

**An Coimisiún Pleanála Reference  
ACP-322690-25**

**Proposed 110kV Substation and  
Grid Connection at Kellistown, Co.  
Carlow**

**Submissions Response**

**On behalf of  
PRT Solar Limited**



MALONE O'REGAN





Ground Floor – Unit 3  
Bracken Business Park  
Bracken Road, Sandyford  
Dublin 18, D18 V32Y  
Tel: +353- 1- 567 76 55  
Email: [enviro@mores.ie](mailto:enviro@mores.ie)

**Title: Submissions Response, Proposed 110kV Substation and Grid Connection at Kellistown, Co. Carlow**

**Job Number: E2238**

**Prepared By: Kathryn Broderick**

**Signed:** K. Broderick

**Checked By: Kevin O'Regan**

**Signed:** KOR

**Approved By: Kevin O'Regan**

**Signed:** KOR

**Revision Record**

| Issue No. | Date     | Description   | Remark | Prepared | Checked | Approved |
|-----------|----------|---------------|--------|----------|---------|----------|
| 01        | 03/11/25 | Response Doc. | FINAL  | KB       | KOR     | KOR      |
|           |          |               |        |          |         |          |
|           |          |               |        |          |         |          |

**Copyright and Third-Party Disclaimer**

Malone O'Regan Environmental ('MOR Environmental') has prepared this report for the sole use of our client (as named on the front of the report) in accordance with the Client's instructions using all reasonable skill and competence and generally accepted consultancy principles. The report was prepared in accordance with the budget and terms of reference agreed with the Client and does not in any way constitute advice to any third party who is able to access it by any means. MOR Environmental excludes to the fullest extent lawfully permitted all liability whatsoever for any costs, liabilities or losses arising as a result of or reliance upon the contents of this report by any person or legal entity (other than the Client in accordance with the terms of reference). MOR Environmental has not verified any documents or information supplied by third parties and referred to herein in compiling this document and no warranty is provided as part of this document. No part of this report may be copied or reproduced without express written confirmation from MOR Environmental. Any methodology contained in this report is provided to the Client in confidence and must not be disclosed or copied to third parties without the prior written agreement of MOR Environmental. Disclosure of such information may constitute an actionable breach of confidence or may otherwise prejudice our commercial interests. Third parties who obtain access to this report by any means, including disclosure by the Client, will be subject to the Copyright and Third-Party Disclaimer contained herein.

**Response to Observation submitted by Paul Rooney**  
**Proposed 110kV Substation and Grid Connection at Kellistown Co. Carlow**  
**PRT Solar Limited**

**Contents**

|          |                                                                |          |
|----------|----------------------------------------------------------------|----------|
| <b>1</b> | <b>INTRODUCTION .....</b>                                      | <b>1</b> |
| 1.1      | Project Splitting and Lack of Cumulative Assessment.....       | 1        |
| 1.2      | Risk to River Barrow and River Nore SAC .....                  | 2        |
| 1.3      | Community Burden, Lack of Engagement and Road Saturation ..... | 3        |
| 1.4      | Fire Risk of BESS adjacent to Substation.....                  | 4        |
| 1.5      | Overdevelopment, Noise, Pollution and Lack of Regulatory.....  | 4        |
| 1.6      | Inadequate Justification and Alternatives.....                 | 5        |
| <b>2</b> | <b>CONCLUSIONS .....</b>                                       | <b>6</b> |

## 1 INTRODUCTION

Malone O'Regan Environmental ('MOR Environmental') have been commissioned by Prt Solar Limited ('the Applicant') to respond to An Coimisiún Pleanála's ('the Commission') invitation dated 13<sup>th</sup> October 2025 to make a submission on the observations received in relation to the application. The Strategic Infrastructure Development ('SID') application by Prt Solar Ltd is for a Proposed 110kV substation and associated 110kV underground cable ('The Proposed Development').

MOR Environmental is obliged to the Commission for affording the Applicant the opportunity to make a submission on the observations made. Three submissions were received by the Commission:

1. Paul Rooney;
2. Transport Infrastructure Ireland ('TII'); and,
3. Carlow County Council ('CCC').

As set out in the observation documents, TII had no observations to make, and CCC raised no objection to the Proposed Development in principle, subject to conditions. Accordingly, it is considered that no further comment is warranted regarding these statutory bodies.

An objection was received from Mr. Paul Rooney of Rathoe, Co. Carlow in relation to the Proposed Development. The points raised in this objection have been itemised and addressed in detail within this submission as outlined below.

### 1.1 Project Splitting and Lack of Cumulative Assessment

In relation to Mr. Rooney's assertion regarding project splitting, MOR Environmental wishes to clarify that two separate planning applications had to be pursued given the statutory requirements under the Planning and Development Act 2000 (as amended) ('The Act').

