in an unlikely, indirect, negative, temporary, reversible, slight effect. • Pre-mitigation effects on surface water and groundwater quality from hydrocarbons and chemicals are assessed to be unlikely, indirect, negative, temporary, reversible, slight effect.	• As in the construction phase, surface runoff control measures will be put in place during decommissioning works. • The drainage system at the electrical control unit will remain operational during the decommissioning phase.	No likely significant residual effects on the hydrological environment or on water quality are envisaged during the decommissioning stage of the project.

Air Quality & Climate	• Localised dust emissions with effects assessed as not likely to be significant during the decommissioning phase.	• No specific mitigation proposed.	Subject to the implementation of measures (Section 8.6.3 of the EIAR) residual effects are assessed to be imperceptible and short-term in terms of air quality.
Air Quality & Climate – Noise & Vibration	• No decommissioning is proposed for the electricity substation. • Noise levels will be similar to those for the construction of the underground electricity line and the electrical control unit, and of similar, but reduced, magnitude temporary duration.	• Mitigation measures as per construction phase.	No significant residual effects are assessed as likely to occur.

Cumulative Effects - Summary

Land & Soil

- No cumulative effects assessed as arising.

Water

- There is a potential for health effects to arise through surface and groundwater contamination and impacts on water supplies.
- Flooding, although the likelihood is assessed as very low, could cause temporary health issues.

- The likelihood for cumulative effects is assessed to be hydrological (surface water quality) rather than hydrogeological (groundwater).

Air Quality & Climate

- There is potential for cumulative effects to arise in relation to dust during the construction phase if the project is constructed concurrently with other projects. Following the implementation of mitigation measures there is no likely significant effects arising.
- In terms of noise and vibration effects, it is assessed that cumulative operational phase effects will be negative, not significant and long-term.

Monitoring

Land & Soil

- Soil deposition areas will be monitored on a weekly basis during the construction phase, and monthly following the construction phase for a period of 6-months.

Water

- EPA will be responsible for the ongoing monitoring of surface water drainage system.
- Prior to commencement of development a Water Quality Inspection & Monitoring Plan (WQIMP) will be agreed with the Planning Authority as part of the CEMP.
- Regular inspections of the drainage system will occur to ensure effective functioning.

Do Nothing

- No impacts or changes to land, soils, geology or current land use practices and drainage arrangements.
- There would be no alteration to the hydrological and hydrogeological environment.
- If the project were not to proceed, the existing air quality and noise environment will remain unchanged.
- No change to climate conditions.

Table 10.8 - Consideration of Impacts, Significance and Mitigation Measures for Land, Soil, Water, Air & Climate

Assessment of Direct and Indirect Effects

10.8.20 I have examined, analysed, and evaluated Chapters 6, 7 and 8 of the EIAR, and all of the associated appendices, documentation and submissions on file in respect of effects on land, soil, water, air & climate. I am satisfied that the applicant has presented a good understanding of the baseline environment, and has presented sufficient survey data pertaining to each topic to enable an assessment of the likely effects of the proposed development on land and soil, water, air quality and climate. I am further satisfied that the key impacts, both direct and indirect in respect of likely effects on land and soil, water, air quality and climate, have been identified. Mitigation measures proposed comprise standard good practice measures which are noted to be effective. As such, I am satisfied that no significant, adverse direct, indirect, or cumulative effects on the environmental factors will occur in the long term.

10.8.21 I am further satisfied that the key direct and indirect effects in terms of **land and soil** primarily relate to the loss of 1.6ha of agricultural land and the potential for soil erosion and soil contamination due to hydrocarbon spillages during the construction phase of the project. These effects will be short-term effects. I note the mitigation measures proposed to ensure the avoidance of significant effects and to reduce the magnitude and significance of any effects through the implementation of the CEMP and including the Spoil Management Plan, Emergency Plan and the training and procedures indicated in the CEMP. I further note the monitoring of the proposed spoil deposition areas during the construction phase and for a 6-monthly period thereafter. Overall, I am satisfied that the proposed development is not likely to have any significant adverse effects on land and soil.

10.8.22 In terms of matters relating to the **water** environment, I would note the concerns of third parties and prescribed bodies in terms of the potential impacts on public water sources. In particular, c.1.3km of the electricity line route is located inside the Castlewarren GWS source protection area and c.1.6km of the underground electricity line is located inside the Paulstown GWS outer source protection area. The Shankill GWS abstraction spring is located approximately 420m to the northeast of the substation compound but there is no GSI mapped source protection for this spring. The EIAR considers that a 0.5km section of the electricity line, upslope of the spring is potentially within the groundwater catchment for the

spring. The Monefelim River and Paulstown Stream channels are also included in the inner protection zone for the Paulstown Public Water Supply.

10.8.23 In response to these concerns, I note the applicants submission of 16th July 2025. In addition, I further note that Uisce Eireann has considered the matter of the cabling crossing the Zone of Contribution for the Gowran-Goresbridge-Paulstown Water Supply in its submission, noting that given the distance and limited nature of the construction activity, the risk is considered low and that adequate mitigation measures have been proposed. No significant residual effects are assessed as likely to occur on the Castlewarren GWS, Paulstown PWS or Bagenalstown abstraction.

10.8.24 Other potential effects on the water environment arise due to sediment runoff, spillages, discharges or physical modification. A suite of mitigation measures is detailed within the EIAR to avoid, prevent, or reduce any significant adverse impacts on the surface water environment during construction. During the operational phase of the project measures are proposed to include stormwater control measures with runoff limited to greenfield runoff rates. Runoff will pass through an oil interceptor and the storage of fuels and chemicals will be mitigated in accordance with best practice and weekly inspections. A Water Quality Inspection & Monitoring Plan (WQIMP) will be agreed with the Planning Authority as part of the CEMP.

10.8.25 With regard to **flooding** potential and the proposal to use HDD under watercourses, the application includes a site-specific Flood Risk Assessment (Annex 7.1 of the EIAR) and a Water Framework Assessment (Annex 7.3 of the EIAR). The Roads section of KCC raised concerns in terms of the potential for the proposal to HDD under watercourses and the risk of potential flooding to local properties in the immediate vicinity of the substation site as a concern. The installation of the culvert at the unnamed watercourse, the area of concern noted, will require a Section 50 Licence from the OPW in accordance with the Arterial Drainage Act 1945. The applicant advises that this stream crossing will be designed in accordance with OPW guidelines/requirements on applying for a Section 50 consent. The submitted FRA notes that other than the short track to the substation, there are no proposed hardstand areas within 5-10m of a watercourse, and given the location of the entire site within Flood Zone C, I am generally satisfied that the project is acceptable. In addition, the proposed development will not result in a change of any surface water WFD quality or prevent any surface or ground water bodies from reaching good

status. Overall, I am satisfied that the project is unlikely to give rise to any significant effects on water, and no significant effects are anticipated in terms of the water environment during any phase of the project.

10.8.26 In terms of **air quality and climate**, the EIAR submits that the likelihood of effects will arise during the construction phase from dust emissions due to earthworks and construction activities. The magnitude of dust emissions is deemed large and given the sensitivity of the receptors in the area, there is a likelihood of adverse dust effects, giving rise to a significant nuisance prior to mitigation. Effects on human health are assessed as low. It is submitted that the project will not increase traffic volumes by more than 1,000 no. AADT or 200 no. HDV AADT and that there will be no changes to road speeds or road alignments. The assessment on traffic and transport has concluded that the project will give rise to a daily average of 7 no. HGV trips (with an average of up to 22 no. total trips per day) and as a result, the EIAR scopes out the need for a detailed air quality assessment. Given the nature of the project which seeks to connect the permitted renewable energy project to the national grid, during the operational phase, it is assessed that there will be a reduction in GHG emissions, imperceptible in terms of Irelands obligations under the EUs Effort Sharing Regulation (2018/842), and a net saving in terms of GHG emissions. I am satisfied that the adoption of good practice measures relating to dust management mitigation as set out in the EIAR and the CEMP, the effects on air quality, human health and general amenity will not be significant.

10.8.27 I note the submission of third parties with regard to the potential effects of **noise** associated with the construction and operational phases of the project. In addition, I note Kilkenny County Councils submission in terms of the noise impact assessment undertaken and the use of UK guidance in the assessment. I am satisfied that the EIAR has adequately considered the potential impacts associated with the project and has employed best practice measures and guidance, including TII guidance, in the determination of significance of effects. While the project will generate noise during the construction phase, these impacts will be short term and temporary. The main area of impact will be during the installation of the access tracks and the underground electricity cable, where the works will be proximate to the closest NSLs. No vibration effects are assessed as being likely. Given the separation distance to the closest NSL, I am generally satisfied that noise will not

give rise to significant effects during the operational phase. Overall, I am satisfied that the proposed development is not likely to have any significant adverse effects on air quality and climate, including noise and vibration.

Conclusion

10.8.28 Having regard to the foregoing, it is considered the main significant direct and indirect effects on land, soil, water, air and climate are as follows:

- Direct adverse impacts will arise due to the permanent loss of 1.6ha of agricultural land.
- Potential for impacts on groundwater flow and quality at unknown private water supplies and down gradient designated sites in terms of water quality. Risks to groundwater quality and associated receptors will be mitigated with the adoption of a CEMP.
- Potential for impacts on surface water quality during the construction phase due to run-off, spillages, accidental discharges or modifications. A Water Quality Inspection & Monitoring Plan (WQIMP) will be agreed with the Planning Authority as part of the CEMP.
- Potential for residual effects in terms of air quality due to dust arising which will be short-term during the construction phase.
- Residual temporary noise impacts are likely to occur during the construction phase due to increased traffic and other activities.

10.9 Material Assets, Cultural Heritage and the Landscape

Issues Raised

10.9.1 Carlow County Council advise no objection in principle to the proposed enabling/supporting infrastructure which will allow the connecting of the permitted windfarm to the national grid. Impacts on the local road network in terms of drainage systems and existing properties require consideration while the rural character, distinctiveness or sensitivity of the rural landscape should not be unduly damaged.

10.9.2 The Roads Section of Kilkenny County Council notes that the public road network is of limited capacity and raises concerns that the grid connection

installation may impact future developments required by the roads authority. The narrow width of the road for the installation is also noted as a concern. It is submitted that due to the width of the public road, full road reconstruction may be required and that a full assessment will be required. It is preferred that the ducting be provided in third party lands or via overhead lines and the proposed entrance to the substation is considered to be via a road which is substandard in terms of traffic capacity and width. Construction traffic movements are also noted as a concern by the local authority. Kilkenny County Council request that their observations and requirements be satisfactorily addressed prior to the issuing of a planning decision.

10.9.3 The DAU have noted that a desk based Archaeological Impact Assessment was submitted and request that advance archaeological test excavation of all greenfield areas of the site be carried out in advance of any development.

10.9.4 In terms of roads and traffic, third parties have raised concerns in terms of the purported over-engineered approach to the site access proposed, in the context of the local road and lane, generating a traffic hazard. Access to existing property on the local county roads and the cul-de-sac road during the construction phase will be significantly impacted. The Shankill GWS also raise concerns in terms of the potential impacts to the schemes aged pipe infrastructure.

Examination, Analysis and Evaluation

10.9.5 Chapters of the EIAR which consider the project in terms of material assets, cultural heritage and the landscape include Chapter 9 – Landscape, Chapter 10 – Cultural Heritage and Chapter 12 – Material Assets. Matters relating to traffic and transport are included in Chapter 12 while waste management during the construction phase is addressed in Chapter 3 – Description of the Project and Chapter 6 – Land and Soil includes details of excavated materials. Associated annexes include:

- Annex 3.5: Planning Stage CEMP (which includes a Waste Management Plan
- Annex 9.1: Photomontages
- Annex 9.2: Landscape & Ecological Mitigation Plan

- Annex 10.1: Geophysical Survey Report
- Annex 10.2: Test Trenching Report
- Annex 12.1: Construction Traffic Routes
- Annex 12.2: Air Corps Wind Farm & Tall Structures Position Paper
- Annex 12.3: Gas Pipeline Crossing Assessment
- Annex 12.4: Gas Pipeline Electrical Interference Assessment

Examination, Analysis and Evaluation - **Material Assets**

10.9.6 Material assets are defined as "resources that are valued and that are intrinsic to specific places" which can be of human or natural origin"[4], and are generally taken to include built services and infrastructure[5]. For the purposes of this EIA, the following resources are considered in this section:

- Traffic & Transport
- Aviation
- Telecommunications
- Resources & Utility Infrastructure.

10.9.7 In terms of **Traffic & Transport**, the baseline assessed in the submitted EIAR considers the works required to undertake the development in the context of the relevant development plan policies and objectives. To establish the baseline, a desk study and site visit were carried out, and the EIAR notes that the road network in the vicinity of the project comprises a mix of motorway, regional and local roads. Given the proximity of the M9 motorway, c50m to the east of the proposed substation site, it is submitted that this is likely to be used for the delivery of equipment and materials to the site. Other roads to be utilised include the R912, R712 and R448 regional roads and a number of local roads. Full descriptions of the roads are provided in the EIAR, and Annex 12.1 presents the construction traffic route from the R448 to the project site which follow a number of narrow local roads, described as single lane,

[4] Draft Advice Notes for preparing Environmental Impact Statements (EPA, 2015)
[5] Guidelines on the Information to be contained in Environmental Impact Assessment Reports (EPA, 2022)

including the L6674, L6673 and L66732 to the electricity substation site entrance. The Commission will note that following receipt of a response to the submissions, the applicant has proposed an alternative construction access to the proposed substation site. The amended access removes the need to use the majority of the L66732 cul-de-sac road and omits the need to removed 130m of hedgerow to widen a section of the road by 1.5m. I have considered this amendment in the planning assessment above and note that the amendment does not give rise to any significant impacts in terms of EIA, and potentially minimises impacts on the three closest residential properties to the substation site, who use this road. The EIAR proposes alternative routes to and from the site to avoid HGVs meeting on the L6674. The alternative route from the site to the R448 will follow the L66732, L6673, L6674, L3036, and L7117. In terms of the 8.8km underground electricity line route, 5.9km will be located within private lands while the remaining 2.9km will be located within the L6673, L6738, L7117 and L71172.

10.9.8 In terms of **Aviation,** the tallest structure associated with the proposed development is c18m in height (Lightning Mast). There are no major airports in the vicinity of the project site, and the closest airstrip is Maganey Airstrip (Carlow) which is located approximately 20km to the northeast of the windfarm site. Consultation was undertaken with the IAA and the Department of Defence, and the applicant included the Preliminary Scoping Report with the consultation letters. No response was received. The project site is not located within any 'Danger', 'Restricted' or 'Military Operating' area as identified at Annex A, B or C of the Air Corp Position Paper.

