



An  
Coimisiún  
Pleanála

# Inspector's Report

## ABP-322690-25

<b>Development</b>	Proposed 110kV electrical substation and grid connection
<b>Location</b>	located within the townlands of Friarstown, Grangeford Old, Grangeford, Moanalow, Glenoge, Rathnashannagh, Inchisland Or Moatalusha, Rathtoe, Kellistown East, Ballycurragh and Kellistown West, County Carlow.
<b>Planning Authority</b>	Carlow County Council
<b>Applicant</b>	Prt Solar Limited
<b>Type of Application</b>	Application for approval under Section 182A of the Planning and Development Act, 2000 as amended.
<b>Prescribed Bodies</b>	Carlow County Council Transport Infrastructure Ireland
<b>Observers</b>	Paul Rooney
<b>Date of Site Inspection</b>	25 <sup>th</sup> September 2025
<b>Inspector</b>	Alaine Clarke

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## 1.0 Introduction

- 1.1. 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 Commission under ABP-319470-24 for a proposed 110kV electrical substation and grid connection, where the Commission decided that the development would fall within the scope of section 182A of the Act and would be strategic infrastructure.

## 2.0 Site Location and Description

- 2.1. The proposed 110kV Substation will be located on a site that is circa 1.7 hectares in size and is located within the townlands of Friarstown and Grangeford Old. The proposed 110kV underground cable (UGC) will be circa 8 km in length, primarily along public roads and will traverse through the townlands of Friarstown, Grangeford, Old Grangeford, Moanalow, Glenoge, Rathnashannagh, Inchisland Or Moatalusha, Rathoe, Kellistown East, Ballycurragh and Kellistown West to the existing Kellistown 220 kV substation.
- 2.2. The site of the proposed substation is located approximately 8km east of Carlow town centre and c. 5km northwest of Tullow, along the northern side of the R725 Regional Road with access available via Local Road No. L6113 and the R725. The proposed substation site is situated in the northernmost corner of a larger agricultural field and can be accessed via existing farm tracks.
- 2.3. The route of the proposed underground cable (UGC) is shown on the plans and particulars extending in a southerly direction through the permitted solar energy development along existing internal access tracks and exiting directly onto the R725 Regional Road. The UGC will then be situated within existing public road infrastructure, both regional and local, before connecting to the existing ESB 220kV Kellistown Substation.
- 2.4. The surrounding area is primarily agricultural and is characterised by a gently undulating rural landscape dominated by pasture and arable / cereal production with intermittent instances of individual farmsteads and one-off rural housing.

2.5. The Slaney River Valley Special Area of Conservation (Site Code: 000781) lies approximately 2.8km to the east with the River Barrow and River Nore Special Area of Conservation (Site Code: 002162) c. 8.6km to the west. The Ardristan Fen Proposed Natural Heritage Area (Site Code: 000788) is located approximately 1.5km southeast of the route of the proposed UGC.

### 3.0 Proposed Development

3.1. The proposed development will transmit power from the permitted Grangeford Solar Farm (Carlow Co. Co. reg. ref. 23/60297) via an UGC, which will connect into the existing ESB Kellistown 220kV substation, located ca. 3.4km (direct line) southwest of the proposed development.

3.2. A ten-year permission is sought for the following:

- A 40 year lifespan for:
- 1 no. electrical substation compound and access road, palisade fencing and gates,
- 1 no. electrical substation / IPP control building
- 1 no. Eirgrid switch room building
- 6 no. lightning protection monopoles measuring up to 18m in height;
- Associated electrical apparatus, plant and equipment; overhead and underground electrical and communications cabling and ancillary works;
- Upgrading of existing access road;
- Temporary site construction compound; and
- All associated ancillary works above and below ground including landscaping.
- The 110kV underground cabling comprises circa. 8km of underground 110kV electrical cables and associated communications cables;
- 11 no. underground joint bays;
- 3 No HDD Crossings;
- Associated works including road carriageway passing places; and,

- All associated ancillary works above and below ground.

3.3. The following documents are submitted with the application:

- Application Form
- Letter of consent
- Copies of Notification letters
- Drawings and technical plans
- Copies of public notices
- Preliminary Construction Environmental Management Plan
- Natura Impact Statement
- Environmental Report Vol.1;
- Environmental Report – Appendices Vol.2;
- Decommissioning Plan;
- Construction Traffic Management Plan.

3.4. The applicant has created a standalone website for the development,

[www.moanalow110substation.ie](http://www.moanalow110substation.ie)

3.5. The decommissioning plan submitted with the application primarily relates to the permitted solar farm and battery storage facility. It states that it is not anticipated that the 110kV substation will be decommissioned within the timeframe of the permitted life of the solar farm. The Plan states that any decommissioning of the 110kV infrastructure will be undertaken only following written confirmation and formal instruction from EirGrid or the relevant statutory body.

## 4.0 Consultations

### 4.1. Prescribed Bodies

4.1.1. Details of the application to the Commission were circulated to the following prescribed bodies:

- Minister for Housing, Local Government and Heritage

- Minister for the Environment, Climate and Communications
- Commission for Regulation of Utilities, Water and Energy
- Carlow County Council
- Inland Fisheries Ireland (IFI)
- Transport Infrastructure Ireland (TII)
- The Heritage Council
- An Taisce
- An Chomhairle Ealaíon
- Fáilte Ireland
- Uisce Éireann
- Eirgrid
- ESB

## 4.2. Submissions

### 4.2.1. Carlow County Council

4.2.2. The Commission should note that two internal reports (from the Municipal District Engineer and the Environment Section) were not appended to the Carlow Co. Co. Submission. Following a request from ACP these were subsequently received and circulated to the applicant for comment. The points raised by Carlow Co. Co. are summarised below.

- The Planning Authority (PA) considers this current proposed development amounts to supporting infrastructure for the consented Solar PV development by way of an amended substation and have no objection in principle to the proposed development.
- The development should be appropriately co-ordinated with adjoining permitted development to minimise any negative impacts to residential amenities.

- The application should demonstrate that the proposal will not affect or alter any local drainage systems or rivers or adjacent properties and that the underground cables will not affect the drainage of the locally classed public roads.
- The site is located within the Central Lowlands Landscape Character Area which has a class 3 moderate sensitivity designation which has the capacity to absorb most types of development.
- There are 9 no. scenic views and 1 no. scenic route in the County Development Plan within 5km of the site, though the site is not located within scope of any scenic views or routes.
- Details of Natura 2000 sites proximate to the development site are set out, noting the River Barrow and River Nore SAC is connected to the site via the Ardnehue River.
- The Submission is accompanied by reports from the:
  - Environment Section.
    - The Referral Report does not raise any concerns. A number of conditions are recommended relating to construction management and control of invasive species.
    - A detailed AA screening report is included wherein it is concluded that AA can be screened out. The Commission will note that the Report also concludes elsewhere in the screening report that Stage 2 Appropriate Assessment is necessary and concludes that the Environment Section has ascertained that the project, alone or in combination with other projects, will not adversely affect the integrity of the site concerned.
  - Municipal District Engineer. Concerns raised primarily relate to impact on roads, traffic and access and include:
    - Why the cables are to be placed in the road; that trench detail for the public road is not acceptable, that no communication chambers, cable joint boxes, shallow ducting or earth link

chambers are to be placed in the public road. That cables should be placed beneath existing services.

- Regarding road closures that the R725 and L-3046 cannot be closed under any circumstances.
  - Applicant to prove access to Kellis substation is achievable.
  - Access to site and compounds to be 17m off set from the public road.
  - Seek a proposal for working in the vicinity of Rahtoe village.
  - Potential for impact with winter maintenance programme.
  - Certain diversions are not acceptable.
  - Minimisation of HGV journeys, querying number of HGV movements.
  - Maintenance of access for residents.
  - Visual impact of the lighting poles.
  - Several conditions are stated.
- Relevant development plan provisions are set out including from Chapter 7, Climate Action and Energy, including CA P2, RE. P1, SE. P2, SE. O1 and SE. O2, and Chapter 9, Landscape and Green Infrastructure including LA P1 and LA P2.
  - Relevant sections of the Carlow County Renewable Energy Strategy (Volume 2b Appendix VI of the CDP) and the Carlow County Landscape Character Assessment & Schedule of Protected Views (Volume 2b Appendix VII of the Carlow County Development Plan).
  - Suitable conditions are proposed in the event of a grant of permission:
    - Additional landscaping measures around the perimeter of the substation compound;
    - The appointment of a traffic management coordinator;
    - Pre and post road surveys and reinstatement works to borne by the applicant;

- Provide details for protection measures for existing water service infrastructure;
- A detailed CEMP and Surface Water Management Plan;
- Implementation of the NIS mitigation measures;
- Development levies and bond to be agreed prior to commencement.

#### 4.2.3. TII

- TII has no observations to make.

#### 4.2.4. Paul Rooney

- The proposed development represents a clear case of project splitting to bypass environmental assessment, referencing permitted solar farm (CCC ref. 23/60297) and proposed Battery Energy Storage System.
- Failure to carry out Strategic Environmental Assessment (SEA).
- Risk to River Barrow and River Note SAC.
- No hydrological modelling or detailed flood risk analysis is provided.
- Disruptions resulting from construction traffic.
- No meaningful consultation with the local community.
- Prescribed bodies appear not to have actively engaged in the application.
- Fire risk of BESS adjacent to substation.
- Overconcentration of energy infrastructure in the area.
- Proposal is in breach of the Carlow County Development Plan 2022-2028.
- No full operational noise assessment.
- Inadequate justification and alternatives.
- Request that permission is refused, that an EIAR is submitted, opportunity that local communities are given a full opportunity to participate, require full engagement from prescribed bodies.

#### 4.2.5. **Applicant's Response**

4.2.6. The submissions on file have been circulated to the applicant. The response relates to Carlow Co. Co.'s original submission i.e. without the supplementary internal reports which was subsequently received by ACP. The supplementary reports were circulated to the applicant for comment, although no subsequent response was received from the applicant.

4.2.7. In relation to the concerns raised by Mr. Rooney, the applicant's response is summarised as follows:

- Project splitting and lack of Cumulative Assessment: two separate applications were required for procedural compliance, though both applications have been coordinated. The development is not subject to requirements of the SEA Directive and has been screened out for EIAR requirement. A comprehensive Environmental Report has been prepared.
- Risk to River barrow and River Nore SAC: a comprehensive appropriate assessment screening and Natura Impact Statement have been prepared. The HDD drilling method is widely acceptable and avoids any direct physical interaction or disturbance to the aquatic environment. Pollution prevention measures to protect the water environment are proposed. The proposed development will not adversely affect the integrity or conservation status of any qualifying interests of the River Barrow and River Nore SAC.
- Community Burden, Lack of Engagement and Road Saturation: the proposed UGC to the existing 220kV Kellistown substation was identified as the shortest, most direct and least disruptive route. A Construction Traffic Management Plan has been prepared, and a liaison office will be appointed. The public and prescribed body consultation process is set out.
- Fire Risk of BESS adjacent to Substation: the BESS is permitted under a separate grant of permission and that all relevant fire safety and explosion risk considerations were appropriately assessed and addressed.
- Overdevelopment, Noise, Pollution and lack of Regulation: the proposed development complies with the County Development Plan and national and regional energy and climate policy. A noise impact assessment has been undertaken; predicted noise levels at all noise-sensitive receptors remained below the relevant daytime and night-time limits with no significant variation in

overall ambient noise levels predicted. Noise mitigation measures are proposed.