1. Under the provisions of the Act, the permitted solar development (Solar PV, 38kV substation and Battery Energy Storage System ('BESS') (Planning Ref: 23/60297)) was submitted to Carlow County Council under Section 34 of the Act ('The Permitted Development').

The permitted 38kV substation was based on the assumption of capacity being available in Carlow 110/38kV substation, and a connection with the Distribution System operator ESB Networks (ESBN). Subsequently, EirGrid issued a Grid Connection Offer at 110kV to the existing 220 kV substation at Kellistown. As a result, a separate application was required.

2. In accordance with Section 182A of the Act, the proposed underground grid connection ('UGC') and substation, operating at a voltage of 110kV, fall within the definition of SID. As such, this component must be submitted directly to the Commission for determination. On 6<sup>th</sup> February 2025, the Commission served notice that it is of the opinion that the Proposed Development falls within the scope of Section 182A of the Planning and Development Act 2000, as amended and that the Commission had decided that the Proposed Development would be strategic infrastructure (ABP Ref: ABP-319470-24).

Therefore, two separate applications were required. This separation was not a matter of project segmentation or avoidance of cumulative assessment but was a necessary procedural compliance with the statutory planning framework.

Mr. Rooney states "*The Environmental Reports admits this is the central node for the solar farm and its permitted infrastructure, yet a single EIAR has not been undertaken*".

MOR Environmental would like to clarify that both applications have been prepared in a coordinated manner, with cumulative and in-combination effects fully considered and assessed across both planning applications. This is presented within relevant chapter of the ER submitted.

Mr. Rooney asserts that there was a “*failure to carry out a Strategic Environmental Assessment (SEA) in accordance with Directive 2001/42/EC raises legal concerns*”

It should be clarified that the SEA Directive (Directive 2001/42/EC) applies specifically to “*plans and programmes*”, as defined in Article 2 of the Directive. The Proposed Development constitutes a project, not a plan or programme, and therefore does not fall within the scope of the SEA Directive. Consequently, there is no legal requirement to undertake a Strategic Environmental Assessment in relation to the Proposed Development.

MOR would like to clarify that an EIA Screening Assessment was undertaken in accordance with Schedule 5 and Schedule 7 of the Planning and Development Regulations 2001 (as amended) and in accordance with Directive 2011/92/EU, amended by Directive 2014/52/EU (“the EIA Directive”). The EIA Screening Assessment concluded that neither a mandatory or a subthreshold EIAR was warranted.

Notwithstanding this, a comprehensive Environmental Report (‘ER’) was prepared, which specifically considered the cumulative environmental effects of the Proposed Development alongside the Permitted Development (Planning Ref: 23/60297) and other relevant developments in the area. Where applicable, each technical chapter of the Environmental Report includes a dedicated cumulative assessment section, evaluating the combined effects of the Proposed Development alongside other developments including the Permitted Development. This chapter-specific approach ensured that both applications were supported by a robust and defensible environmental assessments, fully compliant with statutory requirements and best practice guidelines.

Accordingly, the process fully complies with the relevant SEA and EIA legislation, and there is no legal basis for Mr. Rooney’s claim.

## **1.2 Risk to River Barrow and River Nore SAC**

Mr. Rooney asserts that the reliance on horizontal directional drilling (‘HDD’) “*lacks adequate scientific certainty*” in relation to risk to the River Barrow and River Nore Special Area of Conservation (‘SAC’).

MOR would like to clarify that a comprehensive Stage 1 Screening for Appropriate Assessment and Stage 2 Natura Impact Statement (‘NIS’) was completed as part of the SID Application, in full accordance with relevant legislation and best-practice guidance. As detailed in Section 3.5.3 of the NIS, the proposed HDD methodology has been clearly outlined and described. This technique involves drilling beneath the bed of the watercourses, thereby avoiding any direct physical interaction with, or disturbance to, the aquatic environment. HDD drilling is a widely accepted method for minimising environmental impacts in sensitive areas.

Notwithstanding this, a precautionary approach was adopted throughout the assessment, with detailed watercourse protection and pollution prevention measures proposed to ensure that no significant adverse effects will arise on any nearby watercourses connected to the River Barrow and River Nore SAC.

Following an objective and evidence-based assessment, it was concluded, in line with the best available scientific knowledge, that the Proposed Development will not, either alone or in combination with other plans or projects, adversely affect the integrity or conservation status of any qualifying interests of the River Barrow and River Nore SAC or any other European site. There is, therefore, no reasonable scientific doubt regarding this conclusion.

MOR firmly disagrees with Mr. Rooney assertion and maintains that the potential for any risk or adverse effects on the River Barrow and River Nore SAC was comprehensively assessed and fully addressed within the NIS.

### 1.3 Community Burden, Lack of Engagement and Road Saturation

Please note that the permitted solar development (Planning Ref: 23/60297) is not under construction and is not contributing to any current road closures or disruption within the Rathoe area.