10.9.9 In terms of **Telecommunications,** the EIAR considers the likely effects of the project on a range of communications infrastructure including telecommunication networks, broadcast radio and television and fixed infrastructure such as telecommunication masts. A number of service providers were consulted during the scoping of the EIAR, with 7 responses received. No specific concerns were raised, and the subject site is not located within a strategically important location for telecommunications infrastructure.

10.9.10 In terms of **Resources & Utility Infrastructure,** the EIAR considers the effects on or interactions with existing renewable and non-renewable resources as well as other utility infrastructure, and notes existing quarries in both Co. Kilkenny

and Co. Carlow, as well as electricity transmission lines and telecommunication wires. The EIAR describes the existing environment in the context of existing and permitted renewable energy projects across both counties, including wind, solar and micro-generation projects, and non-renewable resources in terms of quarries. In terms of utility infrastructure, the EIAR notes the existing 38kV and 110kV electricity transmission lines and the wired telecommunications network, including associated poles. The presence of a high-pressure gas pipeline located c250m to the east of the proposed substation, which will be crossed by the underground electricity line is also highlighted.

10.9.11 Chapter 3: Description of the Project of the EIAR includes a section on Construction **Waste Management** during the construction phase. The project will include the provision of a temporary construction compound at the site of the proposed electricity substation, which will include a waste management area during the construction phase. Section 3.5.5 of the EIAR details the waste generated during the construction phase and waste proposal measures to be implemented. A Waste Management Plan is also included in Annex 3.5: Planning Stage CEMP. Chapter 6 of the EIAR deals with Land & Soil and provides details of spoil generation and management at both the substation site and control unit site.

Examination, Analysis and Evaluation – **Cultural Heritage**

10.9.12 Chapter 10 of the EIAR applies a 1km study area around the electricity substation and the electrical control unit in terms of assessing the presence of protected archaeological remains (RMP sites), and a 2km study area has been applied to assess the presence of other nominated or listed features of architectural or cultural heritage. A study area of 100m either side of the line route applies in the assessment of archaeological, architectural and cultural heritage features. The assessment included a desk review, field inspections (September 2021, May 2024 and September 2024) geophysical surveys (at the site of the electricity substation in June 2024 which revealed 1 no. feature of possible archaeological significance) and licenced test trenching (at the site of the electricity substation in October 2024).

10.9.13 The feature revealed as part of the geophysical survey will be preserved *in situ* in its entirety. The test trenching revealed the presence of a small sub-oval pit (at

the location identified in the geophysical survey) along the route of the access track immediately west of the electricity substation. This below-ground feature was preserved in situ during test trenching and will be preserved in situ in its entirety. No Recorded Monuments were recorded within the site of the substation, with 1 RM identified within 100m of southern boundary the substation site - RMP KK016-006: linear earthwork. There are an additional 17 RMs within 1km of the substation (identified on Figure 10.7 of Chapter 10 of the EIAR). There are no RMs within the site of the electrical control unit and a Redundant Record is noted approximately 920m to the southwest of the site (RMP KK015-071). There are no RMs within the area of the underground electricity line and 4 RMs within 100m of the line (identified on Figure 10.8 of Chapter 10 of the EIAR).

10.9.14 There are no National Monuments or World Heritage Sites within 2km of either the substation or the control unit, and none within 100m of the line route in either Co. Carlow or Co. Kilkenny. There are no Protected Structures or Architectural Conservation Areas within the same study areas in Co. Carlow. There are 9 Protected Structures within 2km of the substation site in Co. Kilkenny (identified on Figure 10.14 of Chapter 10 of the EIAR), all located to the east of the M9. These structures include churches, castles, house, gate lodges and farmyard complex. There are no Protected Structures or ACAs identified within 2km of the control unit or 100m of the line route corridor. In terms of the NIAH, there are 16 structures recorded (including the 9 PS identified) within 2km of the substation site, again, all are located to the east of the M9 motorway.

Examination, Analysis and Evaluation - **Landscape**

10.9.15 Chapter 9 of the EIAR applies a 5km Zone of Theoretical Visibility as the study area around the proposed development site (including all elements) in terms of assessing the likely landscape and visual effects of the proposed development on the receiving environment. The baseline environment is described in terms of the landscape character assessments for the counties of Kilkenny and Carlow and are described as follows:

- Kilkenny County Council –
    - The electricity substation is located within the ‘Transition Zone’ landscape type and the ‘B1: Castlecomer Plateau Southern Transition Zone’ landscape character area.
    - The closest ‘landscape areas of highly scenic and significant visual amenity value’ is c.4km southeast of the project site and relates to the corridor of the River Barrow.
- Carlow County Council –
    - The underground electricity line passes through lands in County Carlow and, more specifically, through the ‘Killeshin Hills’ LCA with a level ‘5 – Most Sensitive’ classification.

10.9.16 The location of the proposed substation is identified as being along the 70m contour where the terrain is relatively flat while the proposed control unit is located on more elevated terrain within the Castlecomer Plateau at an elevation of 310mAOD. The receiving landscape comprises primarily pastoral farming lands with pockets of commercial forestry, a quarry and centres of population. It is noted that the substation and interface masts are the primary features considered in terms of visual effects.

10.9.17 Six Viewshed Reference Points (VRPs) were identified as a basis for assessment within the STV. The landscape value and sensitivity as assessed in relation to a number of factors with the EIAR describing the area as a robust rural landscape, influenced by several anthropogenic land uses including roads, railway line and quarrying, with distinctive landscape features including the Castlecomer Plateau and the River Barrow. The sensitivity of the landscape and associated features is considered in the assessment of effects.

10.9.18 Table 10.9 below presents a summary of the likely effects of the proposed development on material assets, cultural heritage and landscape as identified in the EIAR.

Potential Material Assets, Cultural Heritage and Landscape Impacts	Potential Effects in the absence of Mitigation	Mitigation & Monitoring Measures	Residual Impacts
Construction Phase			
Material Assets – Traffic & Transport	• 2 no site entrances will be constructed to provide access to the substation and control unit. Works will require the removal of 15m of roadside vegetation at the substation site and 10m at the control unit site. All works will be undertaken on private lands and no significant direct or indirect transport and access effects are envisaged. • The amended proposed construction access to the substation site removes the need to use the majority of the L66732 cul-de-sac road and omits the need to remove 130m of hedgerow to widen a section of the road by 1.5m, minimising potential effects. • The installation of the underground electricity line will result in direct and indirect effects on transport and access. Following the installation, all public roads will be subject to a full width carriage reinstatement. Direct effects will be slight, negative	• A Traffic Management Plan to be agreed as part of the Construction Environmental Management Plan (CEMP) • Appropriate traffic management will be implemented • Construction phase traffic movements will be limited to 07:00-19:00 Monday to Friday and 07:00–13:00 on Saturdays with no movements on Sundays or public holidays. • Rolling road closures • Adequate and appropriate signage • Staff vehicle sharing will be encouraged • Parking for staff will be provided at the electricity substation compound. • Road sweeping • No abnormal sized delivery will be required.	Site entrance – not significant, negative and short term. Underground Electricity Line – direct, slight, negative, of high probability and short term (temporary)

	and short term (temporary). Indirect effects relate to traffic disruption due to the construction process, including full road closures on a rolling basis over 100m at any one time. Diversions will be implemented and local access for residents, landowners and business operators will be maintained. Potential disruptions for pedestrians. • In terms of HGV deliveries and construction traffic, the timescale for completion is 15-18 months, and will involve approximately 2,736 no. loads (see EIAR Table 12.6 of Chapter 12: Material Assets) being delivered to the project site (152 trips per month and 7 trips per day, excluding Sundays and public holidays). • In terms of construction staff movements, it is anticipated that 40 staff will be employed at peak construction who will arrive on site in light-goods vehicles (LGVs) and crew vehicles. It is anticipated that 15 vehicles will visit the site on a daily basis. Parking will be provided at the electricity substation compound, and	• A designated contact point and coordinator will be in place.	HGV movements - not likely to be significant and likely to be slight, negative, direct and short term. Staff movements - not likely to be significant and likely to be not significant, negative and short-term. No significant residual effects are assessed as likely to occur, and likely to be slight to imperceptible negative and short-term.

	no parking will be permitted along the cable route.		
Material Assets - Aviation	• The project is not, due to the absence of particularly tall structures, a type of development which is likely to give rise to effects on or interactions with aviation. • The tallest structures are 18m in height (lightning masts) and are unlikely to interact with any aviation receptors.	• No mitigation required	No significant residual effects are assessed as likely to occur.
Material Assets – Telecommunications	• Given the nature of the development and the absence of tall structures, interference or adverse effects are unlikely.	• No mitigation required	No significant residual effects are assessed as likely to occur.
Material Assets – Resources & Utility Infrastructure **Waste Management**	• It is assessed that significant effects on resources and utility infrastructure are unlikely to occur as a result of the construction phase. • Minor temporary disruption to electricity supply at a local level could occur during the process of connecting the project to the national grid. • Potential for accidental collision with overhead wires or subsurface cables/pipes.	• Accidental collision with overhead / underground lines will be mitigated through good construction practices • Local sourcing of aggregates • EirGrid will balance loading on the electricity network during connection process. • The installation of the underground electricity line will be undertaken in strict accordance with the Code of Practice for Working in the Vicinity of the Transmission Network (Gas Networks Ireland, 2021) and	Effects are assessed to be slight-imperceptible, direct, indirect and short-term. In the event of interaction with the gas pipeline, there is a risk of significant effects on the operation

	• In terms of the high-pressure gas pipeline, an assessment (Annex 12.3 of EIAR) finds that the likely effects; including barlow stress, effective stress, principal stress and fatigue; are each within allowable tolerances. • The project will require the extraction of non-renewable resources for the construction, which will be resourced locally. • Waste generated during the construction phase will be managed under the Waste Management Plan in the CEMP. • Excavated material will be used for reinstatement / landscaping – (15,030m^3) • The development will result in the excavation of 10,385m^3 of excess material which will be stored within deposition area at the substation site. • Spoil will be transported to the deposition areas. • Shankill GWS infrastructure is less likely to be affected with the proposed new construction access layout, which removes HGVs from the L66732.	particularly with respect to the use of hand-held equipment within 1.5m (linear distance) of the pipeline. A detailed Method Statement will be prepared for review by Gas Networks Ireland. • Spoil will be deposited in layers and drainage management measures implemented. • The spoil areas will be covered with the vegetative topsoil layer removed from the footprint of the deposition areas or covered with topsoil and allowed to vegetate. • Works will be monitored on a weekly basis during construction phase. • All pavement material will be disposed of at an approved off-site waste facility.	of the gas network.

Cultural Heritage	• There are no RMs or protected archaeological features, or PSs or NIAH structures within the footprint of the project, with no direct effects associated with the construction of the project. • There is 1 RM within 100m and 17 RMs within 1km of the substation, and 4 within 100m of the line route. There are 9 PSs within 2km of the substation. The effect will be temporary, reversible and imperceptible in terms of visual and noise effects. • The effect will be permanent, direct and imperceptible to unrecorded features potentially discovered. • In the absence of mitigation there is likely a permanent and direct construction phase effect on any previously unrecorded archaeological remains that may exist within the project site.	• Archaeological monitoring of all excavations to be carried out. • Written and photographic records will be created. • Buffer zone of 25m to be applied around the western, eastern and southern sides of the site of the possible burnt spread as revealed in the geophysical survey to ensure its protection and to avoid any likelihood of adverse effects. • The alignment of the access track to the west of the electricity substation has been designed such that it does not affect the sub-oval pit.	No direct or indirect construction phase effect on the cultural heritage resource.
Landscape	• During the construction phase, temporary landscape impacts may be experienced due to a high intensity of activity.	• No specific landscape and visual mitigation measures proposed beyond standard best practice.	Medium and Medium-low visual receptor sensitivities will result in

	• Construction phase effects are assessed to be negative, transient, reversible and, in terms of duration, short-term. • Physical effects will be experienced locally at the site of the control unit and substation. • There will be a permanent physical disturbance of the landform and land cover of the site, including the removal of hedgerows (up to c140m). • Assessed as likely to result in a visual effect of in the immediate surroundings of the site.	• Development proposes progressive reinstatement and landscaping. • The project has been designed without a need to modify the existing terrain and minimise substantial excavations.	temporary slight visual impacts and not significant. Visual effects are not assessed as likely to be significant.
Operational Phase			
Material Assets – **As above**	• The project will generally be unmanned save for routine inspections and maintenance amounting to 1-2 visits per week. • In the event of a major fault, larger machinery may be required. • Traffic volume and movements is predicted to be very low. • Due to the low altitude of the project no effects on aviation, including the M9 critical low-level flying route	• Measures to ensure the protection of the gas pipeline will be implemented, as dictated by GNI.	No likely significant adverse residual effects during the operation phase

	identified in the Draft Air Corps Wind Farm/Tall Structures Position Paper, are assessed. • Due to the characteristics of the project, it is assessed that significant effects on telecommunications are not likely to occur during the operational phase. • No likely effect on existing utility infrastructure or renewable or non-renewable resources anticipated. • In terms of the high-pressure gas pipeline, an assessment of the operational phase (Annex 12.4 of EIAR) concludes that the effect of electromagnetic radiation on the pipeline under normal operating conditions or under fault conditions, will be below the relevant threshold. • All waste arising will be removed from site and reused, recycled or disposed of in accordance with all relevant waste management regulations and guidelines.		
Cultural Heritage	• Due to the proximity of the electricity substation, there will be a likely long-term, reversible and slight operational phase visual effect on 1 no. Recorded	• No mitigation required	A likely long-term, reversible and slight residual visual effect on 1 no. Recorded

	Monument (RMP KK016-006: linear earthwork). • A likely long-term, reversible and not significant operational phase visual effect is assessed on the additional 17 no. Recorded Monuments within 1km of the electricity substation. • A likely long-term, reversible and not significant operational phase visual effect is assessed on the 16 no. NIAH structures within 2km of the electricity substation.		Monument (RMP KK016-006: linear earthwork). A likely long-term, reversible and not significant residual visual effect on the additional 17 no. Recorded Monuments within 1km of the electricity substation. A likely long-term, reversible and imperceptible residual noise effect on the archaeological resource.
Landscape	• The development will result in anthropogenic forms and features within the pastoral setting. • Existing vegetated boundaries will screen from visual receptors. • The magnitude of the operational phase landscape impact is assessed	• Other than those required to be removed to facilitate the development, existing hedgerows will be maintained and protected. • 220m of new hedgerow will be planted. • Approximately 920m of existing perimeter and internal hedgerows	Landscape effects are deemed Moderate-Slight within the site, reducing to Slight beyond the immediate site context.

	as reducing to Low-negligible and Negligible, with increased distance. • Visual impacts are assessed from Imperceptible - Neutral – Permanent from the selected VRPs with sensitivities ranging from low – medium – high.	will be bolstered where required to thicken and fill gaps. • Advanced nursery stock trees will be planted to fill noticeable gaps and to increase screening.	The effect is deemed negative and permanent. The highest residual significance of visual effect is assessed to be Slight - imperceptible (VP2). The effect is assessed as Neutral and permanent.
Decommissioning Phase			
Material Assets – As above	• The electricity substation will form part of the national electricity network and decommissioning will not occur. • The underground electricity line will be decommissioned and removed but the ducting will remain in situ. • The electrical control unit will be decommissioned. • The volume of traffic movements during decommissioning is assessed	• Other than the implementation of standard best practice procedures, no decommissioning phase mitigation measures are required.	Not significant, negative and of short-term duration. No significant residual adverse effects are assessed as likely to occur.

	to be significantly reduced compared to the construction phase operations. • Due to the low altitude of activity during the decommissioning phase, it is assessed that there will be no likely significant effects on aviation. • No significant effects are assessed as likely to occur during the decommissioning phase. • In terms of waste management, the electrical control unit and underground electricity line will be decommissioned at the same time as the White Hill Wind Farm, and elements reused, recycled or appropriately disposed of.		
Cultural Heritage	• No decommissioning is proposed for the electricity substation. • The electrical control unit and electricity line will be removed.	• Ducting will be left *in situ* to minimise ground disturbance.	No decommissioning phase effects on archaeological, architectural or cultural heritage resource.
Landscape	• No decommissioning is proposed for the electricity substation. • Adverse effects arise during the decommissioning phase due to the	• Following decommissioning of the control unit and electricity line, all excavated or disturbed areas will be soiled over and re-seeded.	The substation will not be decommissioned.

	presence of plant and machinery, traffic movements and excavations.		The effects of the control unit are assessed to be slight-imperceptible and positive.

