

Inspector's Report ABP-315063-22

Development Development of a synchronous

condenser grid support facility and all

associated works

Location Kellistown East, Co. Carlow

Planning Authority Carlow County Council

Planning Authority Reg. Ref. 21445

Applicant(s) Island Stability Services Ltd.

Type of Application Permission.

Planning Authority Decision Grant

Type of Appeal Third Party

Appellant(s) Paul Rooney.

Observer(s) None.

Date of Site Inspection 6th October 2023 & 13th March 2024.

Inspector Peter Nelson

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1.0 Site Location and Description

- 1.1. The site is located in Kellistown East, County Carlow, approximately 0.5km west of Rathoe Village, 5 km from Tullow, 6km from Junction 5 on the M9 and 9km southeast of Carlow. The site is accessed from the L3046 local road to the south. The site is adjacent to the ESB Kellistown Electricity Substation, accessed over a private lane that has a junction with another local road to the west of the application site. This local road has a significant ribbon residential development.
- 1.2. Agriculture is the dominant land use in the surrounding area. There is a derelict house on a Y junction on the public road within a few metres of the site access, but there are no houses on the site boundary. The site is relatively flat with hedgerow boundaries. The stated site size is 1.44ha

2.0 **Proposed Development**

- 2.1. Permission is sought for a 10-year planning permission to develop a synchronous condenser grid support facility, which will connect to the adjoining ESB Kellistown Electricity Substation. The proposed development will have a projected life span of 50 years. At the end of life, the proposed development can either be decommissioned or refurbished to extend its life. The development is to be located within a site compound c.1 ha.
- 2.2. The Synchronous Condenser (SC) is housed within a condenser and control building along with a flywheel, the start-up system, a lubricant system for its operation and an air compressor and pumps, which are used to cool the SC during operation.
- 2.3. Outside the building, there will be ancillary equipment, such as modular containers for the electrical control equipment used to provide the signals for when the SC is required to operate by the network, two transformers and an external circuit breaker essential for the connection of the SC to the adjacent substation. There is also the firefighting water tank, the oil separator, and the collection pit for safe operation onsite.
- 2.4. The proposed Project will provide an electrical service called inertia to the EirGrid electrical transmission system, which acts to stabilise the grid during periods of fluctuating loads.

- 2.5. Inertia is a measure of the system's resistance to a change in speed (frequency). Conventional power plants have more time to recover the system and to replace missing generation. Thus, the National Grid relies on this inertia to catch and recover a falling frequency event. However, increased levels of renewable energy can give rise to uncertainty and variability for grid operators, and additional actions are therefore required to balance the system.
- 2.6. For the SC to operate effectively it needs to be located beside the point of connection to the transmission system. The proposed SC will provide the required power to the ESB network by an underground grid connection cable, which will connect the facility to the adjacent Kellistown 220kv substation located directly to the west of the site. Kellistown is an important node in the Mid-East Region of the grid as it connects the 220KV transmission network, which distributes power to the surrounding counties.

3.0 Planning Authority Decision

3.1. Decision

Permission for the proposed development was granted by Carlow County Council on the 17th October, 2022, subject to 21no. conditions. Conditions of note include:

- Condition 4 requires the removal of the development prior to the end of a
 period of 50 years unless planning permission has been granted for retention
 for a further period. It also requires the submission and agreement of a
 detailed restoration plan.
- Condition No.10 details requirements in relation to abnormal load deliveries to facilitate the development.
- Condition No.13 requires that all mitigation measures outlined in the Natura Impact Statement are fully adhered to and implemented.
- Condition No.15 requires that measures shall be implemented to prevent the spread of Alien Invasive Species during construction works and control measures shall have regard to The Management of Noxious Weeds and Nonnative Invasive Plant Species on National Roads (NRA).

- Condition No.19 requires the employment of a suitably qualified archaeologist to monitor all groundworks/excavations required for the development.
- Condition No.21 requires a development contribution.

3.2. Planning Authority Reports

3.2.1. Planning Reports

The Planner's first report, dated the

• The planning authority requested the applicant to provide Further Information relating to a revised Appropriate Assessment Screening Report, details of the traffic movements and requirements for the construction and operation of the development, evidence of sufficient legal interest to access the site from the private laneway, a Landscape and Visual Impact Assessment, a Noise Impact Assessment and clarification of the height of the compound building.

The main points of Planner's second report on the Further Information dated the 17th October 2022 can be summarised as follows:

- The NIS was referred to the Environment Section, who concurred with the submitted NIS report. The planning authority concluded that subject to the implementation of the mitigation measures, the project, alone or in combination with other projects, will not adversely affect the integrity of the Natura 2000 site.
- All of the previous Traffic and Access concerns have been addressed and there is now no objection subject to conditions.
- The applicants have submitted evidence of the legal status of the access land and their intended use of the same, and a letter from the relevant landowner has been submitted.
- The submitted Landscape and Visual Assessment has been reviewed, and it
 is considered that the proposed development can be accommodated in the
 rural landscape without a significant visual impact, noting the presence of an
 existing ESB substation adjoining the site.

- The submitted Noise Impact Assessment has been assessed by the Environmental Section, which has no objection to the proposed development, subject to conditions.
- The applicant has confirmed that the building height is 12.15m, as shown in the drawings and not in the public notices.
- The proposed development complies with the policies and objectives of the Carlow County Development Plan 2022-2028, including Chapter 7, "Climate Action and Energy".

3.2.2. Other Technical Reports

A report received from the Environmental Health Officer dated the 20th December 2021 recommends that the proposed development be subject to conditions relating to construction methods, noise limits and monitoring, air quality and light pollution reduction.

3.3. Prescribed Bodies

<u>Uisce Eireann</u>

The report received from Uisce Eireann, dated the 21st of September 2021, states that as the applicant is not seeking a connection to IW assets, there is no impact and, therefore, no objection.

<u>Transportation Infrastructure Ireland</u>

A report was received from TII on the 8th of December 2021 stating that TII has no observation to make on this application.

3.4. Third Party Observations

Observations were received from Paul Rooney, William Rooney and John Rooney. The main points raised can be summarised as follows:

- If Eirgrid deems the proposed technologies are required, they should be located at existing power stations and not in rural areas surrounded by family homes, local schools and villages.
- The submitted Rownan Habitats Directive Screening does not address the real risk of pollutants entering the water stream.
- Oil from excavation equipment, cranes, delivery lorries, etc, is a concern.
- There is insufficient detail on how lube oil would be contained in an emergency.
- The proposed firefighting water tank is not detailed in the plans.
- The Noise Statement does not include all residences in closest proximity to the proposed development.
- A more detailed assessment of tonal noise from the development must be considered.
- A complete and detailed Baseline Environmental Noise Survey should be included in the planning application.
- Concerned with the potential health effects of exposure to Electro Magnetic Fields.
- Concerned about the possible effects this site would have on the local water table and flooding to local farmlands as a result of the excavation and development of this site.
- All of the construction traffic will be accessed from the Rathoe Road, which is dangerous.
- Given the historic location, a full archaeological assessment of the site is required.