- Inadequate Justification and Alternatives: setting out justification for the proposed development stating that EIRGrid informed Aer Soléir that the system operator's preferred connection method is a 110kV connection to Kellis 220/110kV substation where is an existing spare 110kV bay available. The proposed substation replaces the permitted 38kV substation. Construction works will be phased and temporary.

4.2.8. In relation to the concerns raised by Carlow Co. Co., the applicant stated that no objection was raised to the proposed development in principle, subject to conditions, and no further comment is warranted.

## 5.0 Planning History

5.1. The following planning applications are relevant to the proposed development:

### On site:

- ABP-319470-24: The Commission decided that the proposed 110kV substation and underground cable development falls within the scope of section 182A of the Planning and Development Act, 2000, as amended.
- Carlow Co. Co. ref. 23/60297: Permission granted for a ca. 91ha solar farm and 38kV substation and associated development. A NIS was submitted as additional information.
- ABP-309987-21/Carlow Co. Co. ref. 21/23: Permission granted for a ca. 65ha solar farm and 38kV substation and associated development following consideration of a material contravention of the development plan. A NIS accompanied the application.

5.2. Several applications for solar farms in the area have been granted permission, including:

- Carlow Co. Co. ref. 20/44
- Carlow Co. Co. ref. 21/38
- Carlow Co. Co. ref. 22/149

- ABP 318475-23 / Carlow Co. Co. 23/92

## 6.0 Policy Context

### 6.1. EU, National and Regional Legislation/Policy

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

- EU Directive 2009/28/EC and Directive 2018/2001/EU (Renewable Energy).
- National Planning Framework, First Revision, April 2025.
- Climate Action and Low Carbon Development Act 2015, as amended.
- National Mitigation Plan, 2017.
- National Adaption Framework, 2024.
- National Biodiversity Action Plan 2023-2030
- Climate Action Plan, 2025
- Climate Action Plan, 2024.
- Regional Spatial and Economic Strategy for the Southern Region (RSES)

6.1.2. 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.

6.1.3. I note that National Policy Objective 72 of the National Planning Framework, First Revision seeks to “Support an all-island approach to the delivery of renewable electricity through interconnection of the transmission grid”. The Plan also highlights its aim under Green Energy (see National Strategic Outcome 8) to “Reinforce the distribution and transmission network to facilitate planned growth and distribution of a more renewables focused source of energy across the major demand centres”.

6.1.4. CAP 25 supports the acceleration of the delivery of renewable energy onto the national grid with a target of achieving 80% of electricity demand being met from

renewable energy by 2030. To this end CAP 25 sets a target of providing 5GW of solar energy by 2025, and a longer-term target of 8GW by 2030.

6.1.5. The following Regional Policy Objectives as set out in the Regional Spatial and Economic Strategy (RSES) in the Southern Region are noted:

- RPO 96 – to support the sustainable development, maintenance and upgrading of electricity and gas network grid infrastructure ...to meet increased demand as the regional economy grows.
- RPO 100 – to support the integration of indigenous renewable energy production and grid injection.
- RPO 219 - to support the sustainable reinforcement and provision of new energy infrastructure by infrastructure providers....
- RPO 222 - to 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 ...

6.1.6. Section 8.2 of the RSES also outlines support for the development of a safe, secure, and reliable system of transmission and distribution of electricity.

## 6.2. **Carlow County Development Plan 2022-2028**

6.2.1. The Carlow County Development Plan 2022-2028 is the operative plan. The following are particularly relevant:

### Chapter 6: Infrastructure and Environmental Management

- EI P1: 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.
- EI P2: Ensure that development proposals for energy transmission and distribution infrastructure follow best practice with regard to siting and design...

## Chapter 7: Climate Action and Energy

- RE P1: Encourage and facilitate the production of energy from renewable sources, such as from wind, solar, bioenergy, hydroelectricity, and geothermal, subject to compliance with proper planning and environmental considerations.
- RE 01: Seek to achieve a minimum of 130MW of renewable electricity in the County by 2030, by enabling renewable energy developments, and through micro-generation including rooftop solar, wind, hydro-electric and bioenergy combined heat and power (CHP).
- IF P1: 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.

## Chapter 9: Landscape and Green Infrastructure

- General landscape objectives LA 01 and LA 02 and policies LA P1, LA P2, LA P5, LA P6, PA P8 are relevant.
- The site is located in the Central Lowlands character area, described as occupying a substantial portion of the County, in an area designated as farmed lowland.
- The landscape sensitivity is assessed at 2/3 in a 5-point scale where 5 is the highest sensitivity and 1 is the lowest.
- The relevant policy objective is as follows: new developments to maintain integrity of landscape character area through careful location, siting and design.

## Chapter 16 deals with Development Management Standards.

- 16.11.10 – Underground cables – requirement to demonstrate that environmental impacts are minimised;
- 16.12.2 – Energy Development Projects – will be considered in the context of Government policy and competing Council policy. Proposals should demonstrate that human health has been considered. Where existing

infrastructural assets (such as substations) already exist, such assets should be considered for sustainable use where there is capacity.

- 6.2.2. A Renewable Energy Strategy for the County has been prepared alongside the development plan and is incorporated as Appendix VI.

## 7.0 Natural Heritage Designations

- 7.1. The application site is not located within or immediately adjacent to any sites with a natural heritage designation. The nearest designated sites are:

- River Barrow and River Nore SAC, site code 002162, ca. 8.4km to the west;
- Slaney River Valley SAC, site code 000781, ca. 2km to the east;
- Ardristan Fen, proposed Natural Heritage Area (pNHA), site code 000788, ca. 4.6km to the south;
- Slaney River Valley pNHA, ca.8.6km to the southeast.

## 8.0 EIA Screening

- 8.1. The proposed development is not a class for the purposes of EIA as per the classes of development set out in Schedule 5 of the Planning and Development Regulations 2001, as amended (or Part V of the 1994 Roads Regulations). No mandatory requirement for EIA therefore arises and there is also no requirement for a screening determination. Refer to Form 1 in Appendix 1 of report.
- 8.2. The Commission should note that the applicant states that EIA is not required and notwithstanding prepared and submitted a screening assessment based on the criteria of Schedule 7 of the Planning and Development Regulations, 2001 as amended, I note that an electrical substation and/or underground cabling is not a class of development contained in Parts 1 or 2 of Schedule 5 of the Regulations which sets out the prescribed classes of development and thresholds that trigger a mandatory EIAR and neither a mandatory EIA, nor screening for EIA, is required for the substation and/or the underground cable.

## 9.0 Assessment

### 9.1. Introduction

9.1.1. Having examined the application details and all other documentation on file, including the submissions received in relation to the application, and inspected the site, and having regard to relevant local/regional/national policies and guidance, I consider that the main issues in the planning assessment are as follows:

- Principle of development and planning policy
- Biodiversity
- Water
- Noise
- Landscape and Visual
- Cultural Heritage
- Traffic
- Other Issues

The following assessment is dealt with under these headings.

### 9.2. Principle of Development and Planning Policy

- 9.2.1. The proposed 110kV substation and underground cable development is stated by the applicant to be critical infrastructure that will be intrinsically linked to both permitted and planned renewable energy projects, comprising both solar and battery energy storage developments. It is anticipated that the proposed 110kV substation will be developed in lieu of a previously permitted 38kV substation granted by Carlow County Council (Planning Ref: 2360297). The proposed development will connect the permitted solar development, also granted permission under planning reg. ref. 2360297, to the national grid.
- 9.2.2. I note the third-party submission from Paul Rooney raises concerns with respect to the principle of the development amongst other matters. The submission states that the project is project splitting, citing case law, and that an EIAR has not been

undertaken. Reference is made to the failure to carry out a Strategic Environmental Assessment (SEA). Overconcentration of energy infrastructure in the area is also raised as a concern.

- 9.2.3. The proposed development is not one that is subject to EIA. I refer the Commission to section 8.0 of this Inspector's Report which considers EIA Screening. Neither is the proposed development one that is subject to the SEA Directive. The Carlow County Development Plan 2022-2028, including appendix VI Renewable Energy Strategy, was subject to SEA.
- 9.2.4. Renewable energy projects are supported 'in principle' at national, regional and local policy levels, with the imperative at all policy levels being the need to reduce greenhouse gas emissions, reduce reliance on fossil fuels and combat climate change.
- 9.2.5. In line with EU ambition, the Programme for Government, Our Shared Future commits to achieving a 51% reduction in Ireland's overall GHG emissions from 2021 to 2030, and to achieving net-zero emissions no later than 2050. National Policy (including the NPF First Revision, April 2025 and Climate Action Plan 2025 and Climate Action Plan 2024) include objectives to support proposals which aim to achieve a climate neutral economy.
- 9.2.6. The National Planning Framework (First Revision) National Strategic Outcome (NSO) 8 focuses on the 'Transition to a Low Carbon and Climate Resilient Society' and includes National Policy Objective 70 to 'promote renewable energy use and generation at appropriate locations within the built and natural environment to meet national objectives towards achieving a low carbon economy by 2050', while the need for new energy systems and transmission grids are recognised.
- 9.2.7. At a regional level, the Regional Spatial and Economic Strategy (RSES) for the Southern Region, Regional Policy Objectives (RPOs) 96, 100, 219 and 222 support the upgrading and provision of new energy infrastructure to integrate renewable energy sources and meet future energy needs.
- 9.2.8. At a local level, the proposal accords, inter alia, with Carlow County Development Plan policies EI P1, RE P1 and IF P1 which support the development of energy infrastructure, including the integration of transmission network requirements facilitating linkages of renewable energy proposals. It should be noted that the

principle of the solar farm is not under determination as part of this planning application. The principle of a solar farm is accepted, and it follows that the principle of any development required to enable the permitted development should also be acceptable in principle subject to an assessment under any other relevant criteria, as covered below.

- 9.2.9. Having regard to the above I am satisfied that the principle of the development of a 110kV electricity substation and associated grid connection comprising 110kV line connecting the permitted Grangeford solar farm to the national grid is acceptable in principle.