MOR would also like to clarify that the proposed UGC to the existing 220kV Kellistown Substation was identified as the shortest, most direct, and least disruptive route. The works associated with the UGC will also be temporary in nature. Furthermore, a Construction Traffic Management Plan ('CTMP') was prepared by Meinhardt and submitted as part of the planning application. The CTMP outlines how the construction works will be carried out in a structured, respectful, and safe manner, incorporating targeted measures designed to minimise and manage potential impacts that may arise throughout the delivery of the Proposed Development. The CTMP outlined specific measures to be implemented in order to minimise the temporary impacts to local residents. This will include for information signage, informational flyer drop and the appointment of a liaison officer. Access for all residents will remain in place and safe access will be provided at all times to private residences along the proposed UGC.

MOR would also like to clarify that, in accordance with statutory requirements, the Proposed Development was publicly advertised as part of the planning application process. A notice was published in a locally circulated newspaper (Irish Daily Star), and the full application documentation was made available for public inspection in the Offices of the Commission 64 Marlborough Street, Dublin 1 and the offices of Carlow County Council, County Buildings, Athy Rd, Carlow, R93 E7R7. The application is also available to view/download on [www.moanalow110substation.ie](http://www.moanalow110substation.ie). This ensured that any person had the opportunity to make a submission or observation in relation to the Proposed Development, in full compliance with the relevant provisions of the Planning and Development Acts.

Furthermore, as part of the SID application process, and in accordance with Section 182A of the Planning and Development Act, it was determined by the Commission that the statutory notice must be provided to the relevant Statutory bodies. In compliance with this requirement, formal notification was issued to the following bodies:

- Minister for Housing, Local Government and Heritage;
- Minister for the Environment, Climate and Communications;
- Carlow County Council;
- Transport Infrastructure Ireland;
- An Taisce;
- Failte Ireland;
- The Heritage council;
- An Chomhairle Ealaion;
- Uisce Eireann (Irish Water); and,
- Commissions for Regulation of Utilities.

The assertion that prescribed bodies have “*not meaningfully engaged*” with this application is therefore simply incorrect. All prescribed bodies were formally notified in accordance with the

required statutory procedures, thereby ensuring full transparency, engagement, and adherence to the statutory consultation process as required under Irish planning legislation.

#### **1.4 Fire Risk of BESS adjacent to Substation**

MOR would like to clarify that the Proposed Development relates solely to the construction and operation of a 110kV substation and associated 110kV UGC. This application does not include any element of the previously permitted development which included for a Battery Energy Storage System (BESS).

The BESS forms part of a separate, Permitted Development (Planning Ref: 23/60297) that was subject to full assessment under the statutory planning process. For completeness, the Permitted Development has been incorporated into the cumulative impact assessments contained within each relevant technical chapter of the Environmental Report prepared for the Proposed Development.

As part of that process, a comprehensive suite of safety and fire prevention measures was incorporated into the design, including a total safety management system and integrated fire detection and suppression systems in accordance with recognised standards.

In addition, the permitted application was formally referred to the Carlow County Fire Authority for review. A report issued on 26 January 2024 by Mr. N. Grady, Senior Assistant County Fire Officer, confirmed no objection, subject to standard conditions ensuring continued compliance with the requirements of the Chief Fire Officer. This demonstrates that all relevant fire safety and explosion risk considerations were appropriately assessed and addressed under the applicable codes and statutory guidance.

The proposed 110 kV substation will therefore be a separate and distinct infrastructure component, the function of which will be limited to electrical transmission and grid connection. It will not increase any risk associated with the permitted BESS and therefore does not require any thermal runaway risk assessment.

The substation equipment, such as transformers, and switchgear will be designed and constructed in accordance with EirGrid and ESB Networks standards, ensuring full compliance with all applicable electrical safety and operational regulations.

Accordingly, Mr. Rooney's reference to explosion in relation to the BESS or thermal runaway risk is without foundation in relation to the current application.

#### **1.5 Overdevelopment, Noise, Pollution and Lack of Regulatory**

Mr Rooney's assertion regarding an alleged "*overconcentration of energy infrastructure*" in the Rathoe–Grangeford area is without evidential basis. MOR wishes to emphasise that the Proposed Development fully accords with the policies and objectives set out in the Carlow County Development Plan 2022–2028, which explicitly supports the expansion of renewable energy infrastructure in appropriate and suitable locations, as outlined in Chapter 4 of the ER, Policy, Planning and Development.

The Proposed Development will also be entirely consistent with national and regional energy and climate policy, and directly contributes to Ireland's ongoing efforts to decarbonise the electricity system, enhance energy security, and deliver on commitments in line with the Climate Action Plan, National Energy and Climate Plan, and the Renewable Electricity Support Scheme ('RESS') objectives.