As the project is not a stand-alone project and needs to be connected to the

substation, the combined effect of these projects would have needed to be

assessed.

• The project requires an Environmental Impact Assessment.

Potential fire risk to nearby residential properties.

Potential light pollution to birds of prey.

The visual impact of the proposed building on the area is a concern.

4.0 **Planning History**

Adjoining Sites

P.A. Ref: 23/129

Permission was refused on the 14th of September, 2023, to extend the period of appropriate duration for permission granted for the restoration, part demolition and extension to the rear of an existing house, onsite wastewater treatment system and all associated site and landscape works. (P.A. Ref: 18/296), as works had not been

commenced.

ABP ref: 303821-19

Permission was granted on the 23rd of September 2019 on a third-party appeal for a 10-year permission for a 100MW battery energy storage facility in 34 metal

containers and associated works.

P.A. ref: 93139

Permission was granted on the 4th of January 1994 for the Erection of a 220KV outdoor type transmission station and control building.

Relevant Sites nearby

ABP ref: 316205-23 Pre-Application consultation under Section 182E of the

Planning and Development Act 2000, as amended for the Proposed new line bay

and associated underground cabling. The Board decided on the 27th of July, 2023,

that the proposal did not fall within the scope of 182A of the Planning and

Development Act 2000, as amended, and that planning permission should be made

in the first instance to Carlow County Council.

ABP ref: 313139-22

An application for approval under Section 182A of the Planning and Development

Act10 was approved on the 3rd of November 2022 for a solar farm which will

connect to the national grid on lands with a total area of circa 127 hectares,

consisting of solar panels on ground-mounted frames, 28 No. Single-storey

electrical inverter/transformer stations and associated equipment container, security

fencing, satellite communications pole, CCTV, upgrading existing access tracks and

new access tracks, temporary construction compounds, landscaping, and all

associated ancillary development works. Construction and operational access will

be via entrances from the L-7111 and L-7112. The operational lifespan of the solar

farm will be 35 years.

P.A. ref. No.22199

Permission granted on the 9th August 2022 for a 10-year permission for an

underground electricity interconnector cable and all associated site development

works.

ABP ref: 307891-20

A 10-year planning permission granted on the 28th September 2021 on first party

appeal for a solar farm.

Relevant Appeals

ABP. Ref: 315485-23

Permission granted after Third Party Appeal on the 13th October 2023 for demolition of LRP Station (Previously approved ABP ref PL14.125540). Construct and operate and electricity grid services consisting of a battery storage system (BESS) and a synchronous condenser (Sync Con).

5.0 **Policy Context**

5.1. **Development Plan**

The Carlow County Development Plan 2022-2028 is the operation development plan for the area and came into effect on the 4th July 2022.

The following policies are particularly relevant:

Chapter 6: Infrastructure and Environmental Management

- El 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.
- El 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.

5.7. Regional Spatial Economic Strategy (RSES)

- 5.7.1. The RSES for the Southern Region provides a regional policy position for the consideration of renewable energy in land-use planning. Chapter 8 of the RSES deals with Water and Energy Utilities and notes that "the existing infrastructure...is essential for the continued provision of a secure and reliable electricity supply."
- 5.7.2. The following Regional Policy Objectives are noted:
 - RPO 96 Integrating Renewable Energy Sources to support the sustainable development, maintenance and upgrading of electricity and gas network grid infrastructure to integrate renewable energy sources and ensure our national and regional energy system remains safe, secure and ready to meet increased demand as the regional economy grows
 - RPO 100 Indigenous Renewable Energy Production and Grid Injection to support the integration of indigenous renewable energy production and grid injection.
 - RPO 219 New Energy Infrastructure to support the sustainable reinforcement and provision of new energy infrastructure by infrastructure providers...
 - RPO 222 Electricity Infrastructure 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.

5.2. National Planning Framework (NPF)

- 5.2.1. The NPF is a high-level strategic plan to shape the future growth and development of the country to 2040. It is focused on delivering 10 National Strategic Outcomes (NSOs). NSO 8 focuses on the 'Transition to a Low Carbon and Climate Resilient Society' and recognises the need to harness both on-shore and off-shore potential from energy sources including solar and deliver 40% of our electricity needs from renewable sources.
- 5.2.2. It is stated in the NPF that "new energy systems and transmission grids will be necessary for a more distributed, renewables-focused energy generation system, harnessing both the considerable on-shore and off-shore potential from energy sources such as wind, wave and solar and connecting the richest sources of that energy to the major sources of demand".
- 5.2.3. Section 5.4, 'Planning and Investment to Support Rural Job Creation', notes that in meeting the challenge of transitioning to a low-carbon economy, the location of future national renewable energy generation will, for the most part, need to be accommodated on large tracts of land that are located in a rural setting, while also continuing to protect the integrity of the environment and respecting the needs of people who live in rural areas.
- 5.2.4. It is a National Policy Objective (NPO 55) 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'.

5.3. Ireland's National Energy and Climate Plan 2021-2030

- 5.3.1. This plan sets out a road map for taking decisive action to halve our greenhouse gas emissions by 2030 and reach net zero emissions by 2050. Among the most important measures in the plan is to increase the proportion of renewable electricity, up to 80% of all electricity generation by 2030.
- 5.3.2. The Plan notes that:

- additional electricity generation and transmission infrastructure will be a critical enabler to achieve our renewable energy and emissions targets. Public acceptance of that additional generation and transmission infrastructure will be crucial to this transition;
- to meet the required level of emissions reduction, by 2030 the grid will be expanded and reinforced – through the addition of lines, substations, and new technologies;
- Achieving the renewable electricity target of up to 80% will entail investment
 of tens of billions of Euro, including in the installation and maintenance of
 generation assets, and associated infrastructure and services;
- The electricity system will be strengthened through advanced building/upgrading of the grid and supporting infrastructure at key strategic locations... The building of new substations, associated infrastructure and new technologies will also be incorporated, along with strategic upgrading of existing substations, to ensure efficient long-term and timely development of the system.

5.4. Climate Action Plan, 2023

5.4.1. This plan seeks to tackle climate breakdown and it commits Ireland to a legally binding target of net-zero greenhouse gas emissions by 2050, an emissions reduction of 75%, and up to 80% of electricity demand to be from renewables by 2030. Large scale deployment of renewables, both onshore and offshore, will be critical to decarbonising the power sector as well as enabling the electrification of other technologies.