Cumulative Effects - Summary

Material Assets – Traffic & Transport

- Cumulative effects are only likely to occur during the construction phase. Construction material for the development is likely to be sourced from one or more of the quarries listed in Table 1.4 (Chapter 1) of the EIAR.
- Possible cumulative effects are possible in relation to the construction of other projects if the construction phases overlap. It is anticipated that the project will be constructed concurrently with the permitted White Hill Wind Farm – with 21 no. predicted daily HGV movements.
- The proposed route of the underground electricity line largely avoids potential construction material delivery routes associated with both the White Hill Wind Farm and the subject project.
- It is therefore concluded that cumulative effects are assessed as likely to be no greater than moderate, indirect, negative and temporary.

Material Assets – Aviation

- There is no likelihood of the project giving rise to any significant effects on aviation, individually or in combination with other existing, permitted or proposed developments.

Material Assets – Telecommunications

- There is no likelihood of significant effects arising in combination with existing, permitted or proposed developments.

Material Assets – Resources & Utilities Infrastructure

- The project is not assessed as likely to result in any cumulative effects on resources or utility infrastructure, either individually or in combination with other existing, permitted or proposed developments.

Cultural Heritage

- Direct effects on archaeological, architectural and cultural heritage resources will be localised and contained and mitigated, cumulative direct effects are not assessed as likely to occur.

Landscape

- Cumulative effects associated with the control unit are not anticipated while the proposed substation is located c6km from the nearest permitted wind turbine. It is assessed that cumulative construction phase effects are limited and are not likely to be significant; while any operational phase cumulative landscape and visual effects are likely to be generated only with the electricity substation and interface masts.
- In terms of landscape effects, the project will result in an increased intensity of development in the local landscape. However, given the separation distance, it is likely the project will be viewed as a separate development.
- In terms of visual effects, the distance between projects reduces the likelihood of clear cumulative visibility. There will be limited visibility of the substation.

Monitoring

Material Assets – Traffic & Transport

- Pre and post construction pavement condition surveys will be undertaken on all non-national access routes.
- Any deterioration of carriageways or structures identified shall be put right at the expense of the Developer and to the satisfaction of the Planning Authority (Authorities).

Material Assets – Resources & Utilities Infrastructure

- Potential monitoring of interference levels associated with the gas pipeline as required or requested by Gas Network Ireland.
- Soil deposition areas will be monitored on a weekly basis during the construction phase, and monthly following the construction phase for a period of 6-months

Cultural Heritage

- Excavation during the construction phase may result in the discovery of previously unrecorded cultural heritage features. Excavation activities will be monitored and any finds recorded.

Do Nothing

- The level of traffic in the area would not temporarily increase beyond a natural traffic growth.
- No additional demand on natural resources and materials to support the development.
- No effects on utilities (gas and/or water) infrastructure.
- No impacts on archaeology or cultural heritage assets.
- The landscape would not be affected and no changes to the visual amenity of the area would arise.

Table 10.9 - Consideration of Impacts, Significance and Mitigation Measures for Material Assets, Cultural Heritage and the Landscape

Assessment of Direct and Indirect Effects

10.9.19 I have examined, analysed, and evaluated Chapters 3, 9, 10 and 12 of the EIAR, and all of the associated appendices, documentation and submissions on file in respect of effects on material assets, cultural heritage and landscape. I am satisfied that the applicant has presented a good understanding of the baseline environment, and has presented sufficient survey data pertaining to each topic to enable an assessment of the likely effects of the proposed development on traffic and transport, material assets, utilities and resources, waste, cultural heritage and landscape. I am further satisfied that the key impacts, both direct and indirect in respect of likely effects on material assets, cultural heritage and landscape, have been identified. Mitigation measures proposed comprise standard good practice measures which are noted to be effective, notably with regard to the prevention of adverse effects on archaeology and disruption to roads/traffic and utilities. The Board will note the specific mitigation measures proposed for the operational phase of the project to ensure the protection of the gas pipeline, relating to baseline electrical interference measurements and datalogging and compliance with any measures as dictated by Gas Networks Ireland. As such, I am satisfied that no significant, adverse direct, indirect, or cumulative effects on the environmental factors will occur in the long term.

10.9.20 I am further satisfied that the key direct and indirect effects in terms of material assets primarily relate to traffic and transport during the construction phase of the project. These effects will be short-term effects on people living, working, and travelling on the public road network in the area of the site due to additional traffic and short-term road closures and diversions. Traffic diversion and closures will result in some delays along the routes affected during the construction phase. I note the mitigation measures proposed to ensure the avoidance of significant effects and to reduce the magnitude and significance of any effects through the implementation of a Traffic Management Plan. During the operational phase, the level of traffic generated by the project will be imperceptible. Overall, I am satisfied that the proposed development is not likely to have any significant adverse effects on traffic and transport.

10.9.21 No significant effects are anticipated in terms of aviation or telecommunications during any phase of the project.

10.9.22 In terms of resources and utility infrastructure, the potential effects of the construction phase on the high-pressure gas pipeline are to be mitigated by way of measures agreed with Gas Networks Ireland, and the installation of the underground electricity line will be undertaken in strict accordance with the Code of Practice for Working in the Vicinity of the Transmission Network (Gas Networks Ireland, 2021). During the operational phase, measures to ensure the protection of the gas pipeline will be implemented, as dictated by Gas Networks Ireland. In terms of potential impacts on the Shankill GWS infrastructure, potential effects are minimised in the amended construction access proposal submitted by the applicant, which removes heavy goods traffic from the L66732. No significant negative residual impacts on major infrastructure or utilities are predicted either during construction or operation. The proposed development has been designed to minimise impacts on major utility infrastructure.

10.9.23 The potential for significant effects on cultural heritage during the construction phase, primarily relating to the uncovering of previously unknown materials, will be mitigated by way of best practice measures carried out under the supervision of a suitably qualified archaeologist under Licence (where required) granted by the Minister for Housing, Local Government and Heritage, and in accordance with the provisions of the National Monuments Acts 1930–2004 (as amended). Measures will include preservation *in situ* and monitoring of construction activities. A number of architectural and cultural heritage assets are noted to be slightly impacted following mitigation. No significant impacts are anticipated for archaeology, architectural heritage and cultural heritage during the construction or operational phases.

10.9.24 The potential for significant landscape and visual impacts occurring arise during the construction phase of the project. The proposed control unit will be set back from the public road and is located on a well screened site. This feature will be seen as ancillary to the larger permitted windfarm development if visible. The installation of the electricity cable will temporarily affect the visual amenity of the area, but is fully reversible on completion of the installation. The proposed substation will be developed within a site which currently provides substantial screening through existing vegetation along the boundaries. While the substation will be readily identifiable as an electrical infrastructure installation, the greatest effects arise from within the project site and the highest residual significance of visual effects at the

nearest visual receptor is assessed to be slight-imperceptible. No significant impacts are anticipated for landscape during any phase of the project.

Conclusion

10.9.25 Having regard to the foregoing, it is considered the main significant direct and indirect effects on material assets, cultural heritage and landscape are as follows:

- Short term adverse impact arising from the construction phase on traffic and transport in terms of increased traffic, temporary road closures and diversions. Construction phase impacts will be mitigated by standard good construction practices. Effects will be temporary in nature and appropriate traffic management arrangements will be put in place.
- Potential effects on the high-pressure gas pipeline will be mitigated by measures to ensure the protection of the pipeline and as dictated by Gas Networks Ireland.
- Potential effects on Shankill GWS infrastructure are minimised in the amended construction access proposal submitted by the applicant, which removes heavy goods traffic from the L66732.
- Potential effects on undiscovered archaeological materials during the construction phase. Best practice mitigation and monitoring of ground works proposed. Buffer zone of 25m to be applied around the site of the possible burnt spread as revealed in the geophysical survey to ensure its protection
- A likely long-term, reversible and:
    - slight residual operational phase visual effect on 1 no. Recorded Monument (RMP KK016-006: linear earthwork).
    - not significant residual operational phase visual effect on the additional 17 no. Recorded Monuments within 1km of the electricity substation.
    - imperceptible residual operational phase noise effect on the archaeological resource.

- Potential for adverse impacts on the landscape and visual amenity of the area during the construction phase due to high intensity activity and permanent physical disturbance of the landform and land cover of the site, including the removal of up to c140m of hedgerows. Landscape effects during the operational phase at the substation site are assessed as Moderate-Slight within the site, reducing to Slight beyond the immediate site context.

10.10 Risks associated with Major Accidents and/or Disasters.

10.10.1 No prescribed body or third party raised issues with regard to major accidents and/or disasters.

10.10.2 Major accidents or natural disasters is assessed in Chapter 4 of the EIAR which consider the project in terms of Population & Human Health, in Chapter 6 in terms of Land & Soil and Chapter 7 in terms of Water. Risks associated with the spread of non-native invasive species is assessed in Chapter 5 – Biodiversity.

10.10.3 There is no likely ground instability and limited likelihood for significant natural disasters to occur at the project site other than flood and fire. A Flood Risk Assessment is included in Annex 7.1 and flooding is assessed in Chapter 7 of the EIAR. Other potential risks identified during the construction phase of the project include:

- Potential interaction with the gas pipeline.
- Release of hydrocarbons and potential pollution of watercourses or groundwater during construction
- Potential for spreading non-native/invasive plant species during the construction phase in the absence of biosecurity measures

10.10.4 The project is not identified to be a likely source of pollution either during the construction or operational phases due to ‘designed in’ features including drainage infrastructure, limited volume of hydrocarbons stored on site and the bunding arrangements to ensure spillages do not occur. Mitigation measures are set out in chapters 6 and 7 to ensure that significant environmental effects are unlikely to occur. The CEMP will include measures to mitigate the Identified risks. The project

site is not regulated by or connected/proximate to any site regulated under the Control of Major Accident Hazards Involving Dangerous Substances Regulations (COMAH/SEVESO Directive) and there is no likelihood of effects on, or interactions with, any such site.

10.10.5 I am satisfied that given the nature of the proposed development, and the mitigation measures proposed, together with the low-medium probability of a major accident/ natural disaster, it is not likely that significant effects on the environment would arise in this regard. There are no cumulative impacts that would combine to result in significant residual environmental impacts.

10.11 Interactions between Factors

10.11.1 Interactions between the environmental factors described are assessed in Chapter 13 of the EIAR. Table 13.1 provides a Matrix of Interactions, and the key interactive impacts are summarised as follows:

- Population & Human Health and Air Quality & Climate – potential impacts arising include effects from dust emissions and emissions from plant and machinery during the construction phase. Operational impacts are assessed as positive due to the project facilitating the transmission of renewable energy which would displace fossil fuel generated electricity, improving air quality and having a positive effect on human health.
- Population & Human Health and Landscape – potential impacts arise in terms of the degree of intrusion or dominance created by the development and the sensitivity of the receptors.
- Population & Human Health and Noise & Vibration – potential short-term impacts arise in terms of the construction phase which are to be managed through mitigation measures and good construction practices. While similar impacts may arise during the decommissioning phase, the substation is to be retained and therefore the effects are significantly.
- Population & Human Health and Material Assets – potential short-term impacts arise in terms of the construction phase and associated transport and access issue. Increased traffic volumes, and associated local disruptions to residents,

will be temporary and are to be managed through traffic management measures as part of the CEMP to be agreed with the planning authority. While similar impacts may arise during the decommissioning phase, the substation is to be retained and therefore the effects are significantly reduced.

- Biodiversity and Land & Soils – excavation and removal of soils during the construction phase will lead to habitat loss. No ecologically sensitive areas are affected, with no significant residual effects on biodiversity.
- Biodiversity and Water – potential for sedimentation of waters during the construction phase which could impact habitats and species. Mitigation measures proposed to ensure the protection of the water environment including water quality and aquatic ecology.
- Land & Soils and Cultural Heritage – potential impacts on unrecorded sub-surface cultural heritage features uncovered during excavation works. Mitigation measures, including archaeological monitoring is proposed.
- Air Quality & Climate and Materials Assets (Transport & Access) – short term temporary effects on local air quality will arise from exhaust emissions.

10.11.2 It is considered that effects as a result of interactions, indirect and cumulative effects can be avoided, managed or mitigated by the measures which form part of the proposed development, the proposed mitigations measures detailed in the Environmental Impact Assessment Report, and with suitable conditions. Construction stage interactions will mostly be short-term and mitigation for one environmental factor are notably applicable to other environmental factors. The subject development is assessed with all the other relevant plans and projects in the wider area. I am satisfied, therefore, that significant environmental effects arising due to the project, as a result of cumulative impacts or impacts arising from interactions between environmental factors, are fully considered and addressed.