### 9.3. **Biodiversity**

- 9.3.1. An Environmental Report, prepared by Malone O'Regan Environmental, is submitted with the application, Chapter 6 of which considers 'Biodiversity'. An Ecological Appraisal of the proposed development has been carried out by ecologists and an assessment on potential impacts on European sites was also undertaken and is presented in the Stage 2: Appropriate Assessment – Natura Impact Statement, which should be read in conjunction with chapter 6. Impact on European sites is considered in Section 10 of this Inspector's Report. Site surveys were undertaken in May 2024 and January 2025.
- 9.3.2. The majority of the site comprises agricultural grassland which is used for the production of arable crops and existing road infrastructure. The principal natural or semi-natural habitat features noted during the site survey were the hedge / treelines bordering the site.
- 9.3.3. The National Biodiversity Database Centre (NBDC) holds no records for amphibian species, badger, bats, otter or other notable mammals within 2km of the site. The site and surrounding area is considered to be of moderate suitability for bats. No notable or protected bird species were identified onsite during the site walkover. Tree /hedge lines bordering the site have features that are considered to be suitable to support roosting bats species. Invasive species were not noted during the site walkover. No plant species protected under the Flora Protection Order were noted on site.

9.3.4. No impacts to species are expected during the operational phase. Mitigation measures during the construction phase are detailed in Section 6.4 of the Environmental Report. I note the following:

- All hedgerow and treelines onsite will be maintained and protected.
- ca. 731m of additional planting will be implemented. A landscape plan accompanies the application;
- All vegetation clearance works will be scheduled to take place outside of the nesting bird season.
- All works and proposed infrastructure will be set back a minimum of 6m from drainage ditches; water mitigation measures will be implemented throughout the construction phase which will ensure protection of water quality within the drainage ditch network.
- A project Ecological Clerk of Works (ECoW) will be appointed.
- In respect of Otter, I note that a setback of ca. 50m will be implemented from the Ardnehue River. I note that the applicant considered that there will be no disturbances to this species due to the fact that all infrastructure capable of producing noise emissions will be located over 200m from any watercourse and ca. 2km from the nearest SAC boundary.
- A series of protection measures against the spread of invasive species are proposed.
- A Biodiversity Management Plan is prepared for the overall development, i.e. including the permitted solar farm, and is attached as Appendix C to the Environmental Report which includes creation of a biodiversity enhancement zone.

9.3.5. Having inspected the site and considered the application documentation I consider that the proposed development site is currently of low ecological value. It is located in an area predominantly made up of agricultural grassland (arable) and it is not of value to any Annex I or Annex II species or Red listed birds.

9.3.6. In my opinion the proposed development will not result in any significant impacts on ecological receptors identified both on site and in the surrounding area following the

implementation of appropriate mitigation measures / enhancement measures. I am satisfied the proposed development is acceptable from a biodiversity and ecological perspective.

#### 9.4. **Water**

- 9.4.1. Chapter 7 of the Environmental Report deals with 'Water' and contains a 'Preliminary Site-Specific Flood Risk Assessment (FRA)' which has regard to the 'The Planning System and Flood Risk Management – Guidelines for Planning Authorities'. The chapter and preliminary FRA were informed by a desk-based study and site walkover surveys in May 2024 and January 2025. The site layout plan for the proposed substation, ref. 05967-DR-150, indicates 2 no. foul waste holding tanks, soakaways and a below ground 1500L rainwater harvesting tanks and oil separator.
- 9.4.2. The preliminary FRA considers potential impact to surface water / groundwater quality and potential flood risk. No fluvial or pluvial risk of flooding has been identified. Only minimal ground disturbance and localised levelling works will be required for the overall development of the Site. No in-river works will be required for the proposed development. As part of the UGC the Aghalona River, Roscat River and Burren River will be crossed using HDD, drilling beneath the watercourses and avoiding any disturbance to these streams. Mitigation measures are proposed as part of the CEMP to minimise the potential risk to groundwater quality associated with the construction phase of the proposed development. During the operational phase, rainwater will percolate to ground. The proposed development is located on lands zoned Flood Zone C and the proposed development can be considered as 'Appropriate' having regard to the Flood Risk Management Guidelines.
- 9.4.3. No wastewater discharges will be generated during the operational phase; foul water will be diverted to a holding tank and subsequently removed by licensed contractor.
- 9.4.4. The Carlow County Council submission request that a condition is included that provides for protection measures for existing water service infrastructure in the area during the grid connection works. The submission further requests a CEMP and detailed Surface Water Management Plan to be submitted. Appropriate conditions are attached for the Commission's consideration.

- 9.4.5. The site is located within a relatively low-lying landscape. The majority of the proposed development site is comprised primarily of tilled derived granites. The underlying aquifer beneath the majority of the site is classified as LI (locally important aquifer - bedrock, which is moderately productive only in local zones), with a portion comprising to the south classified as PI (poor aquifer – bedrock which is generally unproductive except for local zones). The groundwater vulnerability at the substation site is ‘moderate’, while the majority of the UGC route is generally ‘High’.
- 9.4.6. The site is underlain by two Groundwater Bodies (‘GWB’), the New Ross GWB and the Burren Valley Gravels GWB. The status of both GWBs (based on the monitoring period 2019-2024) is considered ‘good’. Both GWBs are considered to be ‘not at risk’ in relation to the WFD objectives.
- 9.4.7. The site is situated within the Barrow WFD Catchment and the Barrow\_SC\_090 subcatchment. There are six hydrological features of note within close proximity to the site and three watercourses will be crossed via the UGC route.
- Ardnehue River, which drains to the River Burren.
  - Grangeford Old Stream, though no evidence of this watercourse in-situ.
  - Baunogenasraid Stream, which drains to the River Burren.
  - Aghalona River, will be crossed by the proposed UGC via horizontal drilling (HDD). It drains to the River Burren.
  - Roscat River, will be crossed by the proposed UGC via horizontal drilling (HDD). It drains to the River Burren.
  - Burren River, will be crossed by the proposed UGC via horizontal drilling (HDD). It drains to the River Burren.
- 9.4.8. The Ardnehue River, Grangeford River, Baunogenesraid Stream, Aghalona River and Roscat River are of moderate status (based on the monitoring period 2019-2024). Both Aghalona River and Burren River are at risk of not meeting WFD objectives while the remaining riverbodies are not at risk.
- 9.4.9. I have assessed the proposed substation development and considered the objectives as set out in Article 4 of the Water Framework Directive which seek to protect and, where necessary, restore surface and ground water waterbodies in

order to reach good status (meaning both good chemical and good ecological status), and to prevent deterioration. I have undertaken a WFD Impact Assessment Stage 1 Screening which is included in Appendix 2 of this Inspector's Report. The impact from the development was considered in terms of the construction and operational phases. Through the use of best practice construction practice and implementation of a CEMP at the construction phase all potential impacts can be screened out. I conclude on the basis of objective information, that the proposed development will not result in a risk of deterioration on any water body either qualitatively or quantitatively or on a temporary or permanent basis or otherwise jeopardise any water body in reaching its WFD objectives and consequently can be excluded from further assessment.

- 9.4.10. The third-party submission from Paul Rooney raises concern that no hydrological modelling or detailed flood risk analysis is provided and that the proposal lacks adequate scientific certainty. Having reviewed the documentation on file, the Carlow County Development Plan 2022-2028 Flood Risk Assessment and having consulted flood risk data on the OPW website, I am satisfied that hydrological modelling is not required in respect of the proposed development, and furthermore that there is no flood risk arising as a result of the proposed development at the proposed substation site or elsewhere.
- 9.4.11. I am satisfied that sufficient detail has been provided to support the conclusion that the proposed development would not be subject to flooding, nor will it give rise to the risk of flooding elsewhere. To conclude, I am satisfied that the proposed development is acceptable from a hydrological perspective.

## 9.5. **Noise**

- 9.5.1. Chapter 8 of the Environmental Report deals with 'Noise' and contains a noise impact assessment' which had regard to best practice documents including BS 5228-1:2009+A1:2014, Code of practice for noise and vibration control on construction and open sites, Noise; BS5228-2:2009, Code of Practice for Noise and Vibration Control on Construction and Open Sites, Vibration; and BS 7385-1 Evaluation and Measurement for Vibration in Buildings – Part 1 Guide for measurement of vibrations and evaluation of their effects on buildings. The

assessment and the design of monitoring programme was undertaken by a MOR Environmental acoustician.

9.5.2. The assessment was informed by a noise survey which was undertaken in July 2022 (for the permitted solar farm). As the application was lodged within 3 years of the baseline data it is considered to be representative and suitable for the current application. I am satisfied that there have no environmental changes to the baseline which would render the baseline outdated and I am satisfied that the baseline used for the noise impact assessment is relevant for the purposes of the current assessment.

9.5.3. In relation to the proposed substation development, the location of noise sensitive receptors (NSRs) in the vicinity of the site are indicated in Figure 8-2 of the Environmental Report. The nearest NSRs are the farmyard (NSR01) and dwelling (NSR02) owned by the landowner.

9.5.4. With the exception of NSR01, the Environmental Report sets out the following construction limits at NSR, based on BS5228-1:2009+A1:2014:

- LAeq,1hr 65dB – Daytime (7am to 7pm Monday to Friday, & 7am to 1pm Saturday);
- LAeq,1hr 55dB – Evening & Weekends; and,
- LAeq,1hr 45dB – Night-time (11pm to 7am).

9.5.5. Some receptors could experience a higher predicted construction noise due to the distance from works, prior to mitigation, based on a worst-case scenario that all on-site plant is operating at the closest point of the boundary to these receptors for a constant duration 1 hour. Vibration is not considered a potential effect.

9.5.6. In respect of the operational phase, noise modelling incorporated a permitted berm/sound barrier (Section 8.7 of the Environmental Report refers) along the northern and eastern boundaries of the permitted solar farm and the inclusion of a 1.5m high acoustic barrier positioned on top of a 1.5m earthen embankment, total height 3m. I note the Environmental Report states:

“For the Proposed Development, the substation is located further away than the previously granted and over a wider area. Due to the noise sources and layout, the ca.1.5m high berm is extended to the eastern boundary of the SID. The

barrier of ca. 1.5m on top of the berm is not considered to be required for the Proposed Development.”

9.5.7. The noise sources related to the operational phase are related to the two transformers for the 110kV substation. The assessment shows the highest value at the closest NSR (NSR02) at LAeq,T 21dB and that all NSRs will remain considerably below the typical noise limits for daytime and the night-time limits, which were assessed as 55 L Aeq, T dB and 40dB, applying the World Health Organisation ('WHO') Night Noise Guidelines ('NNG').

9.5.8. Condition no. 15 of Carlow Co. Co. planning reg. ref. 23/60297 for the solar farm and the 38kV substation limits construction stage noise levels at noise sensitive receptors to the levels recommended in BS5228-1:2009+A1:2014. In respect of operational phase, noise emissions are limited to:

- Daytime (07:00 to 19:00) 55dB LAr,T;
- Evening (19:00 to 23:00) 50dB LAr,T; and,
- Night (23:00 to 07:00) 45dB LAeq,T.

Condition no. 15 of that permission also requires that a programme for noise monitoring is to be agreed with the planning authority.

9.5.9. In respect of cumulative impact, the proposed construction will occur in tandem with the permitted solar farm, CCC planning reg. ref. 23/60297. I note that the permitted development considered the construction of a substation as part of that development albeit for a 38kV substation.