5.5. Climate Action and Low Carbon Development (Amendment) Act, 2021

5.5.1. This establishes a framework to develop the transition towards a low carbon Economy.

5.6. Climate Action and Low Carbon Development Act 2015

5.6.1. Section 15 requires a relevant body to have regard to the approved national mitigation plan, adaptation framework and sectoral adaptation plans, national transition objectives, and the objective of mitigating greenhouse gas emissions and adapting to the effects of climate change in the State.

5.7. Natural Heritage Designations

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

- Ardristan Fen, proposed Natural Heritage Area (pNHA), site code 000788,
 2.3km to the east;
- Slaney River Valley Special Area of Conservation (SAC), site code 000781,
 4.7km to the east;
- Slaney River Valley pNHA, site code 000781, 6.3 km to the south-east;
- River Barrow and River Nore SAC, site code 002162, 10.4km to the west;
- Cloghristick Wood pNHA, site code 000806, 10.3km to the east.

5.8. **EIA Screening**

The EIA Screening included in the Environmental and Planning Report submitted with the application contends that the proposed development is not a project defined by Part 1 and Part 2 of Schedule 5 of the Planning and Development Regulations 2001, as amended, requiring a mandatory Environmental Impact Assessment Report (EIAR).

I am satisfied that the proposed development does not fall under a category of development listed in Schedule 5, Parts 1 or 2. As a result, the development is not considered sub-threshold, and a mandatory Environmental Impact Assessment (EIA) or screening for EIA is not required.

6.0 The Appeal

6.1. Grounds of Appeal

The main ground of appeal can be summarised as follows:

- The applicants have not consulted or engaged in any meaningful way with the local community as government policy requires.
- Adequate mitigation measures should be implemented, including an attenuation tank to store all polluted water in case of flood/fire.
- The access road is not strong enough for traffic associated with the development.
- The proposed turning of large vehicles will potentially cause damage to adjoining residential property.
- No legal entitlement or right of way to use the private lane has been proved or sought.
- The Landscape and Visual Assessment did not consider the impact on the closest residents and included the wrong height for the compound building.
- The development will have a significant negative visual impact on the area.
- No baseline monitoring has been carried out in the Noise Impact Assessment.
- The Noise Impact Assessment does not take into account potential tonal noise.
- The proposed noise mitigation measures are not adequate.
- The NIS was not updated after the request for further information and refers to Carlow County Development Plan 2015-2021 which is out of date with this planning application in 2022.
- No water supply details are given, and Uisce Eireann states that a water connection is not required for the proposed development.
- There is a case in which the combined effects of this application and the connection to the Kellistown Substation over a watercourse that is protected would amount to Project Splitting.

- The AA did not consider the interconnecting cable between the substation and the applicant's site and the additional infrastructure required to link Eirgrid's Substation to Island Stability's Transformer.
- The proposed development is inappropriate development for the rural and agricultural location.
- Concerned with the potential health effects of exposure to electromagnetic fields.
- Concern that there is a fire risk associated with the proposed development.

6.2. Applicant Response

None

6.3. Planning Authority Response

None

6.4. **Observations**

None

7.0 Assessment

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

- Development Location
- Project Splitting
- Traffic and Transportation
- Landscape and Visual Impact
- Electromagnetic Fields
- Drainage Design

7.1. Development Location.

- 7.1.1. The appellant raises concerns that the proposed development would transform this rural area into a potential industrial zone.
- 7.1.2. This type of development is site-specific, and in the present case, the location is related to its proximity to the adjoining ESB substation for which it is proposed to provide inertia to the EirGrid electrical transmission system, which acts to stabilise the grid during periods of fluctuating loads.
- 7.1.3. The National Planning Framework states that new energy systems and transmission grids will be necessary for a new renewable energy system. The Framework specifically (objective number 55) supports renewable energy use and generation at appropriate locations. It is a Regional Policy Objective (RPO 219) of the Regional Spatial Economic Strategy of the Southern Region to support the sustainable reinforcement and provision of new energy infrastructure by infrastructure providers to ensure the energy needs of future population and economic expansion within designated growth areas and across the Region can be delivered in a sustainable and timely manner and that capacity is available at local and regional scale to meet future needs.
- 7.1.4. The County Development Plan sets out policy (EI P1) which is to support and facilitate the reinforcement and development of enhanced energy infrastructure and associated networks to serve the existing and future needs of the County and Region. The policy recognises that this will include the delivery of the necessary integration of transmission network requirements and 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.
- 7.1.5. With regard to the National, Regional and County Development Plan policies in relation to facilitating renewable energy and the adjacent electricity substation, I conclude that the proposed location does not materially contravene the County Development Plan objectives and, therefore, in principle, the area is acceptable.

7.2. Project splitting

- 7.2.1. The appellant contends that there is a strong case that the combined effects of this application and the connection to the Kellistown Substation would amount to project splitting.
- 7.2.2. The appellant highlights the O'Grianna v. An Bord Pleanála and Others case. In that case, it was held that the construction of wind turbines was only the first stage in the development of a wind farm and that a connection to the national grid was a necessary second phase, with any attempts to separate the two phases amounting to 'project-splitting' in contravention of the EIA Directive.
- 7.2.3. The adjoining substation was granted permission in 1994 and has been in operation for many years. As stated in Section 5.6, the proposed development, which includes c.100m of cabling to the adjoining substation, does not fall under a category of development listed in Schedule 5, Parts 1 or 2. As a result, the development is not considered sub-threshold, and a mandatory Environmental Impact Assessment (EIA) or screening for EIA is not required.
- 7.2.4. Therefore, I consider that the proposed development does not represent the splitting of a larger development and that the case law, as suggested, is irrelevant in this case.

7.3. Traffic and Transportation

The appellant raises concerns that the existing access road is not strong enough to bear the load of the heavy delivery vehicles required to construct the proposed development. Concern is also raised that the largest construction vehicle comes within meters of the appellant's brother's home, which he is currently renovating. The dwelling is at the entrance to the laneway and entrance to the proposed development.

The Planning Authority requested the applicant to provide further information confirming that the access road, particularly where the access road meets the public road, is strong enough to bear the load of the heaviest vehicle.

In the reply, the applicant stated that the access road would be designed to accommodate the heaviest vehicles. It was also stated that the section of road

between the site entrance and the L-3046 was inspected and found to be in relatively good condition. A small section of the access road will be used for construction traffic. The applicant states that this section of the road will be monitored during and maintained, repaired and upgraded as required. Three abnormal load deliveries are proposed using a larger section of the private lane. Temporary steel plates will be installed to protect the road surface and the existing utility chamber. I consider that the applicant has demonstrated that adequate protection of the existing access road will take place. Notwithstanding this, if the Board minded to grant permission, I recommend that a condition be attached, ensuring the developer be responsible for any damage to the public road and access lane.