10.12 Reasoned Conclusion

10.12.1 In carrying out this EIA, I have examined the information presented by the applicant, including the EIAR and associated annexes, and the submissions made by the planning authorities, prescribed bodies and observers during the course of the application. I have also had regard to relevant legislation and guidance including, Guidelines on the information to be contained in Environmental Impact Assessment Reports (EPA 2022). It is considered that the main significant direct and indirect effects of the proposed development on the environment are, and will be mitigated as follows:

- Short term adverse impact on **Population & Human Health** arising from the construction phase on residential amenity in terms of general disturbance, noise, dust and potential traffic disruptions on the public road network.
  Construction phase impacts will be mitigated by standard good construction practices. Diversions will be temporary in nature and appropriate traffic management arrangements will be put in place. A community liaison officer has been engaged as a point of contact during construction.
- Adverse impacts on **Biodiversity** from permanent habitat loss of 0.004ha of buildings and artificial surfaces, 150m of drainage ditches x Hedgerows mosaic 1.9ha of improved agricultural grassland and 44.43m of hedgerows.
  Compensatory and enhancement measures will result in a net gain of +25.57m of hedgerows which will take time to establish. Indirect residual effects in terms of dust arising during the construction phase will be short-term and a Water Quality Inspection & Monitoring Plan is to be agreed with the Planning Authority as part of the CEMP to protect the water environment.
- Adverse impacts on 1.6ha of agricultural **Land** due to permanent land take and temporary disturbance.
- Potential for adverse impacts on **ground** w**ater** in terms of groundwater flow and quality at unknown private water supplies and down gradient designated sites in terms of water quality. Risks to groundwater quality and associated receptors will be mitigated with the adoption of a CEMP.
- Potential for impacts on **surface water** quality during the construction phase due to run-off, spillages, accidental discharges or modifications. A Water Quality

Inspection & Monitoring Plan (WQIMP) will be agreed with the Planning Authority as part of the CEMP.

- Potential for residual effects in terms of **Air Quality** due to dust arising which will be short-term during the construction phase. Residual temporary noise impacts are likely to occur during the construction phase due to increased traffic and other activities.
- Adverse impacts on **Material Assets** in terms of:
    - Traffic and transport during the construction phase increased traffic, temporary road closures and diversions.
    - Crossing of the high-pressure gas pipeline will be mitigated by measures to ensure the protection of the pipeline and as dictated by Gas Networks Ireland.
    - Potential effects on Shankill GWS infrastructure are minimised in the amended construction access proposal submitted by the applicant, which removes heavy goods traffic from the L66732.
    - Positive impacts on material assets through the improvement of the electricity infrastructure in the region once the proposed development is operational.
- Adverse impacts on **Cultural Heritage** in terms of potential undiscovered archaeological materials during the construction phase. Best practice mitigation and monitoring of ground works proposed. Buffer zone of 25m to be applied around the site of the possible burnt spread as revealed in the geophysical survey to ensure its protection.

  A likely long-term, reversible and:
    - slight residual operational phase visual effect on 1 no. Recorded Monument (RMP KK016-006: linear earthwork).
    - not significant residual operational phase visual effect on the additional 17 no. Recorded Monuments within 1km of the electricity substation.

    - imperceptible residual operational phase noise effect on the archaeological resource.

- Adverse impact on the **Landscape** and visual amenity of the area during the construction phase due to high intensity activity and permanent physical disturbance of the landform and land cover of the site, including the removal of up to c10m of hedgerows. Landscape effects during the operational phase at the substation site are assessed as Moderate-Slight within the site, reducing to Slight beyond the immediate site context.

11.0 Appropriate Assessment

11.1 Screening Determination

11.1.1. The Commission is referred to Appendix 3 of this report.

11.1.2 Based on the information provided in the screening report, site visit and review of the conservation objectives and supporting documents, I consider that in the absence of mitigation measures beyond best practice construction methods, the proposed development has the potential to result in significant effects on the River Barrow and River Nore SAC (Site code: 002162). I concur with the applicants' findings that such impacts could be significant in terms of the stated conservation objectives of the SAC when considered on their own and in combination with other projects and plans in relation to pollution related pressures and disturbance on qualifying interest habitats and species.

11.1.3. The potential for significant effects on the conservation objectives of the Blackstairs Mountains SAC (Site Code: 000770) and the River Nore SPA (Site Code: 004233) as well as other European Sites outside of the zone of influence can be screened out with confidence because of the separation distances and the lack of substantive ecological linkages or pathways between the proposed works and these European sites.

11.1.5. In accordance with Section 177U of the Planning and Development Act 2000 (as amended) and on the basis of the information provided by the applicant and considered in this AA screening, I conclude that it is not possible to exclude that the proposed development alone or in combination with other plans and projects will give rise to significant effects on River Barrow and River Nore SAC (Site code: 002162) European Site in view of the sites conservation objectives.

11.1.6 Appropriate Assessment is required. It is therefore determined that Appropriate Assessment (stage 2) [under Section 177V of the Planning and Development Act 2000] of the proposed development is required.

11.1.7. In reaching the conclusion of the screening assessment, no account was taken of measures intended to avoid or reduce the potentially harmful effects of the project on any European Site.

11.2 Appropriate Assessment

11.2.1. The Commission is referred to Appendix 4 of this report.

11.2.2 In screening the need for Appropriate Assessment, it was determined that the proposed development could result in significant effects on River Barrow and River Nore SAC (002162) in view of the conservation objectives of those sites and that Appropriate Assessment under the provisions of S177U was required.

11.2.3 Following an examination, analysis and evaluation of the NIS all associated material submitted, I consider that adverse effects on site integrity of the River Barrow and River Nore SAC (002162) can be excluded in view of the conservation objectives of these sites and that no reasonable scientific doubt remains as to the absence of such effects.

11.2.4 My conclusion is based on the following:

- A detailed assessment of construction, operational and decommissioning impacts associated with the project.
- An assessment of in-combination effects with other plans and projects.
- Effectiveness of mitigation measures proposed including supervision and monitoring and integration into CEMP ensuring smooth transition of obligations to eventual contractor.
- Application of planning conditions to ensure application of these measures.
- No significant effects on the qualifying interests of European sites or supporting habitats, arising from the project.
- The proposed development will not affect the attainment of conservation objectives for the River Barrow and River Nore SAC (002162) or prevent or delay the restoration of favourable conservation condition for identified Qualifying Interests.
- No reasonable scientific doubt as to the absence of adverse effects on the integrity of the River Barrow and River Nore SAC (002162).

12.0 Recommendation

Having regard to the foregoing, I recommend that permission for the proposed development be granted, subject to conditions, for the following reasons and considerations as outlined in the Draft Order below.

DRAFT ORDER

Reasons and Considerations

The Commission performed its functions in relation to the making of its decision, in a manner consistent with Section 15(1) of the Climate Action and Low Carbon Act 2015, as amended by Section 17 of the Climate Action and Low Carbon Development (Amendment) Act 2021, (consistent with the Climate Action Plan 2024 and Climate Action Plan 2025, national long term climate action strategy, national adaptation framework and approved sectoral adaptation plans, the furtherance of the national climate objective, and the objective of mitigating greenhouse gas emissions and adapting to the effects of climate change in the State);

And in coming to its decision, the Commission had regard to the following:

(a) European, national, regional and local planning, energy, climate and other policy of relevance, including in particular the following:

- **European Policy/Legislation** including**:**
  i. Directive 2014/52/EU amending Directive 2011/92/EU (Environmental Impact Assessment Directive);
  ii. Directive 92/43/EEC (Habitats Directive) and Directive 79/409/EEC as amended by 2009/147/EC (Birds Directive);
  iii. Directive 2000/60/EC (Water Framework Directive)
- **National Policy and Guidance** including**:**
  i. Project Ireland 2040 - National Planning Framework (2018);
  ii. National Development Plan (2021-2030);
  iii. The objectives and targets of the National Biodiversity Action Plan 2023-2030;

iv. Long-term Strategy on Greenhouse Gas Emissions Reduction (2024);
v. Policy Statement on Security of Electricity Supply (November 2021);
vi. National Energy Security Framework (April 2022);
vii. National Energy and Climate Action Plan (2021-2030);

- **Regional and Local Planning Policy,** including in particular:

i. Regional Spatial and Economic Strategy for the Southern Region,
ii. Kilkenny County Development Plan, 2021-2027,
iii. Carlow County Development Plan, 2022-2028

(b) the location, nature, scale and extent of the proposed development,
(c) the documentation submitted with the application, including:
- the Environmental Impact Assessment Report,
- Natura Impact Statement, and
- accompanying reports including the outline Construction Environmental Management Plan,

(d) mitigation measures proposed for construction and operation of the site,
(e) The likely consequences for the environment and the proper planning and sustainable development of the area in which it is proposed to carry out the proposed development, and the absence of likely significant effects of the proposed development on European sites,
(f) the submissions on file including those from third parties, prescribed bodies and the Planning Authorities, and
(g) the Inspectors report and recommendation.

Proper Planning and Sustainable Development:

It is considered that, subject to compliance with the conditions set out below, the proposed development would be in accordance with European, National, Regional and Local planning and related policy, would be consistent with the provision of the Climate Action Plan 2024 and Climate Action Plan 2025 and would make a positive

contribution towards Ireland's renewable energy and security of energy supply requirements. Furthermore, the proposed development would not have a significant impact on the water environment, including public water supply resources, nor have an unacceptable impact on the character of the landscape or archaeological heritage, would not have a significant impact on ecology, nor seriously injure the visual and residential amenities of the area, 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.

Environmental Impact Assessment

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

a) The nature, scale and location of the proposed development.

b) The Environmental Impact Assessment Report and associated documentation in support of the application for which approval is sought.

c) The submissions received during the course of the application.

d) The Inspector's report and recommendation.

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

Having regard to the examination of environmental information contained above, and in particular to the EIAR and other information provided by the developer, and the submissions from the planning authorities, prescribed bodies and observers during the course of the application, it is considered that the main significant direct and indirect effects of the proposed development on the environment are, and will be mitigated as follows:

- Short term adverse impact on **Population & Human Health** arising from the construction phase on residential amenity in terms of general disturbance, noise, dust and potential traffic disruptions on the public road network.
  Construction phase impacts will be mitigated by standard good construction practices. Diversions will be temporary in nature and appropriate traffic management arrangements will be put in place. A community liaison officer has been engaged as a point of contact during construction.
- Adverse impacts on **Biodiversity** from permanent habitat loss of 0.004ha of buildings and artificial surfaces, 150m of drainage ditches x Hedgerows mosaic 1.9ha of improved agricultural grassland and 44.43m of hedgerows.
  Compensatory and enhancement measures will result in a net gain of +25.57m of hedgerows which will take time to establish. Indirect residual effects in terms of dust arising during the construction phase will be short-term and a Water Quality Inspection & Monitoring Plan is to be agreed with the Planning Authority as part of the CEMP to protect the water environment.
- Adverse impacts on 1.6ha of agricultural **Land** due to permanent land take and temporary disturbance.
- Potential for adverse impacts on **ground** w**ater** in terms of groundwater flow and quality at unknown private water supplies and down gradient designated sites in terms of water quality. Risks to groundwater quality and associated receptors will be mitigated with the adoption of a CEMP.
- Potential for impacts on **surface water** quality during the construction phase due to run-off, spillages, accidental discharges or modifications. A Water Quality Inspection & Monitoring Plan (WQIMP) will be agreed with the Planning Authority as part of the CEMP.

- Potential for residual effects in terms of **Air Quality** due to dust arising which will be short-term during the construction phase. Residual temporary noise impacts are likely to occur during the construction phase due to increased traffic and other activities.
- Adverse impacts on **Material Assets** in terms of:
    - Traffic and transport during the construction phase increased traffic, temporary road closures and diversions.
    - Crossing of the high-pressure gas pipeline will be mitigated by measures to ensure the protection of the pipeline and as dictated by Gas Networks Ireland.
    - Potential effects on Shankill GWS infrastructure are minimised in the amended construction access proposal submitted by the applicant, which removes heavy goods traffic from the L66732.
    - Positive impacts on material assets through the improvement of the electricity infrastructure in the region once the proposed development is operational.
- Adverse impacts on **Cultural Heritage** in terms of potential undiscovered archaeological materials during the construction phase. Best practice mitigation and monitoring of ground works proposed. Buffer zone of 25m to be applied around the site of the possible burnt spread as revealed in the geophysical survey to ensure its protection.

  A likely long-term, reversible and:
    - slight residual operational phase visual effect on 1 no. Recorded Monument (RMP KK016-006: linear earthwork).
    - not significant residual operational phase visual effect on the additional 17 no. Recorded Monuments within 1km of the electricity substation.
    - imperceptible residual operational phase noise effect on the archaeological resource.

- Adverse impact on the **Landscape** and visual amenity of the area during the construction phase due to high intensity activity and permanent physical disturbance of the landform and land cover of the site, including the removal of up to c140m of hedgerows. Landscape effects during the operational phase at the substation site are assessed as Moderate-Slight within the site, reducing to Slight beyond the immediate site context.

It is considered that effects as a result of interactions, indirect and cumulative effects can be avoided, managed or mitigated by the measures which form part of the proposed development, the proposed mitigations measures detailed in the Environmental Impact Assessment Report and with suitable conditions. There is, therefore, nothing to prevent the approval of the development on the grounds of significant environmental effects, or as a result of cumulative effects or effects arising from interactions between environmental factors.

Reasoned Conclusion on Significant Effects:

The Board completed an environmental impact assessment in relation to the proposed development and concluded that, subject to the implementation of the mitigation measures proposed, and subject to compliance with the conditions set out below, the effects of the proposed development on the environment, by itself and in combination with other plans and projects 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 sites' 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 and 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 sites 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 sites Conservation Objectives.

CONDITIONS

1. The proposed development shall be carried out and completed in accordance with the plans and particulars, lodged with the application to An Coimisiún Pleanála on the 18th day of March 2025 and the applicants response to submissions to the proposed development received by the Commission on the 16th of July 2025 as it relates to the construction phase access to the substation site, 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.

   No permission for the widening of the carriageway of the L66732 by approximately 1.5m over a distance of approximately 130m is hereby permitted.

   Reason: In the interest of clarity and to protect the amenities of properties and sensitive receptors in the vicinity.

2. All of the environmental, archaeological, construction and ecological mitigation measures set out in the Environmental Impact Statement and Natura Impact Statement accompanying the application to the Planning Authority and other particulars submitted with the application and the applicants response to submissions to the proposed development received by the Commission on the 16th of July, 2025, shall be implemented by the developer in full and 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 10 years from the date of this Order.

Reason: In the interest of clarity.

4. A suitably qualified Project Ecological Clerk-of-Works and Licenced Ecologist shall be retained by the developer to undertake pre-construction surveys at the various project elements, including any river crossings, immediately prior to commencing work in order to check for the presence of protected species in the vicinity (incl. badgers, otters, nesting birds, bats & common lizard). The mitigation measures contained in Annex 1.9 of Volume II of the submitted EIAR shall be implemented in their entirety. The ecologist shall be present during site construction works. Upon completion of works, an ecological report of the site works shall be prepared by the appointed ecologist to be kept on file as part of the public record. Where necessary, the project ecologist shall have 'Cease Works' powers.