9.5.10. A cumulative assessment which considered the permitted solar farm development and additional nearby similar development, based on the operational phase of the proposed substation was undertaken for the proposed substation. I note that All NSRs will remain considerably below the typical noise limits for daytime (LAeq,T 55dB), with a peak site-specific contribution of 43dB at NSR02. The effect was deemed locally negligible.

9.5.11. Mitigation measures are set out in section 8.10 of the Environmental Report for the construction phase. This includes the preparation of a CEMP and use of landscaping. Mitigation is stated not to be required for the operation phase as there

will be no likely noise nuisance during the daytime and night-time operation of the proposed development.

- 9.5.12. The third-party submission raises concerns about noise pollution and lack of regulatory guidance.
- 9.5.13. Having reviewed the documentation on file, I note that during the construction phase of the substation, the potential exists for temporary noise nuisance during specific construction works. I acknowledge that due to the distance of proposed construction works from the NSRs identified and the general methods that will be involved in constructing the proposed development, standard construction noise will not breach noise limits at NSRs. During the grid route connection there is a potential for short-term exceedances of typical construction noise limits, prior to mitigation. Noise mitigation measures will be implemented during the construction phase that will be in accordance with recognised best practice guidelines for construction sites.
- 9.5.14. The permitted solar, BESS and 38kV substation development, CCC reg. ref. 23/60297 provided for a berm and sound barrier on top, measuring 3m in height. The noise impact assessment indicates that this berm is extended to the eastern boundary of the SID and the barrier on top of the berm is not considered required for the proposed development. The proposed berm is indicated on one of the site layout plans – the ‘overall site layout plan’ and is not indicated on the detailed site layout plans or the landscaping plan. The berm is considered further in section 9.6 of this Inspector’s Report.
- 9.5.15. In my opinion, the proposed development will not result in any significant impact on NSRs either during the operational phase or, subject to mitigation, during the construction stage. In the interests of consistency with Carlow Co. Co. planning reg. ref. 23/60297, it is considered appropriate that the noise limits as per the permitted solar farm and BESS facility are applied in respect of the proposed substation.

## 9.6. **Landscape and Visual**

- 9.6.1. Section 9 of the Environmental Report, ‘Landscape and Visual’, comprises a Landscape and Visual Impact Assessment (LVIA) prepared by Macro Works Ltd and follows best practice. This section is accompanied by Appendix F Part 1 and Part 2, substation photomontages and comprises seven viewpoints, which are in my opinion

representative of the characteristics of the local landscape. Appendix D-1 comprises a Landscape and Ecological Mitigation Plan, Appendix D-2 contains a Landscape Mitigation Plan which relates to the overall solar farm development.

- 9.6.2. A 3km radius study area is used with a focus on receptors contained within 500m-1km, except where iconic or designated scenic viewpoints exist at greater distances out to 3km.
- 9.6.3. The proposed development is situated in the landscape character area 'central lowlands', which is described in the Carlow County Council Landscape Character Assessment (LCA) as "primarily rural, with medium to quite large fields defined by well maintained and generally low hedges and occasional to frequent hedgerow trees." According to the LCA, the 'central lowlands' area is deemed to be 'moderately sensitive to development', and as a result "it has the capacity to absorb most types of development subject to the implementation of appropriate mitigation measures."
- 9.6.4. The proposed development is situated in the 'Farmed Lowland' Landscape Character Type (LCT) as is the majority of the study area and is designated a Class 3 'Moderate' sensitivity designation.
- 9.6.5. The Carlow County Council submission sets out the development plan policy in respect of landscape, as detailed above, and references LA P1, LA P2, LA P6 and LA P8 as relevant landscape polices. These policies seek to: protect the integrity of the County's landscape; ensure that proposed development does not unduly damage or detract from landscape features or have a disproportionate landscape or visual impact on scenic upland vistas; minimise visual impacts; require that natural site features are retained; and that landscape/visual impact assessment are prepared for certain developments. The submission continues that additional landscaping measures (semi-mature planting) should be planted around the perimeter of the substation compound in order to soften and absorb the overall visual impact of the proposed development.
- 9.6.6. The LVIA considered that construction stage impacts will generate significant construction stage visual effects, although these will be short-term with intermittent views. Construction stage impacts on landscape are considered to be negative, slight to imperceptible and temporary in duration. Operational stage impacts will result in slight, negative and permanent landscape effect.

- 9.6.7. Visual effects were assessed at 7 viewpoints throughout the study area, representing various viewing distances, angles and receptor types. The highest significance of visual effect is deemed to be a 'Slight' (VP4); there is potential for views from a neighbouring residential dwelling, however the proposed substation is well removed (ca. 650m) from the dwelling.
- 9.6.8. Mitigation measures are detailed in section 9.5.5. of the Environmental Report and reference is made to the permitted landscaping mitigation plan for the permitted solar development, which includes additional hedgerow planting and retention, protection and enhancement of all existing hedgerows within the permitted solar site. Reference is also made to a berm along the northern boundary, encompassing the proposed 110kV substation, however the detailed site layout plans nor the landscaping plans make reference to this berm:
- “a berm using surplus soils will be created [along] the northern boundary adjacent to the BESS and extending to encompass the proposed 110kV substation. This berm will serve as an important visual and acoustic screening measure, helping to reduce the visibility of the infrastructure from nearby receptors and minimizing potential noise impacts.”
- 9.6.9. I note that elsewhere in the Environmental Report that the berm will be positioned to the northern and eastern boundaries, section 8.7 refers. The Overall Site Layout Plan (drg no P850) indicates a berm (1.5m high and 5m wide) along the northern boundary only. I consider a condition is necessary for a revised landscaping plan detailing the proposed berm to be submitted for the written agreement of the planning authority. Furthermore, I note the request from Carlow County Council that additional landscaping is provided for around the perimeter of the proposed substation; I have provided for a revised landscaping plan to be submitted under condition no. 9, for the Commission's consideration.
- 9.6.10. I concur with the LVIA that the landscape sensitivity is 'medium-low' and I consider that the landscape has the capacity to absorb the proposed development subject to mitigation. The proposed substation will not introduce an unfamiliar or incongruous form of development, rather a slight intensification of a permitted development, the solar farm and BESS, which will be read collectively.

9.6.11. Having reviewed the LVIA, associated photomontages, application documentation including the drawings, and following a site inspection and a review of the Carlow County Development Plan 2022-2028, and having regard to the permitted solar farm and associated infrastructure which the substation will serve immediately adjoining the site, I am satisfied that subject to the mitigation measures, including the berms to the north and east of the substation site, that the proposed development will not have a significant effect on landscape and visual amenity of the area and is an acceptable form of development in this regard.

## 9.7. Cultural Heritage

9.7.1. Section 10 of the Environmental Report considers Cultural Heritage and is prepared by consultant archaeologists, Dr. Maurice Foley and Mr. Vincent Price. A geophysical survey of the permitted solar farm was undertaken in April 2023 and April 2024, Appendix G refers. The geophysical survey submitted with the application does not cover the proposed substation site. The complete geophysical survey, which covers the substation site, is available on CCC planning reg. ref. 23/60297. Archaeological test trenching within part of the permitted solar farm development site is stated to have been undertaken in April 2024. Details of test trenching are not provided with the subject application. I note that details of test trenching of the proposed solar farm are available on CCC planning reg. ref. 23/60297, but test trenching did not extend to the proposed substation site.

9.7.2. Recorded Monument (CW008-020, burial ground) is located ca. 40m from the site boundary where the UGC is proposed to run to the west before it turns west onto the regional road, R725. The monument is classified as a 'burial ground'. The Archaeological Survey of Ireland states there is 'no visible trace of any structure' and apart from the tomb stones and enclosing wall no structure is apparent. The Environmental Report states that the monument is defined by a circular ditch within which an enclosing low stone wall defined the circular burial ground and states that it is scheduled for inclusion in the next review of the Record of Monument and Places and therefore has legal protection under the National Monument Acts.

9.7.3. The remainder of the UGC route continues along public road towards Kellistown substation. The proposed UGC route passes close to CW008—22, Burial ground,

and within the archaeological zone of CW008-032, Castle- unclassified, proximate to Grangeford Bridge. The proposed UGC route continues south passing within the archaeological zone of CW008-039, Barrow – mound barrow and proximate to CW008-052001, Moated site and CW008-040, Enclosure. The route passes proximate to CW013-008, Enclosure, close to Rathoe, before it passes through the archaeological zone of CW013-007, Moated site, just east of Rathoe Bridge. Sites CW013-081, Enclosure and CW013-005, Enclosure, are located to the north east of Rathoe Bridge. The proposed UGC route continues along the public road, passing through the archaeological zones of CW013-003, Barrow, and CW013-120, Ring ditch, at Kellistown Cross Roads. The assessment notes that only some of the monuments have surface expression today and some have subsequently been levelled since they were recorded.

- 9.7.4. Relevant Carlow Development Plan 2022-2028 policies include AH Policy 1, AH Policies 3-8. These seek to secure the preservation of archaeological monuments, protect zones of archaeological potential and historic burial ground and enhance the archaeological heritage of the County. In addition, that development proposals should be subject to archaeological assessment as necessary and not detract from the setting of archaeological sites.
- 9.7.5. The Carlow County Council submission notes that the application site incorporates the location of a number of recorded monuments and is within the zone of influence of a number of recorded monuments and that archaeological impact assessment shall be carried out and include a geophysical survey and test excavation.
- 9.7.6. Mitigation measures are detailed in section 10.6.4 of the Environmental Report. With respect to the proposed UGC, it is recommended that groundwork associated with the UGC within close proximity to these monuments be monitored by an archaeologist, with particular caution advised in the vicinity of:
- CW008-039 mound in the townland of Inchisland / Moatuluasa,
  - CW013-007 moated site in the townland of Rathoe and
  - CW013-03 barrow-mound barrow in Kellistown East.

The Environmental Report continues that the proposed UGC should be routed on the opposite side of the roadway from these monuments, if “practical and feasible with

respect to other variables”, and that archaeological testing of identified anomalies and selective archaeological testing of the site in advance of construction is considered appropriate.

- 9.7.7. As stated, planning permission for development at the site of proposed substation has been previously granted, CCC Planning reg. ref. 23/60297 refers, which included a geophysical survey of the substation site. Test trenching of the proposed substation site/or evidence of same, has not been undertaken/submitted. I am, however, satisfied that archaeological testing of the site is adequately provided for in condition no. 19 of CCC reg. ref. 23/60297 refers and it is a matter of compliance that test-trenching of the substation site is undertaken and evidence of same is required to be submitted to the planning authority in the form of an archaeological impact assessment.
- 9.7.8. With respect to the proposed UGC route, I consider it appropriate, having regard to the proximity of monuments to the route, and having regard to the mitigation measures proposed in the Environmental Report, that a condition is attached to monitor groundworks by an licensed archaeologist; condition no. 8 refers.
- 9.7.9. Subject to mitigation measures set out in the Environmental report and compliance with archaeological conditions pertaining to CCC planning reg. ref. 23/60297, I am satisfied that the proposed development is satisfactory from a cultural heritage perspective.