The appellant states that it is his understanding that all of the neighbours on this lane must approve any access on this laneway. Regarding the legal interest, I am satisfied that the applicants have provided sufficient evidence of their legal interest for the purposes of the planning application and decision. In any case, this is a matter to be resolved between the parties having regard to the provisions of s.34(13) of the 2000 Planning and Development Act.

7.4. Landscape and Visual Impact

- 7.4.1. The appellant has raised concerns about the proposed development's visual impact on the adjoining residential properties. A Landscape and Visual Impact Assessment (LVIA)was submitted with the planning application. The site is located in the 'Central Lowlands' Landscaped Character as defined in the Carlow County Development Plan 2022-2028. The site is in a defined 'Farmed Lowland' Landscape type with a landscape sensitivity rating of 2(Decreasing)/3 (Moderate).
- 7.4.2. The LVIA assessed the impact of the proposed development and the cumulative impact of the proposed development and the permitted battery storage development.
- 7.4.3. The LVIA concluded that the proposed development is not considered to give rise to any significant residual impacts. Instead, the impacts are not considered to exceed 'Moderate-slight' significance, even in the immediate context of the site and visual impacts are not considered to exceed 'Slight' significance.

- 7.4.4. The appellant has concerns that the proposed development will block the view of the Kellistown Church from his dwelling, which is to the northwest. This may be the case; however, the view is not protected.
- 7.4.5. There is one designated scenic view within 2km of the site: Scenic View 25 (View, southeast of tree ridge and church). As the proposed development is more than 1.2km southeast of the church, I consider that the proposed development will not be detrimental to the protection of this designated view.
- 7.4.6. A landscaping scheme has been proposed and submitted with the planning application. It is proposed to densely plant inside the new southern boundary with a series of dense whips, which will mature into dense vegetation. Trees are to be planted at intervals for additional buffering and to provide the upper-level effect. In front of this, a rural native hedging mix with local species and additional varieties is proposed to increase the biodiversity value of the proposed hedge.
- 7.4.7. I recognise that the proposed structure will be an intervention into the landscape; however, given the character of the adjoining substation, the lack of protected views, the distance of the nearest dwellings and public road and the landscaping screening proposed, I consider that the proposed development will not have a significant impact on the landscape character and visual amenity of the area or the appellant's property.

7.5. **Noise Impact**

- 7.5.1. The appellant raises concerns about the background noise that no baseline monitoring has been carried out when assessing the noise impact of the proposed development.
- 7.5.2. As part of a Further Information request, the Planning Authority requested the applicant to examine baseline monitoring and predicted noise levels in light of current EPA guidelines: 'Guidance Note for Noise: Licence Applications, Surveys and Assessments in Relation to Schedule Activities (NG4)' (2106). These guidelines set out noise limits for Quiet Areas, Low Background Noise Areas and Other Areas.
- 7.5.3. In the reply to further information, the supplement to the Noise Report states that following the EPA guidance, as the site is within 5km of a National Primary Route

(M9 motorway), the site does not satisfy the 'Quite Area' Criteria. The report states that a baseline monitoring programme would confirm if the site fell into the 'Low Background Noise' or 'Other' category. For the assessment, the noise consultant has used the worst-case assessment: 'Low Background Noise' category where more stringent limits apply. I consider that this approach follows the EPA guidelines and is an appropriate method to assess the noise impact of the proposed development in this location.

- 7.5.4. The appellant raises concerns relating to the assumption that there will be no tonality and does not understand why a flywheel weighing 170 tonnes rotating at 50 revolutions per second will not create tonal noise. The applicant claims a properly maintained and lubricated mechanical system should not have tonality. Therefore, no tonality adjustment is used in the noise impact assessment. I consider that the proposed development, which will be enclosed in a structure, will not have a tonal noise, and therefore, tonality does not need to be taken into account when assessing the noise impact.
- 7.5.5. Modelling results suggested that noise levels at the identified Noise Sensitive Locations are higher than the noise design criterion, and 21.9 dBA attenuation would be required to meet the criterion. To mitigate this noise impact, it is proposed to completely enclose the Synchronous Condenser in a structure clad with Kingspan Panels and a double-skinned insulated roller shutter. From the extract submitted in the Noise Impact Assessment, the Kingspan Panel the minimum acoustic performance achieved would be Rw25, which is greater than the highest dBa difference from the Rated Noise level without the enclosure at Noise Sensitive Location No.4, which is the appellant's property.
- 7.5.6. I consider that the proposed development with the proposed enclosure will not cause a significant negative noise impact on the appellant's property.

7.6. Electromagnetic Radiation

Concerns have been raised in the appeal about the possible Electromagnetic Radiation from the proposed synchronous compressor. The appellant states that as this is a new technology, there is little evidence of the potential health effects of a synchronous compensator. The appellant has not supplied any scientific background or evidence for such concern.

7.6.1. The issue of health and safety from Electromagnetic radiation is not within the remit of the Board and, as such, will not form part of this appeal. These are regulated by other codes, and such matters should not be additionally regulated by the planning process.

7.7. Drainage Design

7.7.1. The appellant states that there is no mention of toilet facilities, a foul/sewage connection to Irish Water, or details of a percolation test. The applicant clearly states that no welfare facilities will be provided on-site and no foul drainage will be constructed. The planning application does not propose any connection to a water supply, and the Irish Water Report submitted on the 25th of November 2021 states that the applicant is not seeking a connection to IW assets and is not at risk of impacting IW assets. I therefore consider that adequate information for the development as proposed has been submitted.

7.8. Appropriate Assessment

Appropriate Assessment – Screening

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

The requirements of Article 6(3) as related to screening the need for appropriate assessment of a project under part XAB, section 177U of the Planning and Development Act 2000 (as amended) are considered fully in this section.

7.8.2. Background on the Application

The applicant has submitted a screening report for Appropriate Assessment / Natura Impact Statement as part of the planning application. The Planning Authority considered the original Appropriate Assessment Screening needed to be updated to include great detail/ assessment of the potential impacts of north the construction and operation phase of the proposed development on the drainage channel to the east of the site, which has a hydrological connection to the River Burren.

As part of further information, the applicant submitted a revised Appropriate Assessment Screening included in a Natura Impact Statement.

The Natural Impact Statement prepared by Rowan Engineering Consultants Ltd and dated the 12th April 2021 is in line with the requirements of Article 6(3) of the EU Habitats.

The applicant's **Stage 1 AA Screening Report** was prepared in line with current best practice guidance and provides a description of the proposed development, the site location and surrounding environment and identifies European Sites within a possible zone of influence of the development.