Reason: In the interest of nature conservation and the protection of ecology and wildlife in the area.

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

(b) All works in the vicinity of watercourses shall be in accordance with the recommendations in Inland Fisheries Ireland's Guidance Document on Protection of Fisheries during Construction Works in and adjacent to Waters, 2016, shall be referred to in the Construction and Environmental Management Plan (CEMP) and shall be supervised by an Ecological Clerk of Works.

(c) Surface water from the site shall not be permitted to drain onto the adjoining public road or adjoining properties.

(d) The developer shall ensure that all soil and water quality related mitigation measures are implemented in full and monitored throughout the life cycle of the construction works and monitored throughout the operational phase.

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

6. The developer shall prepare an Invasive Species Management Plan for the written agreement of the planning authority and all plant and machinery used during the works should be thoroughly cleaned and washed before delivery to the site to prevent the spread of hazardous invasive species and pathogens. The developer shall ensure that all mitigation measures as set out in Section 6.6.1.8 of the submitted NIS are implemented in full and monitored throughout the life cycle of the construction works and monitored throughout the operational phase.

Reason: In the interest of the proper planning and sustainable development of the area.

7. All road surfaces, culverts, watercourses, verges, and public lands shall be protected during construction and, in the case of any damage occurring, shall be reinstated to the satisfaction of the planning authorities at the developer's expense. Prior to commencement of development, a road condition survey shall be carried out to provide a basis for reinstatement works. Details in this regard shall be submitted to, and agreed in writing with, the planning authorities prior to commencement of development.

Reason: In order to protect the road network.

8. 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 Preliminary CEMP and Construction Traffic Management Plan 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 community 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.

9. Washing out of the cement delivery truck chute shall be carried out at lined cement washout ponds within the temporary construction compound with waters being tankered off site and disposed of at an approved licensed facility. There will be no discharge of cement contaminated waters to the construction drainage system or to any drain. Such activities shall be supervised by the independent Environmental Clerk of Works, and inspections of watercourses below the works areas, during the construction period, by authorised officers of IFI and the Department of Housing, Local Government and Heritage shall be facilitated when requested.

Reason: In order to protect the environment and sensitive receptors in the vicinity.

10. The developer shall facilitate the archaeological appraisal of the site, and shall provide for the preservation, recording and protection of archaeological materials or features which may exist within the site. In this regard, the developer shall:

(i) notify the relevant 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, and

(ii) employ a suitably-qualified archaeologist prior to the commencement of development. The archaeologist shall assess the site and monitor all site development works. The assessment shall address the following issues:

(a) the nature and location of archaeological material on the site, and

(b) the impact of the proposed development on such archaeological material.

A report, containing the results of the assessment, shall be submitted to the Planning Authority and, arising from this assessment, the developer shall agree in writing with the Planning Authority details regarding any further archaeological requirements (including, if necessary, archaeological excavation) prior to commencement of construction works. In default of agreement on any of these requirements, the matter shall be referred to An Coimisiún Pleanála for determination.

Reason: In order to conserve the archaeological heritage of the area and to secure the preservation (in-situ or by record) and protection of any archaeological remains that may exist within the site.

11. 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.

12. The site development and construction works shall be carried out such a manner as to ensure that the adjoining roads/ 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.

13. Prior to commencement of development, the developer shall lodge with the planning authority a bond of an insurance company, a cash deposit, or such other security as may be acceptable to the planning authority, to secure the satisfactory reinstatement of the site on cessation of the project coupled with an agreement empowering the planning authority to apply such security or part thereof to such reinstatement. The form and amount of the security shall be as agreed between the planning authority and the undertaker or, in default of agreement, shall be referred to An Coimisiún Pleanála for determination.

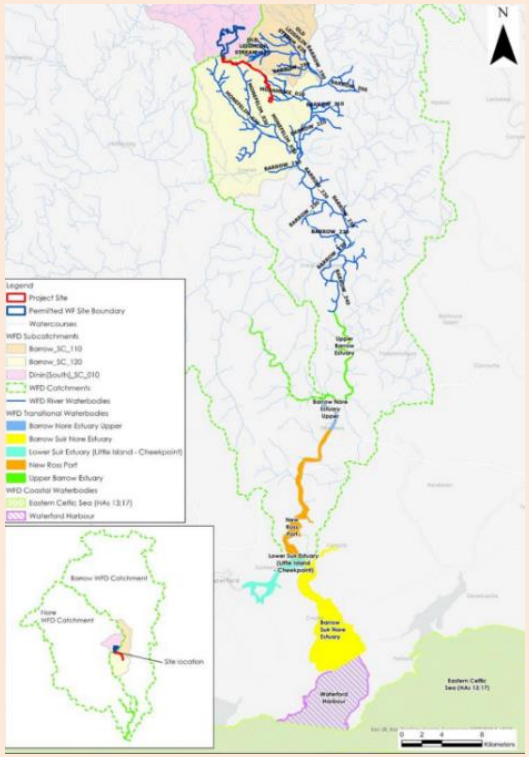
    Reason: To ensure the satisfactory reinstatement of the site.

I confirm that this report represents my professional planning assessment, judgement and opinion on the matter assigned to me and that no person has influenced or sought to influence, directly or indirectly, the exercise of my professional judgement in an improper or inappropriate way.

A. Considine
Senior Planning Inspector
31/07/2025

Appendix 1: WFD Status Impact Assessment

WFD IMPACT ASSESSMENT STAGE 1: SCREENING			
Step 1: Nature of the Project, the Site and Locality			
An Bord Pleanála ref. no.	**ABP-322078-25**	**Townland, address**	Shankill and Ballygorteen, County Kilkenny and Lacken, Moanmore and Baunreagh, County Carlow.
Description of project		Proposed development of an electrical control unit, a 110kV electricity substation and approximately 8.8km of underground electricity line.	
Brief site description, relevant to WFD Screening		The proposed substation site is located in a rural area adjacent to the M9 proximate to Shankill, Co. Kilkenny, and the underground electricity line extends towards the proposed control unit adjacent to the permitted White Hill Wind Farm at Moanmore and Baunreagh, Co. Carlow. The route of the electricity line is located primarily on the local road network and across private agricultural land. On a regional scale, the electricity substation, electrical control unit and electricity line are located entirely within the River Barrow surface water catchment within Hydrometric Area 14. The River Barrow flows approximately 3.5km to the east of the electricity substation site. More specifically, the substation and electrical control unit are located in the Barrow_SC_120 sub-catchment and • The substation within the Moanmore_010 river waterbody sub-basin (Moanmore Stream catchment). • The electrical control unit within the Monefelim_010 river sub-basin (Monefelim River catchment). • The majority of the electricity line is also located in the Barrow_SC_120 sub–catchment with the exception of 1.3km which is located in the Barrow_SC_110 sub-catchment and more locally within the Old Leighlin Stream_010 river waterbody sub-basin (Old Leighlin Stream catchment). The electricity line passes through 4 no. sub-basins; the Monefelim_010 (c.	



	1.4km), Monefelim_030/Paulstown Stream (c. 2.1km), Old Leighlin Stream_010 (c. 1.3km) and Moanmore_010 (c. 4.0km). The development proposes 5 no. watercourse crossings, where no existing culverts exist. No Q-value monitoring stations are located within the Moanmore_010 river subbasin, downstream of the electricity substation and southern end of the electricity line route. In terms of local Groundwater Bodies (GWBs), the electrical control unit and the northern section of the electricity line route are located in the Castlecomer GWB (IE_SE_G_034). The central section of the electricity line route is mapped in the Shanragh GWB (IE_SE_G_124). The substation location and southernmost section of the electricity line route are mapped within the Bagenalstown Lower GWB (IE_SE_G_157).
Proposed surface water details	A Surface Water Management Plan (SWMP), incorporating the surface water drainage design has been prepared for the electricity substation and electrical control unit and incorporates the principles of Sustainable Drainage Systems (SuDS) through an arrangement of surface water drainage infrastructure. SUDs system proposed includes *inter alia* upslope clean water drains, downslope dirty water drains, sedimats, flow attenuation and filtration check dams, stilling ponds, lagoon-type settlement ponds and buffered outfalls or level spreaders. All stormwater and surface water from the substation compound will be passed through an oil/hydrocarbon interceptor to prevent the discharge of any hydrocarbons
Proposed water supply source & available capacity	No supply confirmed. Proposed connection to Shankill GWS or private well with a yield akin to a single dwelling house.
Proposed wastewater treatment system & available capacity, other issues	Wastewater arising from the EirGrid and IPP buildings will be stored in a sealed sub-surface foul holding-tank and will be removed from site as required by a local licensed waste collector.

Step 2: Identification of relevant water bodies and Step 3: S-P-R connection						
Identified water body	**Distance to (m)**	**Water body name(s) (code)**	**WFD Status**	**Risk of not achieving WFD Objective e.g.at risk, review, not at risk**	**Identified pressures on that water body**	**Pathway linkage to water feature (e.g. surface run-off, drainage, groundwater)**
River Waterbody	0.5km	Monefelim_010 (IE_SE_14M030100)	High	Not at risk	No pressures	Yes – Site located within river sub-basin.
River Waterbody	3km	Monefelim_020 (IE_SE_14M030600)	Good	Review	No pressures	Yes – SWB located downstream of the Monefeilim_10
River Waterbody	UGC crosses	Monefelim_030 (IE_SE_14M031000)	Moderate	At Risk	Agriculture, Domestic WW	Yes – Site located within river sub-basin.
River Waterbody	0.3km	Old Leighlin Stream_010 (IE_SE_14O020500)	Good	Not at risk	None	Yes – Site located within river sub-basin.
River Waterbody	Entrance to substation	Moanmore_010 (IE_SE_14M240860)	Good	Review	None	Yes – Site located within river sub-basin.
River Waterbody	3.8km	Old Leighlin Stream_020 (IE_SE_14O020700)	Moderate	At Risk	Agriculture	Yes – SWB located downstream of the Old Leighlin Stream_010
River Waterbody	1.5km	Barrow_190 (IE_SE_14B012820)	Moderate	Review	None	Yes – SWB located downstream SWBs where the project is directly located.
River Waterbody	3.7km	Barrow_200 (IE_SE_14B012920)	Moderate	At Risk	Agriculture, Urban Run Off, Urban WW	Yes – SWB located downstream SWBs where the project is directly located.

Step 2: Identification of relevant water bodies and Step 3: S-P-R connection						
Identified water body	**Distance to (m)**	**Water body name(s) (code)**	**WFD Status**	**Risk of not achieving WFD Objective e.g.at risk, review, not at risk**	**Identified pressures on that water body**	**Pathway linkage to water feature (e.g. surface run-off, drainage, groundwater)**
River Waterbody	3.6km	Barrow_210 (IE_SE_14B013100)	Poor	At Risk	Agriculture, Aquaculture, Hdyromorphology Urban runoff	Yes – SWB located downstream SWBs where the project is directly located.
River Waterbody	7.8km	Barrow_220 (IE_SE_14B012920)	Moderate	At Risk	Agriculture	No – due to distance, intervening lands and volume of water in River Barrow. No potential effects to WFD status.
River Waterbody	11.6km	Barrow_230 (IE_SE_14B013514)	Poor	At Risk	Anthropogenic, Hydromorphology	No – due to distance, intervening lands and volume of water in River Barrow. No potential effects to WFD status.
River Waterbody	18.8km	Barrow_240 (IE_SE_14B013600)	Moderate	Review	None	No – due to distance, intervening lands and volume of water in River Barrow. No potential effects to WFD status.
Transitional Waterbody	21.6km	Upper Barrow Estuary (IE_SE_100_0300)	Moderate	At Risk	Agriculture	No – due to distance, intervening lands and volume of water in River Barrow. No potential effects to WFD status.

Step 2: Identification of relevant water bodies and Step 3: S-P-R connection						
Identified water body	**Distance to (m)**	**Water body name(s) (code)**	**WFD Status**	**Risk of not achieving WFD Objective e.g.at risk, review, not at risk**	**Identified pressures on that water body**	**Pathway linkage to water feature (e.g. surface run-off, drainage, groundwater)**
Transitional Waterbody	30.3km	Barrow Nore Estuary Upper (IE_SE_100_0250)	Moderate	At Risk	Agriculture	No – due to distance, intervening lands and volume of water in River Barrow Estuary. No potential effects to WFD status.
Transitional Waterbody	33.5km	New Ross Port (IE_SE_100_0200)	Moderate	At Risk	Agriculture	No – due to distance, intervening lands and volume of water in River Barrow Estuary. No potential effects to WFD status.
Transitional Waterbody	45.9km	Lower Suir Estuary (Little Island - Cheekpoint) (IE_SE_100_0500)	Moderate	At Risk	Agriculture	No – due to distance, intervening lands and volume of water in River Barrow Estuary. No potential effects to WFD status.
Transitional Waterbody	46km	Barrow Suir Nore Estuary (IE_SE_100_0100)	Moderate	At Risk	Agriculture	No – due to distance, intervening lands and volume of water in the Barrow Suir Nore Estuary. No potential effects to WFD status.