## 9.8. **Traffic**

- 9.8.1. Section 11 of the Environmental Report deals with traffic. A Construction Traffic Management Plan (CTMP) prepared by Meinhardt is included at Appendix H to the Environmental Report. The road network is described at section 11.1, including the proposed haul route, which will utilise, the M9, the R448, the R418, the R725 and the L6113. The UGC route will utilise the L30535, the L3046, the L1024 and the L6113. A desk study by Meinhardt states that L6113, the L3053 and the L30535 are lightly trafficked with moderate traffic levels on the R725.
- 9.8.2. Access to the farm on the which the substation and associated solar farm are proposed via the R725. This access will be utilised during both construction and to service the proposed development once operational. A temporary construction

access via the L6113 was authorised as part of the permitted solar farm development. It is proposed that the L6113 access point will also serve as an alternative egress in respect of the proposed development. Sightlines in accordance with the TII Design Manual for Roads and Bridges are achievable.

9.8.3. No internal roads are proposed as part of the proposed substation development. The proposed substation will utilise tracks permitted under the solar farm development, CCC reg. ref. 23/60297.

9.8.4. The CTMP addresses the proposed UGC route. The primary disruptions to the road network are expected to occur during the installation of Joint Bay's, which are to be provided approximately every 700-900m along the UGC route. Due to the scale of the Joint Bays, it is anticipated that only the R725 will have sufficient width to accommodate the minimum carriageway width of 2.5 metres. Three temporary full road closures are proposed on the local roads to facilitate the installations. Temporary full road closures will also be required to facilitate the HDD at the three bridge locations. Traffic diversions will be in place for a period of time on a number of roads, up to a maximum of 15 weeks. The overall construction period is expected to take ca. 90 weeks.

9.8.5. Mitigation measures are set out in section 11.11 of the Environmental Report and section 4.14 of the CTMP, amongst which are:

- The appointment of a dedicated person for the management of deliveries.
- Local and emergency access to houses and businesses along affected routes will be accommodated at all times.
- Pre- and post-construction condition survey of the roads and bridges along the haul and cabling route, with the contractor liable for repairs.
- Agreement of a specific traffic management plan.

9.8.6. The proposed UGC will require a road opening licence under Section 254 of the Planning and Development Act 2000, as amended, from Carlow County Council.

9.8.7. The Carlow County Council submission requests that a traffic management coordinator is appointed to liaise with similar adjoining development and to coordinate construction timelines and road opening to prevent prolonged and negative impacts to road users, and pre and post surveys and reinstatement are

undertaken, as may be necessary. I consider it appropriate to include a condition which extends the remit of the traffic management coordinator to liaise with similar adjoining development and road openings to prevent prolonged and negative impacts to road users; condition no. 7 refers.

- 9.8.8. As stated at section 4.1 of this Inspector's report, the Carlow County Council submission includes a report from the District Engineer who raises several concerns primarily relating to impact on roads, traffic and access. I note that the Carlow Co. Co. Chief Executive's Report did not include many of these conditions specifically in the list of 'conditions which may be appropriate', however, I am satisfied that the majority of concerns can be addressed by condition. Other concerns raised by the District Engineer include a request that the L-3046 cannot be closed under any circumstances, which contrasts with the proposal in the CTMP to close the L-3046 for ca. 6 no. days. Having regard to the foregoing, I consider it appropriate that the final CTMP shall be agreed in writing with Carlow County Council; condition no. 7 refers.
- 9.8.9. The 3<sup>rd</sup>-party submission raises concerns in respect of constant road closures, traffic lights and disruption in the area and surrounding local road, and that the proposed development extends that burden indefinitely..
- 9.8.10. Notwithstanding the third party concerns, I am satisfied, that the mitigation measures outlined the CTMP and the Environmental Report, together with the inclusion of the afore-mentioned additional measure to agree the CTMP with the planning authority, will minimise disruption on the local road network and that traffic impacts can be appropriately managed. The proposed construction period is temporary, ca. 90 weeks, with the development being undertaken in stages. I am therefore satisfied that the proposed development is acceptable from a traffic management perspective.

## 9.9. **Other Issues**

### 9.9.1. Fire Risk

The third-party submission raises concern about fire risk at the permitted adjoining BESS facility. The third-party concern relates to the adjoining development and not the proposed development the subject of the current application. I note however that condition no. 17 of the permission that authorised the BESS facility (CCC reg. ref.

23/60297) requires consultation with the Chief Fire Officer prior to commencement to comply with their recommendations. The applicant's response to submissions reiterates that the BESS is permitted under a separate grant of permission and that all relevant fire safety and explosion risk considerations were appropriately assessed and addressed.

9.9.2. Duration of Permission

Planning permission for a ten-year period is sought, during which the development may be carried out. I note that the permission for the solar farm, which the proposed substation is to service, is a ten-year permission, condition no. 2 of CCC reg. ref. 23/60297 refers. For this reason, I consider it appropriate to permit a duration of permission of 10 years. A condition to this effect is included for the Commission's consideration.

9.9.3. Operational Life

Despite the proposal that the submission will become a 'node' as part of the transmission system, the application is accompanied by a Decommissioning Plan for the proposed substation and UGC. Developments of this nature are generally left in situ as it may have other connections into it, forming part of the network and becoming an asset of ESB Networks. In the event that the adjoining permitted solar farm is decommissioned at the end of its operational life, the substation will remain in situ as a transmission asset on the national electricity network. Therefore, I consider decommissioning and reinstatement conditions for this application are not necessary.

9.9.4. Planning Authority Conditions

Carlow County Council set out 6 no. conditions to be attached in a grant of permission. I consider these in Table 10.1 below.

**Table 10.1 List of Planning Authority conditions**

Carlow Co. Co. Condition	Include yes / no & detail
Additional landscaping measures (semi mature planting) to be implemented around the perimeter of the Substation Compound in order to soften & absorb the overall visual impact of the proposed development of this area.	Yes, condition no. 9 refers.

The appointment of a traffic management coordinator to liaise with similar adjoining developments and to co-ordinate construction timelines and road openings to prevent prolonged and negative impacts to road users.	Yes, condition no. 7 refers.
Pre and post road surveys and reinstatement costs to maintain the structural integrity of the public road network in respect of the underground grid connection installation works. Any resulting damage must be repaired to the council's satisfaction and all costs borne by the applicant.	Yes, condition no.7 refers.
Provide details for protection measures for existing water service infrastructure in the area during the grid connection works.	Yes, condition no. 12 refers.
A detailed Construction Environmental Management Plan and a detailed Surface Water Management Plan.	Yes, condition no. 6 refers.
All mitigation measures outlined in the submitted Natura Impact Statement to be carried out in full and implemented by the development under the supervisions of a suitability qualified Ecological Clerk of Works.	Yes, condition no. 4 refers.
Development levies and bond to the agreed with the Local Authority prior to commencement.	No, there is no provision to include development contributions in section 182A cases. A bond condition is included – condition no. 15 refers.

## 10.0 Appropriate Assessment

### 10.1. Appropriate Assessment Conclusion: Integrity Test

10.1.1. Appendix 3 to this report contains the AA Screening, Appendix 4 contains the AA itself.

- 10.1.2. In screening the need for Appropriate Assessment, it was determined that the proposed development could result in significant effects on the River Barrow and River Nore SAC (site code 002162) in view of the conservation objectives of that site and that Appropriate Assessment under the provisions of S177U/ 177AE was required.
- 10.1.3. Site specific conservation objectives exist for the screened-in European designated site. I have had regard to the most recent data on the NPWS website and to an up to date in-combination assessment in preparing this AA.
- 10.1.4. I am satisfied that all aspects of the project which could result in significant effects have been considered and assessed in the NIS. In addition, the mitigation measures designed to avoid or reduce any adverse effects on site integrity have been assessed for effectiveness.
- 10.1.5. Following an examination, analysis and evaluation of the NIS all associated material submitted, and taking into account observations on nature conservation, I consider that adverse effects on site integrity of the River Barrow and River Nore SAC 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:
- Distance of the proposed works to the SAC.
  - Detailed assessment of construction and operational impacts.
  - Effectiveness of mitigation measures propose.
  - Application of planning conditions to ensure application of these measures.
  - The proposed development will not affect the attainment of conservation objectives for the River Barrow and River Nore SAC.

## 11.0 Recommendation

Having regard to the documentation on file, the observations and submissions received, the site inspection and the assessment above, I recommend that

permission for the above-described development be granted, subject to conditions, for the following reasons and considerations and subject to attached conditions.

## 12.0 Reasons and Considerations (Draft Order)

In performing its functions to the making of its decision, the Commission had regard to:

Section 15(1) of the Climate Action and Low Carbon Development Act 2015, as amended by Section 17 of the Climate Action and Low Carbon Development (Amendment) Act 2021, and the requirement to, in so far as practicable, perform its functions in a manner consistent with Climate Action Plan 2024 and Climate Action Plan 2025 and the national long term climate action strategy, national adaptation framework and approved sectoral adaptation plans set out in those Plans and in furtherance of the objective of mitigating greenhouse gas emissions and adapting to the effects of climate change in the State.

The Commission also had regard to the following in coming to its decision:

- European legislation, including of particular relevance:
  - Directive 92/43/EEC (Habitats Directive) and Directive 79/409/EEC as amended by 2009/147/EC (Birds Directive) which set the requirements for Conservation of Natural Habitats and of Wild Fauna and Flora throughout the European Union.
  - Directive 2011/92/EU (The EIA Directive) as amended by Directive 2014/52/EU as implemented by Article 94 and Schedule 6 (paragraphs 1 and 2) of the Planning Regulations as amended.
  - Directive 2000/60/EC, the Water Framework Directive and the requirement to exercise its functions in a manner which is consistent with the provisions of the Directive and which achieves or promotes compliance with the requirements of the Directive.
- National and regional planning and related policy, including:

- National policy with regard to the development of renewable energy infrastructure, particularly the NPF First Revision 2025 and National Strategic Outcome 8 and National Policy Objective 72.
- the Climate Action Plan, 2025, and should be read in conjunction with Climate Action Plan 2024,
- The objectives and targets of the National Biodiversity Action Plan 2023-2030.
- Regional and local planning policy, including:
  - Regional Spatial Economic Strategy for the Southern Region;
  - Carlow County Development Plan 2022-2028.
- The nature, scale and design of the proposed development as set out in the planning application and the pattern of development in the vicinity.
- 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 likely significant effects of the proposed development on European sites.
- The Natura Impact Statement submitted.
- The Environmental Report submitted.
- The distance to dwellings or other sensitive receptors from the proposed development.
- The planning history of the immediate area.
- The submissions and observations made in connection with the planning application the response to submissions received in response to same.
- The report and the recommendation of the Inspector, including the examination, analysis and evaluation undertaken in relation to appropriate assessment.