The applicant's AA Screening Report concluded that the proposed development is not directly connected with or necessary for the nature conservation management of the River Barrow and Nore SAC. It also concluded that having regard to the connectivity of the site to this SAC, along with the measures that must be included in the Construction and Environmental Management Plan to protect local water quality, then this project must proceed to the next stage of Appropriate Assessment, namely the Natura Impact Assessment.

Having reviewed the documents, I am satisfied that the information allows for a complete examination and identification of any potential significant effects of the development alone or in combination with other plans and projects on European sites.

7.8.3. Screening for Appropriate Assessment- Test of likely significant effects

The project is not directly connected with or necessary to the management of a European Site, and therefore, it needs to be determined if the development is likely to have significant effects on a European site(s).

The proposed development is examined in relation to any possible interaction with European sites designated Special Conservation Areas (SAC) and Special Protection Areas (SPA) to assess whether it may give rise to significant effects on any European Site.

7.8.4. Brief description of the development

The applicant provides a description of the project on pages 9 to 10 of the AA screening report. In summary, the development comprises:

A 250 to 500 MVA (electrical rating) synchronous condenser. The development will have a site compound of c.1 hectare adjacent to the existing ESB substation. The proposed purpose of the synchronous condenser is for the stabilisation of the electricity grid.

The development will consist of the following elements:

- Compound building to house equipment, including a synchronous condenser generator with flywheel, lube oil skid, air compressor and pumps.
- Cooling equipment
- 6 no. modular containers to house electrical and control equipment.
- 1 no. firefighting water tank and pump.
- An above-ground oil separator and collection pit.
- Balustrade boundary fencing, palisade security entrance gate and CCTV.
- Underground cabling ducts and cable to the neighbouring ESB substation.
- All other ancillary and miscellaneous site works, including site clearance, site
 access, internal roads, and development of hard standing areas, including a
 maintenance laydown area.

Construction mitigation details have been provided in the Construction and Environmental Management Plan (CEMP) prepared by PNG Energy Ltd. The plan outlines measures that will be taken during construction to minimise impact upon the environment. These include:

- Construction works not taking place in periods of heavy rain.
- Silt fences to be cleared regularly.
- Drains to be cleared regularly.
- Fuels and chemicals are to be stored safely within the construction compound.
- Ensuring noise levels are monitored during construction.
- Stopping construction work should any unexpected environmental impacts be encountered and
- Continual review implementation and updating of the CEMP.

The development site is described on page 11 of the Natura Impact Statement. It is described as comprising mainly agriculture, and improved agricultural grasslands and tillage/arable lands are the dominant habitats surrounding the site. Other habitats in the area include hedgerows, treelines and watercourses. There is a land drain to the immediate east of the site, which connects to the Glenoge Stream, 600m north of the site. The Glenoge Stream flows north towards the River Burren, 1.2km north of the site. The River Burren flows north-westerly until it joins the River Barrow just south of Carlow town, 9km northwest of the site.

Taking account of the characteristics of the proposed development in terms of its location and the scale of works, the following issues are considered for examination in terms of implications for likely significant effects on European sites:

- Construction related -uncontrolled surface water/silt/ construction related pollution
- Habitat disturbance /species disturbance (construction and or operational)

7.8.5. Submissions and Observations

The NIS does not indicate that consultation with prescribed bodies was undertaken.

Of the public submissions received, concern was raised that the submitted Appropriate Assessment Screening did not address the real risk of pollutants entering the water stream.

7.8.6. European Sites

The development site is not located in or immediately adjacent to a European site. The closest European site is the Slaney River Valley SAC, within 4.6 Km of the proposed development. The River Barrow and River Nore SAC is located with 10km of the proposed development.

A summary of European Sites that occur within a possible zone of influence of the proposed development is presented in the table below. Where a possible connection between the development and a European site has been identified, these sites are examined in more detail.

Table 1. Summary Table of European Sites within a possible zone of influence of the proposed development

European Site	List of Qualifying Interest/ Special Conservation Interests	Distance from proposed development	Connections (source, pathways receptor)	Considered further in screening
Slaney River Valley SAC	Estuaries [1130] Mudflats and sandflats not covered by seawater at low tide [1140] Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330]	4.6km	None	As no connections exist to this SAC, it is considered that there will not be adverse effects on the integrity of the Slaney

Mediterranean salt	River Valley
meadows (Juncetalia	SAC.
maritimi) [1410]	
Water courses of plain	
to montane levels with	
the Ranunculion	
fluitantis and	
Callitricho-Batrachion	
vegetation [3260]	
Old sessile oak woods	
with Ilex and Blechnum	
in the British Isles	
[91A0]	
[onto]	
Allowing formato with	
Alluvial forests with	
Alnus glutinosa and	
Fraxinus excelsior	
(Alno-Padion, Alnion	
incanae, Salicion	
albae) [91E0]	
Margaritifera	
margaritifera	
(Freshwater Pearl	
Mussel) [1029]	
Petromyzon marinus	
(Sea Lamprey) [1095]	
Lampetra planeri	
(Brook Lamprey)	
[1096]	

	Lampetra fluviatilis (River Lamprey) [1099] Alosa fallax fallax (Twaite Shad) [1103] Salmo salar (Salmon) [1106] Lutra lutra (Otter) [1355] Phoca vitulina (Harbour Seal) [1365]			
River Barrow and River Nore SAC	Estuaries [1130] Mudflats and sandflats not covered by seawater at low tide [1140] Reefs [1170] Salicornia and other annuals colonising mud and sand [1310] Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330]	9.6km	Yes	Yes

Mediterranean salt meadows (Juncetalia maritimi) [1410] Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation [3260] European dry heaths [4030] Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels [6430] Petrifying springs with tufa formation (Cratoneurion) [7220] Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0] Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion

incanae, Salicion		
albae) [91E0]		
Vertigo moulinsiana		
(Desmoulin's Whorl		
Snail) [1016]		
Margaritifera		
margaritifera		
(Freshwater Pearl		
Mussel) [1029]		
Austropotamobius		
pallipes (White-clawed		
Crayfish) [1092]		
Petromyzon marinus		
(Sea Lamprey) [1095]		
(Oca Lamprey) [1000]		
Lampetra planeri		
(Brook Lamprey)		
[1096]		
Lampetra fluviatilis		
(River Lamprey) [1099]		
(Miver Lamprey) [1099]		
Alosa fallax (Twaite		
Shad) [1103]		
Salmo salar (Salmon)		
[1106]		
[1100]		

Lutra lutra (Otter) [1355]	
Trichomanes speciosum (Killarney Fern) [1421]	
Margaritifera durrovensis (Nore Pearl Mussel) [1990]	

Due to potential hydrological connectivity to the River Barrow and Nore SAC an accidental pollution event during both the construction or operation could potentially affect the water quality in the Glenoge Stream and the Burren River to a level that may undermine the conservation objectives of the River Barrow and Nore SAC and its Qualifying Interests.