Step 2: Identification of relevant water bodies and Step 3: S-P-R connection						
Identified water body	**Distance to (m)**	**Water body name(s) (code)**	**WFD Status**	**Risk of not achieving WFD Objective e.g.at risk, review, not at risk**	**Identified pressures on that water body**	**Pathway linkage to water feature (e.g. surface run-off, drainage, groundwater)**
Coastal Waterbody	57.3km	Waterford Harbour (IE_SE_100_0000)	Moderate	At Risk	Agriculture, Urban Run-off	No – due to distance, intervening lands and volume of water in Waterford Harbour. No potential effects to WFD status.
Coastal Waterbody	63.5km	Eastern Celtic Sea (HAs 13;17) (IE_SE_050_0000)	High	Not at Risk	None	No – due to distance, intervening lands and volume of water in the Eastern Celtic Sea. No potential effects to WFD status.
Groundwater Waterbody	Underlying site	Castlecomer (SE_G_034)	Good	Not at risk	No pressures	Yes – project overlies this GWB
Groundwater Waterbody	Underlying site	Shanragh (IE_SE_G_124)	Good	Not at risk	No pressures	Yes – project overlies this GWB
Groundwater Waterbody	Underlying site	Bagenalstown Lower (IE_SE_G_157)	Good	Not at risk	No pressures	Yes – project overlies this GWB

Step 2: Identification of relevant water bodies and Step 3: S-P-R connection						
Identified water body	**Distance to (m)**	**Water body name(s) (code)**	**WFD Status**	**Risk of not achieving WFD Objective e.g.at risk, review, not at risk**	**Identified pressures on that water body**	**Pathway linkage to water feature (e.g. surface run-off, drainage, groundwater)**
Protected Area – Nature Conservation Designations	0.7km	Whitehill Quarries pNHA	-	-	No	No – no hydrological connection
	2.7km	River Barrow and River Nore cSAC	-	-	QIs include water sensitive species	Yes - due to distance and hydrological connection
Protected Area – Nutrient Sensitive Areas		Barrow_190 to Barrow_210	Moderate to Poor	At Risk	Agriculture, Urban Run Off, Urban WW	Yes – due to distance and hydrological connections
		Barrow_220 to Barrow_240	Moderate to Poor	At Risk / Review	Agriculture, Anthropogenic, Hydromorphology	No – due to distance, intervening lands and volume of water in River Barrow. No potential effects to WFD status.
		Upper Barrow Estuary	Moderate	At Risk	Agriculture, Urban WW	No – due to distance, intervening lands and volume of water in River Barrow Estuary. No potential effects to WFD status.
Protected Area – Shellfish Area	57.3km	Waterford Harbour (Cheekpoint/ Arthurstown/ Creadan)	Moderate	At Risk	Agriculture. No potential impacts associated with the project	No – due to distance, intervening lands and volume of water in Waterford Harbour. No potential effects to WFD status.
Protected Area – Drinking Water		Castlewarren GWS, Paulstown PWS and Bagenalstown Lower abstraction (IE_SE_G_157) Shankill GWS not map	Good to Moderate	At Risk / Review	None	Yes – project located within the groundwater / surface water catchments of these sources

Step 4: Detailed description of any component of the development or activity that may cause a risk of not achieving the WFD Objectives having regard to the S-P-R linkage.							
CONSTRUCTION PHASE							
No	Component	Waterbody receptor (EPA Code)	Pathway (existing and new)	Potential for impact/ what is the possible impact	Screening Stage Mitigation Measure*	Residual Risk (yes/no) Detail	**Determination** to proceed to Stage 2. Is there a risk to the water environment? (if 'screened' in or 'uncertain' proceed to Stage 2.**
1.	Surface - River	Monefelim_010 (IE_SE_14M030100)	Existing drainage ditches, watercourse	Excavation dewatering, Surface water runoff Hydrocarbons and cement-based compound spillages Siltation / sedimentation	Standard construction practice CEMP including measures to protect -water quality and surface water, To prevent the release of hydrocarbons & Cement-based products, WW, morphological	No change in • GWB or SWB status in the underlying GWB or downstream SWBs resulting from the project. • quantitative (volume) or qualitative (chemical) status, and the underlying GWB and downstream SWBs are protected from	Screened out as no residual risk remains following implementation of mitigation measures.
2.	Surface - River	Monefelim_020 (IE_SE_14M030600)					
3.	Surface - River	Monefelim_030 (IE_SE_14M031000)					
4.	Surface - River	Old Leighlin Stream_010 (IE_SE_14O020500)					
5.	Surface - River	Moanmore_010 (IE_SE_14M240860)					
6.	Surface - River	Old Leighlin Stream_020 (IE_SE_14O020700)					
7.	Surface - River	Barrow_190 (IE_SE_14B012820)					
8.	Surface - River	Barrow_200 (IE_SE_14B012920)					

9.	Surface - River	Barrow_210 (IE_SE_14B013100)			changes to water courses	any likely deterioration.	
10.	Ground	Castlecomer (IE_SE_G_034)	Pathway exists but poor drainage characteristics	Hydrocarbons and cement-based compound spillages	As above	No due to the • small scale and shallow depth of the works within Source Protection areas • prevailing hydrology and hydrogeology (limiting pathways) • implementation of mitigation measures	Screened out as no residual risk remains following implementation of mitigation measures.
11.	Ground	Shanragh (IE_SE_G_124)					
12.	Ground	Bagenalstown Lower (IE_SE_G_157)					
13.	Protected Area - Nature Conservation	River Barrow and River Nore cSAC	Pathway exists but large assimilative capacity of the River Barrow	As above			
14.	Protected Area – Drinking Water	Castlewarren GWS, Paulstown PWS, Shankill GWS and Bagenalstown abstraction	Pathway exists but limited in terms of hydrology and hydrogeology	As above			
OPERATIONAL PHASE							
	Surface	NA	Existing drainage ditches, watercourse	Stormwater runoff	SUDs features	No	Screened out as no residual risk remains following implementation of mitigation measures.
	Ground	NA	Pathway exists but poor drainage characteristics	Stormwater runoff	SUDs features	No	
DECOMMISSIONING PHASE							
	NA						

Appendix 2: Environmental Impact Assessment - Pre-Screening

Case Reference	ABP-322078-25
Proposed Development Summary	
Development Address	
	In all cases check box /or leave blank
1. Does the proposed development come within the definition of a 'project' for the purposes of EIA?	☒ Yes, it is a 'Project'. Proceed to Q2.
	☐ No, No further action required.
2. Is the proposed development of a CLASS specified in Part 1, Schedule 5 of the Planning and Development Regulations 2001 (as amended)?	
☐ Yes, it is a Class specified in Part 1. **EIA is mandatory. No Screening required. EIAR to be requested. Discuss with ADP.**	
☒ No, it is not a Class specified in Part 1. Proceed to Q3	
3. Is the proposed development of a CLASS specified in Part 2, Schedule 5, Planning and Development Regulations 2001 (as amended) OR a prescribed type of proposed road development under Article 8 of Roads Regulations 1994, AND does it meet/exceed the thresholds?	
☒ No, the development is not of a Class Specified in Part 2, Schedule 5 or a prescribed type of proposed road development under Article 8 of the Roads Regulations, 1994. **No Screening required.**	The project is not of itself, a class that requires mandatory EIA. However, it forms part of the White Hill Windfarm development (comprising the connection of the windfarm to the national grid) which was subject to EIA. Therefore, in accordance with O'Grianna, an EIAR has been prepared by the applicant.
☐ Yes, the proposed development is of a Class and meets/exceeds the threshold.	**State the Class and state the relevant threshold**

EIA is Mandatory. No Screening Required	
☐ Yes, the proposed development is of a Class but is sub-threshold.	**State the Class and state the relevant threshold**

4. Has Schedule 7A information been submitted AND is the development a Class of Development for the purposes of the EIA Directive (as identified in Q3)?	
Yes ☐	**Screening Determination required (Complete Form 3)**
No ☐	**Pre-screening determination conclusion remains as above (Q1 to Q3)**

Inspector: __A. Considine_____ Date: ___28/05/2025_____

Appendix 3: Screening for Appropriate Assessment

Introduction:

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 include:

    - Description of the project
    - Site Characteristics & Potential Impact Mechanisms
    - Identification of Relevant European Sites
    - Description of the likely effects of the project
    - Screening the need for Appropriate Assessment

2. The purpose of AA screening, is to determine whether appropriate assessment is necessary by examining:

    a) whether a plan or project can be excluded from AA requirements because it is directly connected with or necessary to the management of the site, and

    b) the likely effects of a project or plan, either alone or in combination with other projects or plans, on a Natura 2000 site in view of its conservation objectives and considering whether these effects will be significant.

3. Guidance on Appropriate Assessment is provided by the EU and the NPWS in the following documents:

    - Assessment of plans and projects significantly affecting Natura 2000 sites – methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC (EC, 2001).
    - Appropriate Assessment of Plans and Projects in Ireland – Guidance for Planning Authorities (DoEHLG), 2009.

    Both documents provide guidance on Screening for Appropriate Assessment and the process of Appropriate Assessment itself.

4. The application included a Natura Impact Statement, where Section 4 of the document included a Stage 1 AA Screening Report. This report was prepared by SLR Environmental Consulting (Ireland) Ltd (SLR) and is dated January 2025. The

report has been prepared in accordance with the relevant guidelines and sets out the assessment protocol which includes a description of the project and the associated likely environmental impacts, the details of the European Sites which fall within the ZoI of the project and a consideration of the likely significant effects, on its own and in combination with other plans and projects. It is further noted that ecological field surveys were undertaken in the preparation of the environmental documentation, including the NIS and AA Screening Report, between March 2024 and January 2025.

5. The report concluded that it cannot be excluded based on objective evidence and in view of best scientific knowledge, that the proposed development is not likely to have significant effects to the Natura 2000 network, either alone or in-combination with other plans and projects on the River Barrow and River Nore cSAC. Having regard to the information presented, together with the full suite of documents submitted as part of this application, I am satisfied that adequate information is provided in order to screen for Appropriate Assessment.

Description of the Project

6. The project comprises a 110kV electricity substation, including all associated development works to accommodate its construction, operation, maintenance and the export of electricity to the national grid via the existing Kellis-Kilkenny overhead electricity transmission line; and c.8.8 km of underground electricity line. The project seeks to connect the permitted White Hill Wind Farm to the national grid and includes the development of an electrical control unit to be located at the southern extent of the White Hill Wind Farm in order to facilitate the transfer of electricity. The application has been made directly to the Commission under section 182A of the Planning and Development Act, 2000 as amended.

7. The project involves development located across two planning jurisdictions, Co. Kilkenny and Co. Carlow. The elements the subject of this application include the construction of a substation on a greenfield site at Shanklill, Paulstown, Co. Kilkenny, a grid connection of approximately 8.8km of underground electricity line between the proposed substation at Shankill and the proposed control unit at the permitted White Hill Wind Farm. The route will traverse the townlands of Shankill and

Ballygorteen, County Kilkenny and Lacken, Moanmore and Baunreagh, County Carlow, and the underground electricity line will be located within private lands and public roads.

8. In terms of AA, the Board will note that the development is not directly connected or necessary to the management of a European Site. There are 3 Natura 2000 Sites occurring within a 15km radius of the site. The proposed development is examined in terms of any potential for the proposed development to give rise to significant effects on European sites, i.e. designated Special Conservation Areas (SAC) and Special Protection Areas (SPA), within the likely Zone of Influence.

AA Screening Determination

Screening for Appropriate Assessment **Test for likely significant effects**	
Step 1: Description of the project and local site characteristics	
Brief description of project	Electricity infrastructure Direct application to the Commission under application has been made directly to the Commission under section 182A of the Planning and Development Act, 2000 as amended.
Brief description of development site characteristics and potential impact mechanisms	The project involves the development of electricity infrastructure – substation, grid connection, electricity control unit, 2 no. interface masts, site entrances and all associated and ancillary site development works in a total area of approximately 35ha, across Co. Kilkenny and Co. Carlow. A total of c.1.6ha of agricultural land will be permanently lost as part of the project. The project will be developed primarily within agricultural land and along the verges of public roads. The application site was surveyed by ecologists with habitat, mammal, and bird surveys undertaken at the appropriate time of year and in accordance with standard methodologies. It is noted that an extended habitat survey was undertaken in January 2025. No Annex 1 habitats were recorded within the

	project site, and no suitable habitats for breeding birds were recorded. 5 no. non-native / invasive plant species were recorded along hedgerows adjacent to the line route on the L7117 and adjacent to the Shankill 14 watercourse. Previously mapped Annex I alluvial forest [91E0] and hydrophilous tall herb swamp [6430] habitats are located c.18 km downstream from the nearest watercourse crossing (NPWS, 2011). The distribution of Annex I watercourses of plain to montane levels [3260] habitat is not fully known (NPWS, 2011) and so could be present downstream of the project site. NatureScot guidance was consulted to establish ecological connectivity to SPAs within 20km of the project. The project is located within the Castlecomer, Shanragh and Bagenalstown Lower groundwater bodies and the Screening Report noted potential hydrogeological connectivity between the project and European sites located within the same groundwater body. The identified sources of impact include: (i) Habitat destruction / fragmentation / deterioration; (ii) Surface water run-off carrying suspended silt and contaminants, into local watercourses; (iii) Changes to groundwater quality, yield and / or flow paths; (iv) Project related activities (noise, vibration, lighting, human presence, structures, etc.) leading to disturbance / displacement of species; (v) Project related activities leading to a reduction in species populations / density; (vi) Air pollution due to dust and other airborne emissions; and

	(vii) Disturbance and potential spread of invasive species during the proposed works
Screening report	Yes - prepared by SLR Environmental Consulting (Ireland) Ltd (SLR) and dated January 2025
Natura Impact Statement	Yes
Relevant submissions	Carlow County Council notes the proximity of the grid connection route to the River Barrow and River Nore SAC and is considered to be within the ZoI for the project. It is requested that all mitigation measures noted in the NIS be implemented. Kilkenny County Council raises concerns in terms of noise and vibrations on SPAs and SACs. Third party raised concerns in terms of the correctness and robustness of the AA due to stormwater outfall and proximity to Natura 2000 sites.

Step 2. Identification of relevant European sites using the Source-pathway-receptor model

Three European sites were identified as being located within the potential zone of influence of project as detailed in the Table below. I note that the applicant followed the approach of the OPRs Practice Note PN01 (OPR, 2021) and considers the general ecological connectivity relating to movement patterns of mobile species, landscape biogeography, hydrological and hydrogeological connections.

The applicant included both the Blackstairs Mountains SAC (Site Code: 000770) and the River Nore SPA (Site Code: 004233) in their initial screening consideration but found no connectivity and concluded no likely significant effects for these two sites, either alone or in-combination with other plans and projects. All other European sites were also excluded on the basis of no pathways for impacts arising.

European Site (code)	Qualifying interests[1] Link to conservation objectives (NPWS, date)	Distance from proposed development (km)	Ecological connections[2]	Consider further in screening[3] Y/N
River Barrow and River Nore cSAC 002162	Estuarine and coastal habitats, freshwater habitats, dry heath, petrifying springs, Oak woodlands, alluvial forests Desmoulin's Whorl Snail Freshwater Pearl Mussel Nore Pearl Mussel White-clawed Crayfish Sea Lamprey Brook Lamprey River Lamprey Twaite Shad, Salmon, Otter, Killarney Fern River Barrow and River Nore SAC | National Parks & Wildlife Service	2.7km to the southeast	Yes. Hydrological connection downstream via Paulstown stream, Moanmore 14, unnamed tributary, Shankill 14 and unnamed tributary of the Shankill 14. Hydrogeological connection via shared Bagnelstown Lower, Castlecomer and Shanragh groundwater bodies. Potential ecological connection could provide pathway for mobile ex-situ QI species. Invasive species present adjacent to electricity line and watercourse crossings.	Yes

[1] Summary description / **cross reference to NPWS website** is acceptable at this stage in the report

[2] Based on source-pathway-receptor: Direct/ indirect/ tentative/ none, via surface water/ ground water/ air/ use of habitats by mobile species

[3] If no connections: N

Ecological surveys were undertaken by the applicant at appropriate season and frequency, using best practice survey methods were employed and have identified downstream hydrological connection between the project and the River Barrow and River Nore cSAC.

Step 3. Describe the likely effects of the project (if any, alone <u>or</u> in combination) on European Sites

The proposed development will not result in any direct effects on the River Barrow and River Nore SAC. However, given the established downstream hydrological and hydrogeological connectivity to the project site, further consideration is required.