## **Appropriate Assessment**

The Commission agreed with and adopted the screening assessment and conclusion carried out in the inspector's report that the River Barrow and River Nore SAC, site code 002162, is the only European sites for which there is a likelihood of significant effects.

The Commission considered the Natura Impact Statement and associated documentation submitted with the application for approval, the mitigation measures contained therein, the submissions and observations on file, and the Inspector's assessment. The Commission completed an appropriate assessment of the implications of the proposal for the River Barrow and River Nore SAC, site code 002162, in view of the Site's Conservation Objectives. The Commission considered that the information before it was adequate to allow the carrying out of an appropriate assessment. In completing the Appropriate Assessment, the Commission considered, in particular, the following:

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

In completing the appropriate assessment, the Commission accepted and adopted the appropriate assessment carried out in the Inspector's report in respect of the potential effects of the proposed on the aforementioned European sites, having regard to the site's conservation status.

In overall conclusion, the Commission 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 Sites, in view of the site's conservation objectives.

### **Proper planning and sustainable development:**

It is considered that subject to compliance with the conditions set out below the proposed development would accord with European, national, regional and local planning and related policy, it would not have an unacceptable impact on the landscape or ecology, it would not seriously injure the visual or residential amenities

of the area or of property in the vicinity, and it would be acceptable in terms of traffic safety and convenience, and would make a positive contribution towards Ireland's renewable energy and security of energy supply requirements. The proposed development would, therefore, be in accordance with the proper planning and sustainable development of the area.

## 13.0 Conditions

1. The development shall be carried out and completed in accordance with the plans and particulars lodged with the application, as supplemented by the information received on 27<sup>th</sup> May 2025, 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 the commencement of development and the development shall be carried out in accordance with the agreed particulars.

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

2. The substation hereby permitted shall replace that permitted under Carlow County Council planning reg. ref. 23/60297 and the development hereby permitted shall, unless otherwise stated in the following conditions, comply with the conditions of Carlow County Council planning reg. ref. 23/60297.

**Reason:** In the interest of clarity.

3. The period during which the development hereby permitted may be carried out shall be 10 years from the date of this Order.

**Reason:** Having regard to the nature of the proposed development, the Commission considered it reasonable and appropriate to specify a period of the permission in excess of five years.

4. The mitigation measures contained in the submitted Natura Impact Statement (NIS), shall be implemented in full.

**Reason:** To protect the integrity of European Sites.

5. All of the environmental, construction and ecological related mitigation measures, as set out in the Environmental Report, Construction and Environmental Management Plan, Biodiversity Management Plan and Landscape Management Plan, and other particulars submitted with the application, shall be implemented by the undertaker in conjunction with the timelines set out therein except as may otherwise be required to comply with the conditions of this Order.

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

6. Prior to commencement of development, a detailed Construction Environmental Management Plan (CEMP) for the construction phase shall be submitted to and agreed in writing with the planning authority, generally in accordance with the Outline Construction Methodology submitted with the application. The CEMP shall incorporate the following:

- (a) a detailed plan for the construction phase incorporating, inter alia, construction programme, supervisory measures, noise, dust and surface water management measures including appointment of a site noise liaison officer, construction hours and the management, transport and disposal of construction waste. This shall address any concurrent construction phase of the adjoining permitted Solar Farm and BESS.

- (b) a comprehensive programme for the implementation of all monitoring commitments made in the application and supporting documentation during the construction period;

- (c) an Invasive Species Eradication and Management Strategy for the site, to include monitoring post completion of works;

- (d) an emergency response plan;

- (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, and

(f) the location of any and all archaeological or cultural heritage constraints relevant to the proposed development. The CEMP shall clearly describe all identified likely archaeological impacts, both direct and indirect, and all mitigation measures to be employed to protect the archaeological or cultural heritage environment during all phases of site preparation and construction activity.

(g) details for protection measures for existing water service infrastructure in the area during the grid connection works.

(h) a detailed Surface Water Management Plan.

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

7. Prior to the commencement of development, the developer shall comply with the transportation requirements of the planning authority for such works and services as appropriate. Such requirements shall require provision of a detailed Traffic Management Plan which shall be submitted for the written agreement of the Planning Authority and shall include the following details:

(a) Consultation with TII and all private and public companies and road authorities.

(b) Details of haulage routes, control measures for abnormally sized vehicles and an Abnormal Load Assessment.

(c) A road condition survey of roads and bridges along the haul route to be carried out at the developer's expense and to the satisfaction of the planning authority.

(d) Detailed arrangements for construction damage to be made good by the developer to the satisfaction of the planning authority.

(e) Detailed arrangements for temporary traffic management/controls, to include arrangements for the safe operation of the L6113, L3053 and L3046 and the R725, and protocols to keep residents informed,

(f) Construction Route Signage,

(g) Road Opening Licences that will be required,

- (h) Arrangements for the phasing of the development and any concurrent or sequential phase of the Grangeford Solar Farm or cabling in the public road to connect the solar farm to the sub-station.
- (i) Detailed design of the site entrance and site egress onto the R725 and L6113 with provision of sightlines to the satisfaction of the planning authority and recessed entrance gate.
- (j) The appointment of a traffic management coordinator to liaise with similar adjoining developments and to co-ordinate construction timelines and road openings.

**Reason:** In the interest of traffic and pedestrian safety and to minimise traffic disruption in the area.

- 8. (a) The developer shall engage a suitably qualified (licensed eligible) archaeologist to monitor (licensed under the National Monuments Acts) all site clearance works, topsoil stripping, groundworks, trenching and the implementation of agreed preservation in-situ measures associated with the development. Prior to the commencement of such works the archaeologist shall consult with and forward to the Local Authority archaeologist and the national Monument's Service as appropriate a method statement for written agreement. The use of appropriate tools and/or machinery to ensure the preservation and recording of any surviving archaeological remains shall be necessary. Should archaeological remains be identified during the course of archaeological monitoring, all works shall cease in the area of archaeological interest pending a decision of the planning authority, in consultation with the National Monuments Service, regarding appropriate mitigation [preservation in-situ/excavation].
- (b) The developer shall facilitate the archaeologist in recording any remains identified. Any further archaeological mitigation requirements specified by the planning authority, following consultation with the National Monuments Service, shall be complied with by the developer.
- (c) Following the completion of all archaeological work on site and any necessary post-excavation specialist analysis, the planning authority and the National Monuments Service shall be furnished with a final archaeological

report describing the results of the monitoring and any subsequent required archaeological investigative work/excavation required. All resulting and associated archaeological costs shall be borne by the developer.

**Reason:** To ensure the continued preservation [either in situ or by record] of places, caves, sites, features or other objects of archaeological interest"

9. (a) The landscaping scheme shown on drawing number LD.KLLSTWNSBST 1.0 (Landscape and Ecological Mitigation Plan), as submitted to the An Bord Pleanála on the 27th day of May 2025 shall be augmented to provide for:
- i. additional semi-mature planting to the permitter of the substation hereby permitted;
  - ii. a berm along the northern and eastern boundaries of the substation hereby permitted.

The details of which shall be submitted for written agreement with the planning authority.

(b) The scheme shall be carried out within the first planting season following substantial completion of external construction works. All planting shall be adequately protected from damage until established. Any plants which die, are removed or become seriously damaged or diseased, within a period of five years from the completion of the development, shall be replaced within the next planting season with others of similar size and species, unless otherwise agreed in writing with the planning authority.

**Reason:** In order to screen the development, in the interest of visual amenity.

10. (a) Noise and vibration during the construction phase, at sensitive receptors, shall be limited to the levels recommended in BS 5228-1:2009+A1:2014.
- (b) During the operational phase of the substation, the noise level arising from the development, as measured at noise sensitive locations shall not exceed:
- (i) An LeqT, value of 55 dB(A) during the period 0700 to 2200 hours from Monday to Saturday inclusive. [The T value shall be one hour]

- (ii) An Leq, 15 min value of 45 dB(A) at any other time. [The T value shall be 15 minutes]. The noise at such time shall not contain a tonal component.
- (c) At no time shall the noise generated on site result in an increase in noise level of more than 10 dB(A) above background levels at the boundary of the site. All sound measurement shall be carried out in accordance with ISO Recommendation 1996:2007: Acoustics - Description and Measurement of Environmental Noise.
- (d) Prior to the commencement of development, the developer shall agree with the planning authority a protocol for the monitoring of noise from electrical apparatus within the sites. This protocol shall include provision for the shielding or removal of any such apparatus in the event of the exceedance of agreed noise limits as perceived at identified receptors.

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

11. The undertaker shall comply with the following requirements:
- a) No additional artificial lighting shall be installed or operated on site unless authorised by a prior grant of planning permission.
  - b) CCTV cameras shall be fixed and angled to face into the site and shall not be directed towards adjoining property or roads.
  - c) Cables within the site shall be located underground.
  - d) All fencing, gates and exposed metalwork shall be dark green in colour. The roofs of the buildings within the substation compound shall be dark grey or black and the external walls shall be finished in neutral colours such as grey or off-white.

**Reason:** In the interest of clarity, of visual and residential amenity.

12. All road surfaces, water infrastructure, 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 authority at the developer's expense.

**Reason:** In order to protect the road network

13. Site development and building works shall be carried out only between the hours of 0700 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.

14. Drainage arrangements, including the disposal of surface water, shall comply with the requirements of the planning authority for such works and services.

**Reason:** In the interests of environmental protection and flood prevention.

15. Prior to commencement of development, the undertaker shall lodge with the planning authority a cash deposit, a bond of an insurance company, 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 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.