The site is also adjacent to the development of a 100MW battery energy storage facility in 34 metal containers and with associated works. This is a ten-year permission and has yet to be constructed. The proposed development will also be linked to the adjoining substation by underground cabling.

7.8.7. Mitigation measures

No measures designed or intended to avoid or reduce any harmful effects of the project on a European Site have been relied upon in this screening exercise.

7.8.8. Screening Determination

The proposed development was considered in light of the requirements of Section 177U of the Planning and Development Act 2000 as amended. Having carried out Screening for Appropriate Assessment of the project, it has been concluded that the project individually (or in combination with other plans or projects) could have a

significant effect on River Barrow and River Nore SAC No.002162 in view of the site's Conservation Objectives, and Appropriate Assessment is therefore required.

7.8.9. Appropriate Assessment

The requirements of Article 6(3) as related to appropriate assessment of a project under part XAB, sections 177U and 177V of the Planning and Development Act 2000 (as amended) are considered fully in this section.

The areas addressed in this section are as follows:

- Compliance with Article 6(3) of the EU Habitats Directive
- Screening the need for appropriate assessment
- The Natura Impact Statement and associated documents
- Appropriate assessment of implications of the proposed development on the integrity of each European site.

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

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

The proposed development is not directly connected to or necessary to the management of any European site and, therefore, is subject to the provisions of Article 6(3).

7.8.11. Screening Determination

Following the screening process, it has been determined that Appropriate Assessment is required as it cannot be excluded on the basis of objective

information that the proposed development [insert name] individually or incombination with other plans or projects will have a significant effect on the following European sites:

River Barrow and River Nore SAC (002162)

The possibility of significant effects on other European sites) has been excluded on the basis of objective information. The following European sites have been screened out for the need for appropriate assessment.

Slaney River Valley SAC (00781)

Measures intended to reduce or avoid significant effects have not been considered in the screening process.

7.8.12. The Natura Impact Statement

The application included a Natura Impact Statement dated the 12th of April 2021 on foot of a request for further information by Carlow County Council, which examines and assesses potential adverse effects of the proposed development on the River Barrow and River Nore SAC.

The applicant's NIS was prepared in line with current best practice guidance and provides an assessment of potential impacts on the Qualifying Interest of the River Barrow and River Nore SAC that have the potential to be impacted upon by the proposed development.

The applicant's NIS concluded that 'it is considered that with the implementation of mitigation measures, the proposed works do not have the potential to significantly affect the conservation objectives or qualifying interests of the River Barrow and River Nore SAC. The integrity of the site will not be adversely affected.'

Having reviewed the documents and submissions. I am satisfied that the information allows for a complete assessment of any adverse effects of the development on the conservation objectives of the following European sites alone or in combination with other plans and projects:

7.8.13. Appropriate Assessment of implications of the proposed development

The following is a summary of the objective scientific assessment of the implications of the project on the qualifying interest features of the European sites using the best scientific knowledge in the field. All aspects of the project which could result in significant effects are assessed and mitigation measures designed to avoid or reduce any adverse effects are considered and assessed.

The following Guidance was adhered to in my assessment:

- DoEHLG (2009). Appropriate Assessment of Plans and Projects in Ireland:
 Guidance for Planning Authorities. Department of the Environment, Heritage
 and Local Government, National Parks and Wildlife Service. Dublin
- EC (2002) Assessment of plans and projects significantly affecting Natura 2000 sites. Methodological guidance on the provisions of Article 6(3) and 6(4) of the Habitats Directive 92/43/EC
- EC (2018) Managing Natura 2000 sites. The provisions of Article 6 of the Habitats Directive 92/43/EEC]

7.8.14. European Site

A description of the River Barrow and River Nore SAC site and its Conservation and Qualifying Interests/Special Conservation Interests, including any relevant attributes and targets for these sites, are set out in the NIS and summarised in Table 2 of this report as part of my assessment.

7.8.15. Aspects of the proposed development.

The main aspect of the proposed development that could adversely affect the conservation objectives of the River Barrow and River Nore SAC is the impacts on water quality and wetland habitats through construction-related pollution events and /or operational impacts.

Table 2: AA summary matrix for – River Barrow and River Nore SAC

River Barrow and Nore SAC 2162

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

Impacts to water quality and wetland habitats through construction related pollution events and /or operational impacts.

Summary of Appropriate Assessment

Qualifying Interest feature	Conservation Objectives Targets and attributes	Potential adverse effects	Mitigation measures	In- combination measures	Can adverse effects on integrity be excluded?
Estuaries [1130]	Maintain favourable conservation conditions of Estuaries.	No Impacts are predicted. The coastal habitat is c.100k downstream.	None	None	Yes
Salicornia and other annuals colonising mud and sand [1310]	Maintain the favourable conservation condition of Salicornia and other annuals colonizing mud and sand in the River Barrow and River Nore SAC,	No Impacts are predicted. The coastal habitat is c.100k downstream.	None	None	Yes
Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330]	To restore the favourable conservation condition of Atlantic salt meadows in the River Barrow and River Nore SAC.	No Impacts are predicted. The coastal habitat is c.100k downstream.	None	None	Yes

Mediterranean salt meadows (Juncetalia maritimi) [1410]	To restore the favourable conservation condition of Mediterranean salt meadows in the River Barrow and River Nore SAC	No Impacts are predicted. The coastal habitat is c.100k downstream.	None	None	Yes
Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation [3260]	To maintain the favourable conservation condition of Water courses of plain to montane level with the Ranunculion fluitantis and Callitricho-Batrachion vegetation in the River Barrow and River Nore SAC	Loss or decline in the quality or area of the habitat due to pollution or a decrease in water quality arising from run-off during the construction and operation of the proposed development.	See below	None	Yes
European dry heaths [4030]	To maintain the favourable conservation condition of European dry heaths in the River Barrow and River Nore SAC	No Impacts are predicted. This habitat is not within the zone of influence of the site as it occurs on the steep, free-draining, river valley sides, especially the Barrow and tributaries in the foothills of the Blackstairs Mountains	None	None	Yes
Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels [6430]	To maintain the favourable conservation condition of Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels in the River Barrow and River Nore SAC	Loss or decline in the quality or area of the habitat due to pollution or a decrease in water quality arising from run-off during the construction and operation of the proposed development.	See below	None	Yes