Sensitive QIs recorded or likely to occur downstream are identified as being affected by impacts affecting surface water quality as detailed in the screening matrix below.

There is also potential for pathway for mobile ex-situ QI species, also affected by surface water impacts including white-clawed crayfish, Twaite shad, Atlantic salmon, brook lamprey, river lamprey and sea lamprey. Freshwater pearl mussel are mobile also during part of their life cycle when the glochidia are present in mobile salmonid hosts.

Sources of impact and likely significant effects are detailed in the Table below.

AA Screening Matrix

Site name **Qualifying interests**	**Possibility of significant effects (alone) in view of the conservation objectives of the site***	
	Impacts	**Effects**
River Barrow and River Nore cSAC 002162 Estuaries [1130] Mudflats and sandflats not covered by seawater at low tide [1140] Reefs [1170] *Salicornia* and other annuals colonising mud and sand [1310] Atlantic salt meadows *(Glauco-*	Habitat destruction / fragmentation / deterioration Habitats within the project site include improved agricultural grasslands with drainage ditches, hedgerows and treelines, existing roads, buildings, amenity grassland and recolonising bare ground.	Direct habitat loss, both temporary and permanent, during the construction phase which could lead to fragmentation of habitats. Minor short-term habitat loss potential during the decommissioning phase due to the removal of the electrical control unit and its associated compound. No QI or Annex 1 habitats associated with the SAC are recorded within the site, the closest being alluvial forest and tall herb swap c.18km downstream.

Puccinellietalia maritimae) [1330] Mediterranean salt meadows *(Juncetalia maritimi)* [1410] Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitricho-Batrachion* vegetation [3260] European dry heaths [4030] Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels [6430] 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]	Surface water run-off carrying suspended silt and contaminants, into local watercourses	Temporary increased volumes of surface water runoff carrying suspended solids and contaminant during the construction phase. A risk of hydrocarbon / oil discharges and water pollution during the operational phase. Reduced magnitude of construction phase impacts during the decommissioning phase.
	Changes to groundwater quality, yield and / or flow paths	Potential temporary changes to groundwater quality for same surface water sources for impacts outlined above during the construction phase. Similar risks as above to groundwater during the operational phase. Reduced magnitude of construction phase impacts during the decommissioning phase.
	Project related activities (noise, vibration, lighting, human presence, structures, etc.) leading to disturbance / displacement of species. No evidence of otter, white-clawed crayfish, brook, river or sea lamprey, Twaite shad, salmon, Desmoulin's whorl snail or Freshwater pearl mussel within 150m of watercourses	There will be additional noise, vibration, lighting, human presence and structures during the construction phase which could lead to temporary disturbance / displacement of species. There will be long-term lighting associated with the proposed substation during the operational phase. There will be a low level of human presence. Same construction phase impacts during the decommissioning phase. There are desktop records of white-clawed crayfish 4.6 km downstream from the nearest watercourse crossing. Records of other species at distances of +8km to 32km downstream of the nearest watercourse crossing.
	Project related activities leading to a reduction in species populations / density	Same impacts as detailed above. Effects on water quality could reduce prey species, and in turn, prevent QI species foraging, leading to a loss of condition.

Austropotamobius pallipes (White-clawed Crayfish) [1092] *Petromyzon marinus* (Sea Lamprey) [1095] *Lampetra planeri* (Brook Lamprey) [1096] *Lampetra fluviatilis* (River Lamprey) [1099] *Alosa fallax fallax* (Twaite Shad) [1103] *Salmo salar* (Salmon) [1106] *Lutra lutra* (Otter) [1355] *Trichomanes speciosum* (Killarney Fern) [1421]	Air pollution due to dust and other airborne emissions	There will be temporary dust and pollutants generated during the construction phase. Reduced magnitude of construction phase impacts during the decommissioning phase.
	Disturbance and potential spread of invasive species during the proposed works. Species recorded during field surveys include: • Box honeysuckle • Montbretia • Himalayan balsam • Salmonberry • Snowberry	There are invasive and non-native species present near watercourse crossings. Construction phase activities could temporarily accidentally spread invasive species. Reduced magnitude of construction phase impacts during the decommissioning phase. Non-native and invasive species recorded on local road L7117 and adjacent to the Shankill 14 first-order watercourse.
	Likelihood of significant effects from proposed development (alone): **Yes**	
	If No, is there likelihood of significant effects occurring in combination with other plans or projects?	
	Possibility of significant effects (alone) in view of the conservation objectives of the site It is a conservation objective of the River Barrow and River Nore SAC to restore the favourable conservation condition of the following habitats and species within the River Barrow and River Nore SAC, which is defined by a list of specific attributes and targets: • Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330] • Mediterranean salt meadows (Juncetalia maritimi) [1410] • 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] • Freshwater Pearl Mussel Margaritifera margaritifera [1029] • Sea Lamprey Petromyzon marinus [1095]	

	• Brook Lamprey Lampetra planerp [1096] • River Lamprey Lampetra fluviatilis [1099] • Twaite Shad Alosa fallax fallax [1103] • Salmon Salmo salar [1106] • Otter Lutra lutra [1355] * Where a restore objective applies it is necessary to consider whether the project might compromise the objective of restoration or make restoration more difficult. Given the potential for impacts associated with water quality, and the water dependent QIs listed above with a restore objective, further consideration of the impacts is required.

Step 4 Conclude if the proposed development could result in likely significant effects on a European site

Based on the information provided in the screening report, site visit and review of the conservation objectives and supporting documents, I consider that in the absence of mitigation measures beyond best practice construction methods, the proposed development has the potential to result significant effects on the River Barrow and River Nore SAC.

I concur with the applicants' findings that such impacts could be significant in terms of the stated conservation objectives of the SAC and SPA when considered on their own and in combination with other projects and plans in relation to pollution related pressures and disturbance on qualifying interest habitats and species.

Screening Determination

Finding of Likely Significant Effects

In accordance with Section 177U of the Planning and Development Act 2000 (as amended) and on the basis of the information provided by the applicant and considered in this AA screening, I conclude that it is not possible to exclude that the proposed development alone or in combination with other plans and projects will give rise to significant effects on River Barrow and River Nore SAC European Site in view of the sites conservation objectives. Appropriate Assessment is required.

It is therefore determined that Appropriate Assessment (stage 2) [under Section 177V of the Planning and Development Act 2000] of the proposed development is required.

Appendix 4: Appropriate Assessment

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 include:
    - Compliance with Articles 6(3) of the EU Habitats Directive
    - The Natura Impact Statement and associated documents
    - Appropriate Assessment of implications of the proposed development
        - European Sites –
            - Qualifying Interests,
            - Conservation Objectives,
            - Potential Adverse Effects
            - Mitigation Measures
        - Assessment of issues that could give rise to adverse effects
        - In-Combination Effects
        - Findings & Conclusions
    - Appropriate Assessment Conclusion

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

2. The EU Habitats Directive 92/43/EEC provides legal protection for habitats and species of European importance through the establishment of a network of designated conservation areas collectively referred to as Natura 2000 (or 'European') sites. Under Article 6(3) of the Habitats Directive, an Appropriate Assessment must be undertaken for any plan or programme not directly connected with or necessary to the management of a European site but likely to have a significant effect on the site in view of its conservation objectives.

3. The proposed development is not directly connected with or necessary to the management of a European site. In accordance with these requirements the Board, as the competent authority, prior to granting a consent must be satisfied that the proposal individually or in combination with other plans or projects, is either not likely to have a significant effect on any European Site or adversely affect the integrity of such a site, in view of the site(s) conservation objectives.

The Natura Impact Statement and associated documents

4. The application was accompanied by a Natura Impact Statement (NIS, dated 28 January 2025) which scientifically examined the potential impacts of the proposed development on the following European Sites:

    - River Barrow and River Nore SAC (Site Code: 002162)

5. The NIS, at Chapter 3, provides a full description of the proposed development including details of all aspects of the project works, features and construction methods. In addition, Chapter 3 presents a description of the receiving environment across the full site location, including details of the onsite habitats present, faunal and aquatic species, as well as details of the potential impacts of the project.

6. Chapter 4 of the NIS includes the Stage 1: Screening assessment and notes that while there are no European Sites located within or adjacent to the proposed development site, an initial study area of 15km was applied. For SPAs, this study area was increased to 20km to accommodate the foraging distance of wintering grey geese (e.g. greylag goose *Anser anser* and pink-footed goose *Anser brachyrhynchus*) representing the largest foraging range of 2016 NatureScot guidance listed species. The NIS identifies the potential pathways, hydrological, hydrogeological and ecological connections, within the study area and includes an overview of potential impacts of the development during the construction, operational and decommissioning phases.

7. The NIS presents a description of the European Sites and identifies and characterises the potential adverse effects arising due to the proposed development on the European sites, in view of the site's conservation objectives. An outline of the assessment methodology employed to identify and assess the potential impacts on habitats and species identified as qualifying interests of a number of European Sites and their conservation objectives, including cumulative / in-combination impacts is also included. The NIS sets out mitigation measures and addresses efficacy of the measures to ensure no effects on the SAC as a result of the project.

8. The Appropriate Assessment Screening Report and NIS were informed by a suite of sources of information (Section 2.4 of the NIS), consultations with statutory consultees and other bodies with environmental responsibilities (Section 2.5 of the NIS) and the relevant conservation objectives for the Natura 2000 sites. These data

sources were further supported by site specific surveys, and the NIS was prepared by suitably qualified ecologists.

9. Having reviewed the revised NIS and the supporting documentation, I am satisfied that it was prepared in accordance with best practice guidance, provides adequate information in respect of the baseline conditions, clearly identifies the potential impacts, and uses best scientific information and knowledge. Complete, precise and definitive findings and conclusions regarding the identified potential effects on any European site and details of mitigation measures are summarised in Section 6.6.5 of the NIS.

10. Taking account of the preceding screening determination (Appendix 3 of Inspectors Report), the following is an Appropriate Assessment of the implications of the proposed electricity infrastructure development in view of the relevant conservation objectives of River Barrow and River Nore SAC and River Nore SPA based on scientific information provided by the applicant and considering expert opinion through observations on nature conservation. The information relied upon includes the Natura Impact Statement prepared by SLR Environmental Consulting (Ireland) Ltd.

11. I am satisfied that the information provided is adequate to allow for Appropriate Assessment. All aspects of the project which could result in significant effects are considered and assessed in the NIS and mitigation measures designed to avoid or reduce any adverse effects on site integrity of the River Barrow and River Nore SAC (Site Code: 002162) are included and assessed for effectiveness

Appropriate Assessment of implications of the proposed development on each European site

12. The following is a summary of the objective scientific assessment of the implications of the project on the qualifying interest features of the relevant European sites using the best scientific knowledge in the field as presented in the NIS. 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.

13. It is noted that the NIS was submitted prior to the updating of the Conservation Objectives for the River Barrow and River Nore SAC (Site Code: 002162).

14. The identified potential adverse effects identified in the AA Screening Stage include:

    (i) Habitat destruction / fragmentation / deterioration;

    (ii) Surface water run-off carrying suspended silt and contaminants, into local watercourses;

    (iii) Changes to groundwater quality, yield and / or flow paths

    (iv) Project related activities (noise, vibration, lighting, human presence, structures, etc.) leading to disturbance / displacement of species;

    (v) Project related activities leading to a reduction in species populations / density;

    (vi) Air pollution due to dust and other airborne emissions; and

    (vii) Disturbance and potential spread of invasive species during the proposed works

    In terms of the key issues to be considered in Stage 2 Appropriate Assessment, I would make the following comments:

    i. The closest Natura 2000 site is c2.7km to the southeast of the project site. There are no QI or Annex 1 habitats associated with the SAC are recorded within the site, the closest being alluvial forest and tall herb swap c.18km downstream. Therefore, direct effects on habitats can be excluded. Indirect effects in terms of the water environment are considered further below.

    iii. There are no groundwater dependent terrestrial ecosystem (GWDTE) mapped QI habitats or species within the same groundwater catchments of the project. Therefore, changes to groundwater quality, yield and / or flow paths can be excluded.

    vi. Air pollution due to dust and other airborne emissions will be localised and given the separation distance between the site and the closest Natura 2000 site, effects in this regard can be excluded.

    Effects (ii), (iv), (v) and (vii) are addressed further below.

European Sites			
River Barrow and River Nore SAC (002162): **Summary of Key sources for impacts that could give rise to adverse effects (from screening stage):** (i) Habitat destruction / fragmentation / deterioration; (ii) Surface water run-off carrying suspended silt and contaminants, into local watercourses; (iii) Changes to groundwater quality, yield and / or flow paths (iv) Project related activities (noise, vibration, lighting, human presence, structures, etc.) leading to disturbance / displacement of species; (v) Project related activities leading to a reduction in species populations / density; (vi) Air pollution due to dust and other airborne emissions; and (vii) Disturbance and potential spread of invasive species during the proposed works **See Table 6-1 of the NIS**			
Qualifying Interest features likely to be affected	**Conservation Objectives** **Targets and attributes (summary)**	**Potential adverse effects**	**Mitigation measures** **(summary)** NIS SECTION 6.6
Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitricho-Batrachion* vegetation [3260]	Maintain favourable conservation condition. No decline in distribution - The full distribution of this habitat and its sub-types in this site is currently unknown. Likely to occur downstream of site. Hydrological regime to be maintained. Water quality to be maintained in terms of	(ii) Changes to water quality due to suspended solids, nutrients or other pollutants during construction phase. (vii) Accidental spread of invasive species during construction phase.	Best practice pollution control measures in terms of surface water runoff. Application of industry standard controls including: • Implementation of a Surface Water

	suspended sediments, and nutrients.		Management Plan • attenuation of surface water, • implementation of a surface water drainage system incorporating the principles of SuDS, • CEMP, • Works to be supervised by ECOW.
Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels [6430]	Maintain favourable conservation condition. No decline in distribution and maintenance of hydrological regime. Vegetation composition: negative indicator species – changes may affect habitat distribution (no decline)	(ii) Changes to water quality due to suspended solids, nutrients or other pollutants during construction phase. Potential effects on vegetation composition and habitat distribution. No instream works proposed – no effects on hydrological regime. (vii) Accidental spread of invasive species during construction phase.	Inland Fisheries requirements to be conditioned / implemented.
Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (Alno-Padion, Alnion incanae, Salicion albae)* [91E0]	Restore favourable conservation condition No decline in distribution and maintenance of appropriate hydrological regime. Water quality- water chemistry currently unknown. Maintain oligotrophic and calcareous conditions. Vegetation composition: negative indicator species.	(ii) Changes to water quality due to suspended solids, nutrients or other pollutants during construction phase. No instream works proposed – no effects on hydrological regime. (vii) Accidental spread of invasive species during construction phase.	Pre-construction surveys for otter. Implementation of an Invasive Species Management Plan, with supervision of Ecologist – treatment options for species included.