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Alaine Clarke

Senior Planning Inspector

## Appendix 1

### Form 1 - EIA Pre-Screening

<b>Case Reference</b>	322690-25
<b>Proposed Development Summary</b>	The proposed 110kV Substation will be located on a site that is circa 1.7 hectares in size and is located within the townlands of Friarstown and Grangeford Old. The proposed 110kV underground cable (UGC) will be circa 8 km in length, primarily along public roads and will traverse through the townlands of Kellistown East, Kellistown West, Ballycurragh Rathoe, Inchisland Or Moatalusha, Rathnashannagh, Glenoge Moanalow, Grangeford, Grangeford Old and Friarstown in County Carlow.
<b>Development Address</b>	Located within the townlands of Friarstown, Grangeford Old, Grangeford, Moanalow, Glenoge, Rathnashannagh, Inchisland Or Moatalusha, Rathoe, Kellistown East, Ballycurragh and Kellistown West, County Carlow
<b>In all cases check box /or leave blank</b>	
<b>1. Does the proposed development come within the definition of a 'project' for the purposes of EIA?</b>  (For the purposes of the Directive, "Project" means: - The execution of construction works or of other installations or schemes,  - Other interventions in the natural surroundings and landscape including those involving the extraction of mineral resources)	<input checked="" type="checkbox"/> Yes, it is a 'Project'. Proceed to Q2.
	<input type="checkbox"/> No, No further action required.
<b>2. Is the proposed development of a CLASS specified in Part 1, Schedule 5 of the Planning and Development Regulations 2001 (as amended)?</b>	
<input type="checkbox"/> Yes, it is a Class specified in Part 1.  <b>EIA is mandatory. No Screening required. EIAR to be requested. Discuss with ADP.</b>	State the Class here
<input checked="" type="checkbox"/> 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?**

<input checked="" type="checkbox"/> 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.  <b>No Screening required.</b>	<p><i>The proposed development is not a class for the purposes of EIA as per the classes of development set out in Schedule 5 of the Planning and Development Regulations 2001, as amended (or Part V of the 1994 Roads Regulations). No mandatory requirement for EIA therefore arises and there is also no requirement for a screening determination. Refer to Form 1 in Appendix 1 of report.</i></p>
<input type="checkbox"/> Yes, the proposed development is of a Class and meets/exceeds the threshold.  <b>EIA is Mandatory. No Screening Required</b>	<p>n/a</p>
<input type="checkbox"/> Yes, the proposed development is of a Class but is sub-threshold.  <b>Preliminary examination required. (Form 2)</b>  <b>OR</b>  <b>If Schedule 7A information submitted proceed to Q4. (Form 3 Required)</b>	<p>n/a</p>

**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 <input type="checkbox"/>	
No <input checked="" type="checkbox"/>	<b>Pre-screening determination conclusion remains as above (Q1 to Q3)</b>

Inspector: \_\_\_\_\_ Date: \_\_\_\_\_

## Appendix 2

<b>WFD IMPACT ASSESSMENT STAGE 1: SCREENING</b>			
<b>Step 1: Nature of the Project, the Site and Locality</b>			
<b>An Bord Pleanála ref. no.</b>	ABP-322690-25	<b>Townland, address</b>	located within the townlands of Friarstown, Grangeford Old, Grangeford, Moanalow, Glenoge, Rathnashannagh, Inchisland Or Moatalusha, Rathtoe, Kellistown East, Ballycurragh and Kellistown West, County Carlow.
<b>Description of project</b>		The proposed 110kV Substation will be located on a site that is circa 1.7 hectares in size. The proposed 110kV underground cable (UGC) will be circa 8 km in length, primarily along public roads. .	
<b>Brief site description, relevant to WFD Screening,</b>		<p>There are no open watercourses within the proposed substation site. There are 6 no. hydrological features within close proximity to the site and 3 no. watercourses will be crossed via the UGC route:</p> <ul style="list-style-type: none"> <li>• The Ardnehue River, which drains to the River Burren</li> <li>• Grangeford Old Steam, though no evidence of this watercourse in-situ</li> <li>• The Baunogenasraid Stream, which drains to the River Burren</li> <li>• The Aghalona River, will be crossed by the proposed UGC via horizontal drilling (HDD). It drains to the River Burren.</li> </ul>	

	<ul style="list-style-type: none"> <li>• The Roscat River, will be crossed by the proposed UGC via horizontal drilling (HDD). It drains to the River Burren.</li> <li>• The Burren River, will be crossed by the proposed UGC via horizontal drilling (HDD). It drains to the River Burren.</li> </ul>
<b>Proposed surface water details</b>	A Sustainable urban Drainage System (SuDS) approach is proposed. Rainfall runoff from the control building roof in the substation will be collected and piped to a rainwater harvesting tank for reuse in the toilets, with remainder to a soakaway. The access road will allow rainfall to permeate into the ground. A small section will be covered in concrete, water will drain to free-draining areas, constructed in hardcore stone, permeating into the ground.
<b>Proposed water supply source &amp; available capacity</b>	Rainfall runoff from the control building roof in the substation will be collected and piped to a rainwater harvesting tank for reuse in the toilets.
<b>Proposed wastewater treatment system &amp; available capacity, other issues</b>	No foul drainage required. During construction, portable toilets will be provided. Waste will be removed off-site by an approved contractor. During operational phase, foul water will be diverted to a below ground holding tank, which will be periodically emptied by a licensed contractor.
<b>Others?</b>	N/A
<b>Step 2: Identification of relevant water bodies and Step 3: S-P-R connection</b>	

Identified water body	Distance to (m)	Water body name(s) (code)	WFD Status (2019-2024)	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	560m	Ardnehue River (Burren_050)	Moderate	Not at risk	None identified	Surface water run-off
River waterbody	230m	Grangeford Old Steam (Burren_050)	Moderate	Not at risk	None identified	Surface water run-off
River waterbody	2m	Baunogenasraid Stream (Burren_050)	Moderate	Not at risk	None identified	Surface water run-off
River waterbody	0m	Aghalona River (Aghalona_020)	Moderate	At risk	Agriculture	Surface water run-off
River waterbody	0m	Roscat River (Roscat_010)	Moderate	Not at risk	None identified	Surface water run-off
River waterbody	0m	Burren River	Good	At risk	Agriculture	Surface water run-off

		(Burren_040)					
Groundwater body	0m	New Ross	Good	Not at risk	None identified	Groundwater	
Groundwater body	0m	Burren Valley Gravels	Good	Not at risk	None identified	Groundwater	
<b>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.</b>							
<b>CONSTRUCTION PHASE</b>							
No.	Component	Water body receptor (EPA Code)	Pathway (existing and new)	Potential for impact/ what is the possible impact	Screening Stage Mitigation Measure*	Residual Risk (yes/no) Detail	<b>Determination** to proceed to Stage 2. Is there a risk to the water environment? (if 'screened' in or 'uncertain' proceed to Stage 2.</b>
1.	Surface: Site clearance & Construction	The Ardnehue River Grangeford Old Steam	Indirect impact via potential hydrological pathway	Water Pollution from construction run off - Siltation, pH (Concrete),	Use of Standard Construction Practice and CEMP/ Conditions	No	Screen out at this stage.

		<p>The Baunogenasraid Stream</p> <p>The Aghalona River</p> <p>The Roscat River</p> <p>The Burren River.</p>		Hydrocarbon spillages.			
2.	Ground: Site clearance & Construction	<p>New Ross GW</p> <p>Burren Valley Gravels GW</p>	Indirect impact via Potential hydrological pathway	Water Pollution from construction run off - Siltation, pH (Concrete), Hydrocarbon spillages.	Use of Standard Construction Practice and CEMP/ Conditions	No	Screen out at this stage.
<b>OPERATIONAL PHASE</b>							
3.	Surface waterbodies	<p>The Ardnehue River</p> <p>Grangeford Old Steam</p>	No risk identified				Screen out at this stage.

		The Baunogenasraid Stream The Aghalona River The Roscat River The Burren River.					
4.	Ground waterbodies	New Ross GW Burren Valley Gravels GW	No risk identified.				Screen out at this stage.
<b>DECOMMISSIONING PHASE</b>							
5.	Surface waterbodies	The Ardnehue River Grangeford Old Steam	Indirect impact via potential hydrological pathway.	Indirect impact via potential hydrological pathway	Water Pollution from construction run off - Siltation, pH (Concrete), Hydrocarbon spillages.	Use of Standard Construction Practice and CEMP/ Conditions	No

		<p>The Baunogenasraid Stream</p> <p>The Aghalona River</p> <p>The Roscat River</p> <p>The Burren River.</p>					
	Ground waterbodies	<p>New Ross GW</p> <p>Burren Valley Gravels GW</p>	Indirect impact via Potential hydrological pathway	Water Pollution from construction run off - Siltation, pH (Concrete), Hydrocarbon spillages.	Use of Standard Construction Practice and CEMP/ Conditions	No	Screen out at this stage

## Appendix 3 – Screening for Appropriate Assessment

Screening for Appropriate Assessment Test for likely significant effects	
<b>Step 1: Description of the project and local site characteristics</b> <b>Case File: ABP-322690-25</b>	
<b>Brief description of project</b>	Proposed 110kV electrical substation and associated 110kV infrastructure (8km underground cable) required to connect a solar farm to the existing Kellistown substation.
<b>Brief description of development site characteristics and potential impact mechanisms</b>	<p>Site preparation work and construction works will require ground clearance and excavations. A preliminary Construction and Environment Management Plan (pCEMP) accompanies the application. Good practice construction site management measures are integrated into the project design.</p> <p>Surface water runoff from impermeable areas is to be directed to a soakaway to the south of the substation compound. It is noted that runoff will pass through an oil interceptor prior to discharging to the soakaway. A rainwater harvesting system is proposed for the toilets. No foul drainage is required; a holding tank will be used and will be emptied and waste removed to a licensed premises.</p> <p>With regard to designated sites, Slaney River Valley SAC (000781) is located ca. 2.5km from the proposed development site, there is no hydrological connection to the site. The River Barrow and River Nore SAC (002162) is located ca. 8km from the development site, which is hydrologically connected via the Aghalona River, Roscat River and Burren River which discharges into the River Barrow downstream.</p>
<b>Screening report</b>	Yes (Prepared by E Cazzini of Malone O' Regan Environmental)
<b>Natura Impact Statement</b>	Yes (As above)
<b>Relevant submissions</b>	A public submission states that the proposed development would be a risk to River Barrow and River Note SAC.
<b>Step 2: Identification of relevant European sites using the Source-pathway-receptor model</b>	

Two European sites were identified as being located within a potential zone of influence of the proposed development as detailed in Table 1 below.

European Site (code)	Qualifying interests <sup>1</sup> Link to conservation objectives (NPWS, date)	Distance from proposed development (km)	Ecological connections	Consider further in screening Y/N
Slaney River Valley SAC (000781)	<a href="https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO000781.pdf">https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO000781.pdf</a> (NPWS, 2011)  Estuaries [1130] Mudflats and sandflats not covered by seawater at low tide [1140] Atlantic salt meadows [1330] Mediterranean salt meadows [1410] Water courses of plain to montane levels with the Ranunculus fluitantis and Callitriche-Batrachion vegetation [3260] Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0] Alluvial forests with Alnus glutinosa and Fraxinus excelsior [91E0] Freshwater Pearl Mussel [1029] Sea Lamprey [1095] Brook Lamprey [1096] River Lamprey [1099] Twaite Shad [1103] Salmon [1106] Otter [1355] Harbour Seal [1365]	Circa 2.5km	No	N

River Barrow and River Nore SAC (002162)	<p><a href="https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO002162.pdf">https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO002162.pdf</a> (NPWS, 2025)</p> <p>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 (<i>Glauco-Puccinellietalia maritima</i>) [1330]  Mediterranean salt meadows (<i>Juncetalia maritimi</i>) [1410]  Water courses of plain to montane levels with the <i>Ranunculum fluitans</i> and <i>Callitriche-Batrachion</i> 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 (<i>Cratoneurion</i>) [7220]  Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles [91A0]  Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> [91E0]  Desmoulin's Whorl Snail [1016]  <i>Margaritifera margaritifera</i> (Freshwater Pearl Mussel) [1029]  White-clawed Crayfish [1092]  Sea Lamprey [1095]  Brook Lamprey [1096]  River Lamprey [1099]  Twaite Shad [1103]  Salmon [1106]</p>	Circa 8.8km	Yes, 3 x stream crossings for grid connection which are connected downstream to the SAC.	Y
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Otter [1355]  
Killarney Fern [6430]

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

The proposed development will not result in any direct effects on the River Barrow or River Nore SAC. However, due to the risk to surface water pollution and proximity of works to upstream tributaries of the River Barrow impacts generated by the construction of the proposed development require consideration. Sources of impact and likely significant effects are detailed in the Table below.