Petrifying springs with tufa formation (Cratoneurion) [7220]	To maintain the favourable conservation condition of Petrifying springs with tufa formation in the River Barrow and River Nore SAC	Petrifying springs rely on permanent irrigation, usually from the upwelling groundwater sources. The impacts of the development relate to potential pollution of the water entering the stream; therefore, any impacts are unlikely.	None	None	Yes
Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0]	To restore the favourable conservation condition of Old oak woodland with Ilex and Blechnum in the River Barrow and River Nore SAC	The location of the habitats is not within the zone of influence of the application; therefore, any impacts are unlikely.	None	None	Yes
Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) [91E0]	To restore the favourable conservation condition of Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) in the River Barrow and River Nore SAC	The habitat has not been identified within the zone of influence of the application site.	None	None	Yes
Vertigo moulinsiana (Desmoulin's Whorl Snail) [1016]	To maintain the favourable conservation condition of Desmoulin's whorl snail in the River Barrow and River Nore SAC	The two known sites are at Boston Bridge and Borris Bridge are not within the zone of influence of the application site	None	None	Yes

Margaritifera margaritifera (Freshwater Pearl Mussel) [1029]	The status of the freshwater pearl mussel (Margaritifera margaritifera) as a qualifying Annex II species for the River Barrow and River Nore SAC is currently under review	As this species don't occur within the lime-rich Barrow/Nore catchments. No impacts on this species are likely	None	None	Yes
Austropotamobius pallipes (White-clawed Crayfish) [1092]	To maintain the favourable conservation condition of White-clawed crayfish in the River Barrow and River Nore SAC	A decrease in water quality in the river due to containment run off or pollution from the site. An increase in the siltation levels of the Barrow River or its tributaries due to run-off from the site.	See below	None	Yes
Petromyzon marinus (Sea Lamprey) [1095]	To restore the favourable conservation condition of Sea lamprey in the River Barrow and River Nore SAC,	This species does not occur within the zone of influence of the application site	None	None	Yes
Lampetra planeri (Brook Lamprey) [1096]	To restore the favourable conservation condition of Brook lamprey in the River Barrow and River Nore SAC	An increase in siltation load or changes to the siltation patterns of the river due to inadequate siltation control strategies from proposed development. Siltation can create barriers to the migration of lampreys, thus preventing them from accessing suitable spawning habitats.	See below	None	Yes

		Eutrophication- both adult and ammocoete life stages of the lamprey are vulnerable to the effects of pollution.			
Lampetra fluviatilis (River Lamprey) [1099]	To restore the favourable conservation condition of River lamprey in the River Barrow and River Nore SAC	An increase in siltation load or changes to the siltation patterns of the river due to inadequate siltation control strategies from proposed development. Siltation can create barriers to the migration of lampreys, thus preventing them from accessing suitable spawing habitats. Eutrophication- both adult and ammocoete life stages of the lamprey are vulnerable to the effects of pollution.	See below	None	Yes
Alosa fallax fallax (Twaite Shad) [1103]	To restore the favourable conservation condition of Twaite shad in the River Barrow and River Nore SAC	Populations of Twaite shad in the River Barrow are 62km downstream of the application site, and therefore impacts upon this species are unlikely to arise.	None	None	Yes
Salmon	To restore the favourable conservation condition of Salmon in the River Barrow and River Nore SAC	Eutrophication – Pollution of the River Barrow with silt, hydrocarbons or other substances will have a negative impact upon the salmon. Eutrophication will also result in	See below	None	Yes

		a reduction of the habitat availability for the salmon. An increase in the siltation levels of the River Barrow locally due to run off from the site.			
Lutra lutra (Otter) [1355]	To restore the favourable conservation condition of Otter in the River Barrow and River Nore SAC	A decrease in water quality in the Rivers Barrow, the Burren Stream due to contaminated run off or pollution from the site during construction and operation.	See Below	None	Yes
Trichomanes speciosum (Killarney Fern) [1421]	To maintain the favourable conservation condition of Killarney Fern in the River Barrow and River Nore SAC	This species occurs in the southern reaches of the Barrow system.			
Margaritifera durrovensis (Nore Pearl Mussel) [1990]	To restore the favourable conservation condition of the Nore freshwater pearl mussel in the River Barrow and River Nore SAC	This species occurs within the River Nore system. The proposed development will have no impacts upon this species as it is outside of its zone of influence.	None	None	Yes

7.8.16. Mitigation measures:

In order to prevent any deterioration in water quality in the drain that leads to the Glenoge Stream, the Burren River and the River Barrow and Nore SAC, a number of mitigation measures are proposed. These include:

Pre-construction and Construction

- The construction contractors will be made aware of the sensitivity of the location prior to the commencement of construction activities.
- All protection measures will be undertaken from initial site works until the completion of all construction works on site.
- All site preparation and construction works to conform to all relevant guidelines within the document Inland Fisheries Ireland Requirements for the Protection of Fisheries Habitats during Construction and Development Works and River Sites and the updated guidelines entitled Guidelines on Protection of Fisheries During Construction Works in and Adjacent to Waters (2016)
- Unnecessary vegetation clearance should be avoided, and only areas necessary for building works should be cleared.
- Works within the site should be avoided during periods of heavy rainfall.
- Removal of the construction waste will occur as soon as possible after construction works.
- There should be no discharges of contaminated water or ground or surface water from the development either during the construction or operation of the development.
- Silt fences will be erected downslope of the works to attenuate run-off and trap sediment.
- The silt traps are to be constructed so that waters do not flow around the trap during flood events.
- Interceptor drains shall be installed immediately upslope of the construction works area.
- Collector drains shall be installed along the edge of the construction roads and at the bottom of slopes. The collector drains shall allow all surface water

run-off within the construction catchment to be collected and directed towards the water treatment features.

- Storage of fuels, other hydrocarbons and chemicals and refuelling activities
 will not be permitted within 50m of any watercourse.
- Best practice concrete/aggregate management measures should be employed on site.
- Fuels, oils, greases and hydraulic fluids to be stored in bunded compounds.
- Waste oils and hydraulic fluids will be collected in leak-proof containers and removed from the site for disposal and recycling.

Operational Phase

- Post-construction surface water runoff from hardcore/concrete/tarmacadam areas should be directed into a soakway.
- Additional treatment vis services sediment and oil interceptor traps should be considered before discharge into any soakaway or surface water.
- There will be no discharges of polluted stormwater into any local watercourse.
- Bare soil should be seeded as soon as possible with grass seed. This will
 minimise erosion into local drains and watercourses.

7.8.17. Overall Conclusion: Integrity Test

Following the appropriate assessment and the consideration of mitigation measures, I am able to ascertain with confidence that the project would not adversely affect the integrity of River Barrow and River Nore Special Area of Conservation (2162) in view of the Conservation Objectives of this site.