Vertigo moulinsiana (Desmoulin's Whorl Snail) [1016]	Maintain favourable conservation condition. Restore distribution and population size at Ballymurphy, Mountain and Nore. Restore suitable habitat in terms of extent and condition. Restore appropriate hydrological regime. Water quality - Q4-5 or Q5.	(ii) Changes to water quality due to suspended solids, nutrients or other pollutants during construction phase.
Austropotamobius pallipes (White-clawed Crayfish) [1092]	Maintain favourable conservation condition. No reduction in distribution. Water quality – at least Q3-4.	(ii) Changes to water quality due to suspended solids, nutrients or other pollutants during construction phase. (v) Project related activities leading to a reduction in species populations / density. Effects on water quality could impact White-clawed Crayfish.
Petromyzon marinus (Sea Lamprey) [1095]	Restore favourable conservation condition.	(ii) Changes to water quality due to suspended solids, nutrients or other

	Distribution: extent of anadromy - Greater than 75% of main stem length of rivers accessible from estuary Juvenile density in fine sediment – at least 1/m^3 No decline in extent and distribution of spawning beds. Availability of juvenile habitat - More than 50% of sample sites positive.	pollutants during construction phase. No instream works proposed – no potential for barriers to juveniles accessing full extent of suitable habitat. (v) Project related activities leading to a reduction in species populations / density. Effects on water quality could impact juvenile density in fine sediment.
Lampetra planeri (Brook Lamprey) [1096]	Restore favourable conservation condition. Distribution – access to all watercourses down to first order streams. Juvenile density in fine sediment - Mean catchment juvenile density of brook/river lamprey at least 2/m^2. No decline in extent and distribution of spawning beds.	(ii) Changes to water quality due to suspended solids, nutrients or other pollutants during construction phase. No instream works proposed – no potential for barriers to juveniles accessing full extent of suitable habitat. (v) Project related activities leading to a reduction in species

	Availability of juvenile habitat - More than 50% of sample sites positive.	populations / density. Effects on water quality could impact juvenile density in fine sediment.
Alosa fallax fallax (Twaite Shad) [1103]	Restore favourable conservation condition. Distribution: extent of anadromy - Greater than 75% of main stem length of rivers accessible from estuary No decline in extent and distribution of spawning beds. No decline in extent and distribution of spawning habitats. Spawning habitat quality - Maintain stable gravel substrate with very little fine material, free of filamentous algal (macroalgae) growth and macrophyte (rooted higher plants) growth	(ii) Changes to water quality due to suspended solids, nutrients or other pollutants during construction phase. No instream works proposed – no potential for barriers restricting access to spawning areas. (v) Project related activities leading to a reduction in species populations / density. Effects on water quality could including increased suspended solids could impact spawning habitat quality.
Salmo salar (Salmon) [1106]	Restore favourable conservation condition. Distribution: extent of anadromy - 100% of river channels down to second	(ii) Changes to water quality due to suspended solids, nutrients or other pollutants during construction phase.

	order accessible from estuary. Out-migrating smolt abundance - No significant decline. No decline in number and distribution of spawning reeds due to anthropogenic causes. Water quality – at least Q4 at all sites.	No instream works proposed – no potential for barriers to juveniles accessing full extent of suitable habitat. (v) Project related activities leading to a reduction in species populations / density. Effects on water quality could reduce prey species, and in turn, prevent QI species foraging, leading to a loss of condition.
Lutra lutra (Otter) [1355]	Restore favourable conservation condition. No significant decline in terms of distribution, extent of terrestrial habitat, freshwater (river or lake) habitat. No significant decline in couching sites or holts. No significant decline in availability of fish biomass.	(ii) Changes to water quality due to suspended solids, nutrients or other pollutants during construction phase. Impacts on fish spawning gravels, vegetation or invertebrates that fish forage on and in turn, availability of fish biomass. (iv) Project related activities (noise, vibration, lighting, human presence, structures, etc.)

		leading to disturbance / displacement of species. The watercourse provides suitable foraging habitat, but no record of otter within 150m of the watercourse crossings. Construction activities - potential disturbance / displacement of otter associated with the SAC, negatively affecting distribution, extent of terrestrial habitat, extent of freshwater habitat. Potential to provide a temporary barrier to connectivity. (v) Project related activities leading to a reduction in species populations / density. Effects on water quality could reduce prey species, and in turn, prevent QI species foraging, leading to a loss of condition.

Margaritifera margaritifera (Freshwater Pearl Mussel) [1029]	Restore favourable conservation condition Targets to restore distribution, population sizes and structure as well as habitat. Water quality - Q4-5 or Q5.	(ii) Changes to water quality due to suspended solids, nutrients or other pollutants during construction phase. (v) Project related activities leading to a reduction in species populations / density. Effects on water quality will impact FPM.	
Lampetra fluviatilis (River Lamprey) [1099]	Restore favourable conservation condition. Distribution: extent of anadromy - Greater than 75% of main stem and major tributaries down to second order accessible from estuary. Juvenile density in fine sediment – Mean catchment juvenile density of brook/river lamprey at least 2/m². No decline in extent and distribution of spawning beds. Availability of juvenile habitat - More than 50% of sample sites positive.	(ii) Changes to water quality due to suspended solids, nutrients or other pollutants during construction phase. No instream works proposed – no potential for barriers to juveniles accessing full extent of suitable habitat. (v) Project related activities leading to a reduction in species populations / density. Effects on water quality could impact juvenile density in fine sediment.	

Other QIs		
N/A	Not at risk	Rationale for exclusion: Outside the zone of influence / no pathway.

The above table is based on the documentation and information provided on the file and the consideration of the conservation objective relating to the SAC. I am satisfied that the submitted NIS has identified the relevant attributes and targets of the Qualifying Interests identified.

Assessment of issues that could give rise to adverse effects in view of conservation objectives

Having considered the key sources for impacts that could give rise to adverse effects as established at the screening stage, it is considered that the issues that could give rise to adverse effects in view of the conservation objectives for the River Barrow and River Nore SAC (Site Code: 002162) are as follows:

(1) Water quality degradation

The proposed development has the potential to impact habitats and species associated with the SAC in terms of changes to water quality due to suspended solids, nutrients or other pollutants during construction phase. Good water quality is necessary to ensure the maintenance of both habitats and the Annex II species they support. Effects of the project on water quality arise in terms of unmitigated and poorly management site development works, particularly during the construction phase of the project, where silt laden surface water discharges to watercourses connected to the SAC.

A decrease in water quality could compromise the conservation objectives for Annex II species listed and increased sedimentation could impact the distribution of spawning beds and habitat quality. Impacts to water quality could also give rise to potential effects on vegetation composition and habitat distribution. Ecological surveys undertaken indicate that the closest QI species to the project site is the white-clawed crayfish, at approximately 4.6km downstream, with known locations of other species noted between 8km and 32km from the project site. No spraints, couching sites or holts were recorded within the riparian habitat, or within 150m of the watercourse crossings. Desktop records existing within the wider area which indicates that the

watercourses provide suitable foraging habitat for otter. Effects on water quality could reduce prey species, resulting in a decline in availability of fish biomass and in turn, prevent QI species foraging, leading to a loss of condition.

Mitigation measures and conditions

The mitigation measures detailed in the NIS relate to the protection of surface and receiving waters from an ingress of suspended solids, nutrients or other pollutants during the construction phase of the project. A number of measures have been designed into the project to avoid impacts in the first instance with the development of a site drainage plan, surface water management plan, water quality management plan and that the construction works will be supervised by an Ecological Clerk of works. Specific measures are proposed which are established and proven in terms of efficacy and monitoring of the works is proposed. The application includes details in terms of the mitigation measures as they relate to sediment control, use of buffer zones, source, in-line and treatment controls and the management of hydrocarbons, wastewater and cement-based products.

Construction measures include:

- Management of earthworks which could result in suspended solids entering surface waters. Surface water runoff will be managed and treated prior to release off-site, with silt fencing placed down-gradient of construction areas in the first instance. Excavations and earthworks will be monitored daily and such works will take place during periods of low rainfall to reduce run-off and potential siltation of watercourses.
- While no instream works are proposed, mitigation measures are proposed at the crossing location (where HDD is proposed) to ensure silt laden or contaminated surface water run-off does not discharge to the water.
- Management of excavation dewatering (pumping) and subsequent treatment prior to discharge into the drainage network will be undertaken to include appropriate interceptor drainage with no direct discharge to surface waters or local drains, daily monitoring of site excavations and a mobile ‘Siltbuster’ or

similar equivalent specialist treatment system will be available on-site for emergencies.

- Measures proposed to avoid release of hydrocarbons at the site include minimising the volume of fuels or oils stored on site, bunded areas will have 110% capacity and onsite refuelling of machinery will be carried out using a mobile double skinned fuel bowser. There will be regular inspections of plant and machinery, and spill kits will be available. An outline emergency plan for the construction phase to deal with accidental spillages is contained within the Planning-Stage CEMP.
- Measures to avoid contamination of ground and surface waters by wastewaters identified.
- Measures are proposed to ensure that the release of cement-based products is avoided.
- Temporary silt fencing/silt trap arrangements (e.g. straw bales) will be placed within existing roadside/field drainage features along the electricity line route to remove any suspended sediments from the works area.
- Mitigation measures are proposed in respect of the installation of the culvert over the unnamed stream to the north of the electricity substation.
- Measures are identified for the HDD works which include the use of a protective buffer zone, provision of silt fencing and monitoring.

I am satisfied that the preventative measures which are aimed at interrupting the source-pathway-receptor are targeted at the key threats to protected aquatic species and by arresting these pathways or reducing possible effects to a non-significant level, adverse effects can be prevented. Mitigation measures related to water quality are captured in Planning conditions 2 and 5(d) of the Inspectors Report.

(2) Project related impacts

While no otter holts or couches were recorded within 150m of any watercourse crossing, the riparian habitat is considered potentially suitable for foraging. Project related activities including noise, vibration, lighting and human presence has the potential to cause temporary disturbance during the construction phase.

In terms of potential effects on species populations or densities, negative effects on water quality could result in a reduction in prey species for aquatic QIs downstream including lamprey species, white-clawed crayfish, twaite shad, salmon and freshwater pearl mussel. There are no instream works proposed and there is no mechanism by which the project could act as a barrier to aquatic species accessing the full extent of suitable habitat. and no mechanism to affect habitat heterogeneity.

Mitigation measures and conditions

The mitigation measures detailed in the NIS in terms of the project related impacts on QI species include:

- Pre-construction survey for otter
- Limiting construction works to daylight hours
- Providing exit points for any excavations so otters do not become trapped
- Supervision of construction works by Ecological Clerk of Works.

I am satisfied that the measures proposed are adequate and will be effective in ensuring that the attributes required to restore the favourable conservation condition for Otter will not be adversely affected and that the proposed development will not prevent or delay the attainment of the conservation objective to Restore favourable conservation condition. Mitigation measures are captured in Planning condition 4 of the Inspectors Report.

(3) Spread of invasive species

Box honeysuckle, montbretia, Himalayan balsam and salmonberry were present adjacent to the electricity line route. the spread of these species, in particular Himalayan balsam, comprise negative indicator species for QIs of the SAC and changes may affect habitat distribution, undermining conservation objectives for Water courses of plain to montane levels, Hydrophilous tall herb fringe communities and Alluvial forests habitats, areas of which have been identified downstream of the proposed development.

In addition, white-clawed crayfish are noted to be sensitive to invasive species and disease which could be spread by inadequate biosecurity measures. There are no instream works proposed and there is no mechanism by which negative indicator species or disease could be spread.

Mitigation measures and conditions

- An Invasive Species Management Plan will be developed and implemented, with supervision by an ecologist. The Plan will include general prevention and containment measures as well as species-specific treatment measures relating to Himalayan balsam, montbretia, salmonberry and snowberry, and forms part of the CEMP.

I am satisfied that the measures proposed can be implemented, supervised effectively and will be effective in preventing the spread of invasive species. Mitigation measures are captured in Planning condition 6 of the Inspectors Report.

In-combination effects

Plans and projects that could act in combination with the proposed development are detailed and assessed in the NIS. I am satisfied that in-combination effects have been assessed adequately. The applicant has demonstrated satisfactorily that no significant residual effects will remain post the application of mitigation measures and there is therefore no potential for in-combination effects.

Findings and conclusions

The applicant determined that following the implementation of mitigation measures the construction and operation of the proposed development alone, or in combination with other plans and projects, will not adversely affect the integrity of this European site.

Based on the information provided, I am satisfied that adverse effects arising from aspects of the proposed development can be excluded for the European sites considered in the appropriate Assessment. No direct impacts are predicted. Indirect impacts would be temporary in nature and mitigation measures are described to prevent ingress of silt laden surface water and other construction related pollutants. Monitoring measures are also proposed to ensure compliance and effective management of measures. I am satisfied that the mitigation measures proposed to prevent adverse effects have been assessed as effective and can be implemented and conditioned if permission is granted.

In-combination effects have been fully considered and with the implementation of mitigation measures as described, I am satisfied that no in-combination effects arise which would undermine the conservation objectives of any European site.

Reasonable scientific doubt

I am satisfied that no reasonable scientific doubt remains as to the absence of adverse effects.

Site Integrity

The proposed development will not affect the attainment of the Conservation objectives of the River Barrow and River Nore SAC (002162). Adverse effects on site integrity can be excluded, and no reasonable scientific doubt remains as to the absence of such effects.

Appropriate Assessment Conclusion: Integrity Test

In screening the need for Appropriate Assessment, it was determined that the proposed development could result in significant effects on River Barrow and River Nore SAC (002162) in view of the conservation objectives of those sites and that Appropriate Assessment under the provisions of S177U was required.

Following an examination, analysis and evaluation of the NIS all associated material submitted, I consider that adverse effects on site integrity of the River Barrow and River Nore SAC (002162) can be excluded in view of the conservation objectives of these sites and that no reasonable scientific doubt remains as to the absence of such effects.

My conclusion is based on the following:

- A detailed assessment of construction, operational and decommissioning impacts associated with the project.
- An assessment of in-combination effects with other plans and projects.
- Effectiveness of mitigation measures proposed including supervision and monitoring and integration into CEMP ensuring smooth transition of obligations to eventual contractor.
- Application of planning conditions to ensure application of these measures.
- No significant effects on the qualifying interests of European sites or supporting habitats, arising from the project.
- The proposed development will not affect the attainment of conservation objectives for the River Barrow and River Nore SAC (002162) or prevent or delay the restoration of favourable conservation condition for identified Qualifying Interests.
- No reasonable scientific doubt as to the absence of adverse effects on the integrity of the River Barrow and River Nore SAC (002162).