The likely effects of the proposed substation and underground cable development in the townlands of Friarstown, Grangeford Old, Grangeford, Moanalow, Glenoge, Rathnashannagh, Inchisland Or Moatalusha, Rathtoe, Kellistown East, Ballycurragh and Kellistown West, County Carlow are primarily related to potential impacts on water quality and the surrounding environment. These effects are categorised in the table below as well as the sources of impact and likely significant effects.

**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 SAC [002162]	Direct pathway to SAC: Release of silt and sediment during site works Release of construction related compounds including hydrocarbons to surface water. Increased human disturbance at this site, particularly during the construction/ installation phase	Potential damage to riparian and river habitats associated with inadvertent spillages of hydrocarbons and/or other chemicals during construction phase;  Potential damage to the habitats and freshwater qualifying interest species dependent on water quality, an impact of sufficient magnitude could undermine the sites conservation objectives.  Having regard to the results of the Otter Survey (no evidence of otters, see section 5.2.2 of the NIS) and the location of the proposed development site ca. 11.6km upstream of the SAC, I consider it unlikely that the works will have any significant direct or indirect negative effects on the otter as a result of disturbance.

]	<b>Likelihood of significant effects from proposed development (alone): yes</b>
	<b>If No, is there likelihood of significant effects occurring in combination with other plans or projects?</b> Other plans and projects and 'in-combination effects' examined in the Screening Report. I am satisfied that there are no other effects of magnitude that could add to other plans and projects.

**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, 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 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 objective information provided by the applicant, I conclude that the proposed development could result in significant effects on the River Barrow and River Nore SAC in view of the conservation objectives of a number of qualifying interest features of those sites.

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

<b>Appropriate Assessment</b>
The requirements of Article 6(3) as related to Appropriate Assessment of a project under part XAB, sections 177V [or S 177AE] of the Planning and Development Act 2000 (as amended) are considered fully in this section.
<p>Taking account of the preceding screening determination, the following is an Appropriate Assessment of the implications of the proposed substation and underground cable development in view of the relevant conservation objectives of <b>River Barrow and River Nore SAC</b> based on scientific information provided by the applicant and considering expert opinion through observations on nature conservation.</p> <p>The information relied upon includes the following:</p> <ul style="list-style-type: none"><li>• Natura Impact Statement prepared by Malone O'Regan Environmental</li><li>• Conservation objectives for the River Barrow and River Nore SAC 002162 (NPWS June 2025)</li></ul> <p>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 are included and assessed for effectiveness.</p>
<b>Submissions/Observations</b>
<p>Prescribed Bodies: n/a</p> <p>Public Submission:</p> <ul style="list-style-type: none"><li>• Risk to River Barrow and River Note SAC.</li></ul>
<b>River Barrow and River Nore SAC, site code 002162.</b>

**Summary of key issues that could give rise to adverse effects (from screening stage):**

**(i) Surface water pollution, via a hydrological pathway via the Burren River a tributary of the River Barrow.**

**See Table 6-1 and section 7.1.1 of the NIS.**

<b>Qualifying Interest feature</b>	<b>Conservation Objectives Targets and attributes: Site Specific Conservation Objectives, 6<sup>th</sup> June 2025</b>	<b>Potential adverse effects</b>	<b>Mitigation measures</b>
Estuaries [1130]	To maintain the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected.	No - Located > 50km downstream, considered to be outside the zone of influence of this project	Not applicable / none necessary
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-Puccinellietalia maritimae) [1330]	To restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected.		

Mediterranean salt meadows ( <i>Juncetalia maritimi</i> ) [1410]			
Water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitriche-Batrachion</i> vegetation [3260]	To maintain the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected.	No – distribution of habitat is unknown, but was not identified on site, vicinity of site or habitat surveys.	
European dry heaths [4030]		No - the nearest recorded location for this habitat is >40km from the site. Outside the zone of influence.	
Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels [6430]		No – distribution of habitat is unknown, but was not identified on site, vicinity of site or habitat surveys.	
Petrifying springs with tufa formation ( <i>Cratoneurion</i> ) [7220]		No – not present in the immediate vicinity of the site, the only known occurrence is	

		located between Thomastown and Inistioge.	
Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0]	To restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected.	No - the nearest recorded location for this habitat is >50km from the site. Outside the zone of influence.	
Alluvial forests with Alnus glutinosa and Fraxinus excelsior [91E0]		No - the nearest recorded location for this habitat is ca 19km from the site. Outside the zone of influence.	
Desmoulin's Whorl Snail [1016]	To maintain the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected.	No – this species does not occur in the vicinity of the site.	
Margaritifera margaritifera (Freshwater Pearl Mussel) [1029]	To restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected.	No - this does not occur in the vicinity of the site. The site is not proximate to and is distant from identified suitable habitat target, distribution target and catchments.	

White-clawed Crayfish [1092]	To maintain the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected.	Yes – occurs in the River Barrow downstream of the project site.  Possible water quality impact arising from accidental surface water pollution or siltation arising from construction.	Identified on pages 56 and 57 of the NIS.
Sea Lamprey [1095]	To restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected.	Yes – occurs downstream of project site. Lamprey are sensitive to indirect effects from pollution of watercourses with chemicals, silt, contaminants etc. during construction phase.	Identified on pages 56 and 57 of the NIS.
Brook Lamprey [1096]			
River Lamprey [1099]			
Twaite Shad [1103]		No – nearest known location is 60km downstream. Not within zone of influence.	Not applicable / none necessary
Salmon [1106]		Yes - Widespread distribution throughout SAC. Salmon and Otter are sensitive to indirect effects from pollution of watercourses with chemicals,	Identified on pages 56 and 57 of the NIS.
Otter [1355]			

		silt, contaminants etc. during construction phase.	
Killarney Fern [6430]	To maintain the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected.	No - not within zone of influence of proposed project – distance to recorded species >40km from site.	Not applicable / none necessary.

**Assessment of issues that could give rise to adverse effects:**

**(i) Water quality degradation**

Good quality water is necessary to maintain the populations of the Annex II species listed. Water quality degradation is the main risk from unmanaged site works where silt laden surface water could reach the main channel of the River Barrow downstream. Decrease in water quality would compromise conservation objectives for the identified Annex II species at risk from the proposed development – otter, salmon, Sea Lamprey, Brook Lamprey, River Lamprey and white-clawed crayfish and increase sedimentation could alter habitat quality or indirectly adversely affect the local food supplies for species. No operational phase impacts are anticipated.

Hydrological connections have been identified between the site to the SAC via HDD drilling under the Aghalona River, Roscat River and Burren River. The site is located circa 11.6 kilometers upstream of the SAC.

I consider it unlikely that the works will have significant direct or indirect effects on protected species from the SAC during either the construction or operational phase of the proposed development, having regard to:

- the distance separating the site from the SAC,
- the nature of the works which comprise of minimal and temporary ground disturbance,
- no in-river works will be undertaken,

- no direct discharges to surface water or groundwater during the installation of the cable,
- use of HDD method being utilized for the underground cable crossing which will drill beneath the water courses and will avoid any disturbance to these streams;
- pollutants will either be diluted within the water course or pollution such as sediments will settle to the bottom of the water course.

There is potential that potential pollutants could flow from the site into the river network which could lead to a deterioration of local water quality. The following mitigation measures are proposed.

**Mitigation measures and conditions:**

**Mitigation measures are detailed on pages 57 and 58 of the NIS and include:**

- Construction stage works will be undertaken in accordance with an approved CEMP.
- All plant and machinery will be serviced before being mobilized to the site.
- All materials shall be stored at the main contractor compound.
- Excavations would be left open for minimal periods to avoid acting as a conduit for surface water flows.
- Where drainage ditches are crossed, the release of sediment over baseline conditions will be prevented by the use of self traps, check dams and / or bunds. These will be put in place in advance of construction works and monitored on a regular basis.
- No surface water runoff will be discharged onto public roads.
- Weather conditions will be considered when planning construction activities to minimise risk of runoff from the site.
- Provision of exclusion zones and barriers between any stockpile materials and any surface water features to prevent sediment washing into the receiving water environment.
- Entry by plant equipment, machinery, vehicles and construction personnel into water courses, wet drainage ditches, or the River riparian zone shall not be permitted.

- An environmental clerk of works shall be engaged to periodically to inspect all elements of the works for their entire duration.
- Emergency response procedures will be put in place.
- Concrete pouring will only be carried out in dry weather. Washout of concrete trucks will not be permitted.
- Where concrete is to be placed by means of a skip, the opening gate of the delivery chute will be securely fastened to prevent accidental opening.
- Where possible, concrete skips, pumps and machine buckets will be prevented from slewing over water when placing concrete;
- Surplus concrete will be returned to batch plant or offsite concrete wash facility after completion of a pour.
- Any cement spills will be cleaned-up immediately.
- Minimize waste and correct handling of waste measures.
- Any chemicals/oils will be placed within a bund on an area of hardstanding.
- All drainage from bund areas will be directed to secure containment prior to suitable disposal.
- The Appointed Contractor will put in place a step-by-step refuelling procedure which will be communicated to all relevant employees onsite.
- Provision of adequate spill-kits.

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 the NIS are captured in Planning condition 4.

#### **In-combination effects**

I am satisfied that in-combination effects has been assessed adequately in the NIS. The proposed substation and underground cable has been assessed as part of the overall project and no other plans and projects could combine to generate significant effects when

mitigation measures are considered. I am satisfied that the applicant has demonstrated that no significant residual effects will remain post the application of mitigation measures.

Relevant applications considered:

- CCC ref. 21/23/ABP 309987 – within site, solar farm development.
- CCC ref. 20/44 – solar farm development.
- CCC ref. 21/38 – solar farm development.
- CCC ref. 22/149 – solar farm development.
- CCC ref. 23/92 – solar farm development.
- CCC ref. 23/60297 – within site, solar farm development.

### **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 the proposed development can be excluded for the River Barrow and River Nore SAC. 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 proposed. I am satisfied that the mitigation measures proposed to prevent such effects have been assessed as effective and can be implemented and conditioned if permission is granted.

### **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 Conservation objectives of the River Barrow and River Nore SAC. 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 The River Barrow and River Nore SAC 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 and all associated material submitted, and taking into account observations on nature conservation, I consider that adverse effects on site integrity of the River Barrow & River Nore SAC 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:

- Distance of the proposed works to the SAC.
- Detailed assessment of construction and operational impacts.
- Effectiveness of mitigation measures propose.
- Application of planning conditions to ensure application of these measures.
- The proposed development will not affect the attainment of conservation objectives for the River Barrow and River Nore SAC.