This conclusion has been based on a complete assessment of all implications of the project alone and in combination with plans and projects.

7.8.18. Appropriate Assessment Conclusion

The project consisting of a Synchronous Condenser at Kellistown East has been considered in light of the assessment requirements of Sections 177U and 177V of the Planning and Development Act 2000 as amended.

Having carried out screening for Appropriate Assessment of the project, it was concluded that it may have a significant effect on River Barrow and River Nore Special Area of Conservation. Consequently, an Appropriate Assessment was required of the implications of the project on the qualifying features of that site in light of its conservation objectives.

Following an Appropriate Assessment, it has been ascertained that the proposed development, individually or in combination with other plans or projects, would not adversely affect the integrity of the European site No 002162 or any other European site, in view of the site's Conservation Objectives. It is considered that given the mitigation proposed, the potential for a deterioration in water quality reaching the River Barrow and River Nore is unlikely, and therefore, the proposed development will not adversely affect the conservation objectives and targets for the Qualifying Interests.

This conclusion is based on a complete assessment of all aspects of the proposed project and there is no reasonable doubt as to the absence of adverse effects.

This conclusion is based on:

- A full and detailed assessment of all aspects of the proposed project including proposed mitigation measures in relation to the Conservation Objectives of River Barrow and River Nore SAC.
- Detailed assessment of in combination effects with other plans and projects including historical projects, current proposals and future plans.
- No reasonable scientific doubt as to the absence of adverse effects on the integrity of The River Barrow and River Nore SAC
- No reasonable scientific doubt as to the absence of adverse effects on the integrity of The River Barrow and River Nore SAC.

8.0 **Recommendation**

8.1. In accordance with the foregoing, I recommend that permission be granted for the following reasons and considerations, in accordance with the following conditions.

9.0 Reasons and Considerations

The proposed development comprising the development of a synchronous condenser grid support facility which will connect to the adjoining ESB Kellistown Electricity Substation would not unduly impact the natural environment or the amenities of the area, including residential amenity, would align with national policy to transition to carbon neutral energy, would comply with the zoning objectives for the site and the Climate Action and Energy policies contained in the Carlow Development Plan 2022-2028 and would be in accordance with the proper planning and sustainable development of the area.

10.0 Conditions

- 1. The development shall be carried out and completed in accordance with the plans and particulars lodged with the application, as amended by the further plans and particulars submitted on the 5th August 2022, except as may otherwise be required in order to comply with the following conditions. Where such conditions require details to be agreed with the planning authority, the developer shall agree such details in writing with the planning authority prior to commencement of development and the development shall be carried out and completed in accordance with the agreed particulars. Reason: In the interest of clarity.
- 2. The development hereby permitted shall be carried out within 10 years of the date of this permission.

Reason: In the interest of clarity.

3. The development hereby permitted shall be removed from the site before the end of the period of 50 years from their commissioning, unless the period has been extended by a further permission, and site shall be restored within 12 months of decommissioning.

Reason: In the interests of the proper planning and development of the area and to facilitate a review of the facilities at that time.

4. Site development and building works shall be carried out only between the hours of 08.00 and 19.00 from Monday to Friday inclusive, between the hours of 08.00 and 14.00 on Saturdays, and not at all on Sundays, Bank or Public Holidays. Deviation from these times will only be allowed in exceptional circumstances where written approval has been received from the planning authority.

Reason: In the interest of amenity.

- The mitigation measures outlined in the Natura Impact Statement submitted on the 8th August 2022 shall be implemented in full.
 Reason In order to protect the conservation objectives of the River Barrow and River Nore SAC.
- 6. The developer shall be responsible for any damage to the public road and access lane.

Reason: In the interest of clarity.

7. Details of the materials, colours, and textures of the external finishes shall be submitted to and agreed in writing with the planning authority prior to the commencement of development.

Reason: In the interest of visual amenity.

8. Construction and demolition waste shall be managed in accordance with a construction waste and demolition management plan, which shall be submitted to, and agreed in writing with, the planning authority prior to

commencement of development. This plan shall be prepared in accordance with the "Best Practice Guidelines on the Preparation of Waste Management Plans for Construction and Demolition Projects", published by the Department of the Environment, Heritage and Local Government in July 2006. The plan shall include details of waste to be generated during site clearance and construction phases, and details of the methods and locations to be employed for the prevention, minimisation, recovery and disposal of this material in accordance with the provision of the Waste Management Plan for the Region in which the site is situated.

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Reason: In the interest of sustainable waste management.

9. Prior to the operation/ occupation of the proposed development any noise mitigation measures specified in the plans/ drawings and in the amended Noise Impact Assessment shall be constructed and completed in accordance with the proposed scheme.

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

Measures shall be implemented to prevent the spread of Alien Invasive Species during construction works and control measures shall have regard to The Management of Noxious Weeds and Non-native Invasive Plant Species on National Roads (NRA).

Reason: In the interest of the protection of the environment.

11. The developer shall pay to the planning authority a financial contribution in respect of public infrastructure and facilities benefiting development in the area of the planning authority that is provided or intended to be provided by or on behalf of the authority in accordance with the terms of the

Development Contribution Scheme made under section 48 of the Planning and Development Act 2000, as amended. The contribution shall be paid prior to the commencement of development or in such phased payments as the planning authority may facilitate and shall be subject to any applicable indexation provisions of the Scheme at the time of payment. Details of the application of the terms of the Scheme shall be agreed between the planning authority and the developer or, in default of such agreement, the matter shall be referred to the Board to determine the proper application of the terms of the Scheme.

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

Peter Nelson Planning Inspector

26th March 2024

Appendix 1 - Form 1

EIA Pre-Screening

[EIAR not submitted]

An Bord			315063			
Propos Summa		velopment	The development of a sy and all associated works		er grid	support facility
Develo	pment	Address	Kellistown East, Co, Car	low.		
1. Does the proposed de			=	the definition of a	Yes	Yes
'project' for the purpos (that is involving construction natural surroundings)			on works, demolition, or interventions in the		No	
Plan	ning a	nd Develop	opment of a class specif ment Regulations 2001 (uantity, area or limit whe	as amended) and c	loes it	equal or
Yes		Class				Mandatory required
No	Х		Proceed to			eed to Q.3
Deve	3. Is the proposed development of a class specified in Part 2, Schedule 5, Planning and Development Regulations 2001 (as amended) but does not equal or exceed a relevant quantity, area or other limit specified [sub-threshold development]?					
			Threshold	Comment	C	Conclusion
	1			(if relevant)		
No	Х		N/A		Prelir	IAR or minary nination red
Yes		Class/Thre	shold		Proce	eed to Q.4

No	Preliminary Examination required
Yes	Screening Determination required

Inspector:	 Date:	
•		