With regard to potential noise impacts, a comprehensive Noise Impact Assessment was undertaken by MOR Environmental's qualified Environmental Acoustician who is a Member of the Institute of Acoustics ('MIOA'). In chapter 8 of the ER (Noise), the acoustic assessment evaluated potential noise emissions from both the construction and operational phases of the Proposed Development. Baseline noise monitoring was carried out at four representative

locations, characterising existing ambient conditions ranging from 39dB to 61dB, LAeq,T and background levels of 32dB to 40dB LA90,T.

As outlined in section 8.9 of the ER, predicted noise levels from the Proposed Development, together with cumulative contributions from the Permitted Development and adjacent renewable projects (Planning Refs. 20/44 Wexford Solar Ltd, 21/38 and 22/149 Elgin Energy Services Ltd, and 23/92 – Neoen Renewables Ireland Ltd), were comprehensively assessed. The analysis confirmed that all predicted noise levels at all Noise-Sensitive Receptors ('NSRs') remained below the relevant daytime and night-time limits, with no significant variation in overall ambient noise levels predicted.

As outlined in section 8.10 of the ER, noise mitigation measures will be implemented during the construction phase in accordance with recognised best practice guidelines for construction sites. Therefore, it can be concluded that significant noise nuisance issue will not occur during the construction phase of the Proposed Development.

Regarding the Operational Phase of the Proposed Development, based on the design stage acoustics input, the submitted layout and plant selection, there will be no likely noise nuisance during the daytime and night-time operation of the Proposed Development and, as such, specific mitigation measures were not deemed to be warranted.

Assertions of overconcentration or unacceptable noise impacts are not supported by the evidence and have been comprehensively addressed through detailed, best-practice assessments demonstrating full compliance with all relevant standards and policy objectives.

## 1.6 Inadequate Justification and Alternatives

MOR would like to clarify that subject to obtaining consent, the proposed 110kV substation will be developed in lieu of a previously permitted 38kV substation granted by Carlow County Council (Planning Ref: 2360297). The justification and need for the 110kV substation was outlined in the submitted Environmental Report (Chapters 1 and 4).

The permitted 38kV substation was based on the assumption of capacity being available in Carlow 110/38kV substation, and a connection with the Distribution System operator ESB Networks (ESBN). At the time of grid connection offer issuance, the System Operators EBSN and EirGrid communicated that there was no existing available capacity at 38kV voltage for Grangeford Solar Farm, and that substantial works at Carlow 110/38kV substation would be required. EirGrid informed Aer Soléir that the System Operator's preferred connection method is a 110kV connection to Kellis 220/110kV substation where there is an existing spare 110kV bay available. This connection method avoids major disruption to Carlow 110/38kV substation and also provides a connection point with spare 110kV bays for future renewable energy projects in the surrounding area.

The 110kV substation has been designed in accordance with latest Eirgrid Standards, comprising a 110kV Air Insulated Switchgear ('AIS') 2 Bay Station extendable to 4 Bay and 8 Bay configuration. This configuration was recommended by EirGrid as it facilitates future expansion and improving the overall availability of renewable energy on the grid. This strategic design also increases the availability of renewable energy connection capacity in the region.

Mr. Rooney's assertion that '*no alternatives or less disruptive routing options are presented*' is inaccurate. MOR would like to clarify that the proposed UGC route to the existing 220 kV Kellistown Substation was identified as the shortest, most direct, and least disruptive option available. Potential alternative routes were discounted at a preliminary stage of the design as part of internal review on the basis of that they would require extended works on the R725.

Furthermore, it is important to emphasise that the construction activities will be temporary and phased works. Works will proceed in short, controlled sections, with no more than a 100-metre section of trench being opened at any one time. A subsequent 100-metre section will only commence once the reinstatement of the previous section is substantially complete. This

approach will ensure minimal disturbance to local access, traffic, and amenity throughout the construction period as outlined in the CTMP.

## **2 CONCLUSIONS**

In conclusion, it is submitted that the Proposed Development, comprising a 110 kV substation and associated UGC, is fully consistent with national and regional renewable energy policy objectives and does not conflict with the provisions of the Carlow County Development Plan 2022–2028.

The Proposed Development is strategically located adjacent to a key electrical node in County Carlow at Kellistown, optimising grid connectivity and operational efficiency. Comprehensive environmental assessments have been undertaken, demonstrating that the construction and operation of the Proposed Development will not result in any residual likely significant environmental effects.

All submissions received in relation to the application have been carefully considered. Statutory bodies, including Transport Infrastructure Ireland and Carlow County Council, raised no objections in principle. The points raised by the sole objector, Mr. Paul Rooney, have been addressed in detail within this submission, demonstrating that the Proposed Development is both technically and environmentally robust.