Pat and Patricia McCarthy
Daneague,
Ballydaniel,
Youghal,
Co. Cork
P36 XP02

02/11/2026

The Secretary,
An Coimisiun Pleanala,
64 Marlborough Street,
Dublin 1
D01 V902

Re: Observation on Strategic Infrastructure Development
Case Reference VA04.324632

Applicant:	Perigus Energy Ireland Midco Ltd.
Proposed Development:	220kV Air Insulated Substation, loop in grid connection and related works
Location:	Ballyneague, Ballydaniel and Knocknagappagh, County Cork

Dear Sir/Madam,

We, Pat and Patricia McCarthy, are retired and live in close proximity to the proposed development. We have lived in this area all our lives and have a longstanding connection to the surrounding rural landscape. We own approximately 9 acres of land surrounding our home, immediately adjoining the red-line boundary of the wider development.

This Observation relates specifically to the proposed 220kV substation and associated grid connection infrastructure. We acknowledge that the solar farm and battery energy storage development are the subject of a separate planning application. However, the substation is being proposed as substantial, permanent electricity infrastructure. It is intended to remain in place independently of the solar farm's operational life and must therefore be assessed on its own merits, having regard to its long-term presence and its proximity to existing homes.

We ask the Commission to consider the following grounds of objection:

1. Water Pollution and Our Private Well

Our home depends on a private well for its water supply. The protection of this supply is of fundamental importance to us. Given the close proximity of the proposed substation and the nature of the works involved, we require clear evidence that construction and subsequent operation will not adversely affect groundwater or the quality and reliability of our water supply.

The Construction Environmental Management Plan (CEMP) describes an extensive network of historic and unmapped drains across the site, draining towards the River Tourig and onwards to the River Blackwater, a European designated site. It identifies the site as largely

overlying the Glenville Groundwater Body, with high groundwater vulnerability and areas of extreme vulnerability close to rivers towards the south.

The Spoil Management Plan (Appendix B) refers to approximately 13,600m³ of topsoil and 39,690m³ of subsoil across 4.71 hectares. These volumes demonstrate the extent of the proposed ground disturbance and material handling. The substation compound also proposes soakaway infiltration, while two oil-filled transformers and a diesel generator and fuel storage will be present.

The Water Quality Monitoring Plan acknowledges that a residual risk of accidental spillages remains. This is particularly relevant where potentially polluting materials are being stored and handled in an area with groundwater vulnerability and where drainage and infiltration systems are proposed.

We cannot identify sufficient site specific information demonstrating that our private well, and other neighbouring private wells, have been adequately identified and assessed. The absence of a well from a database or drawing should not be taken as evidence that no private well exists. The applicant should demonstrate that neighbouring water supplies have been properly identified, including their locations and the potential pathways by which construction or operational pollution could reach them.

We also seek clarification on how the proposed drainage arrangements would operate in the event of a significant oil or fuel spill. It must be demonstrated that contaminated water could be contained and prevented from entering the soakaway system, groundwater or neighbouring drainage channels. The same issue arises in the event of a transformer fire, where contaminated firefighting water could present a further pollution risk.

We request that the Commission require a site-specific hydrogeological assessment which identifies neighbouring private wells, assesses groundwater flow and drainage pathways, and considers the potential effects of construction, soakaway infiltration and accidental pollution incidents.

Before any works commence, our private well should be independently tested and a full baseline water quality record established. A clear programme of monitoring should continue throughout construction and operation, with defined testing frequencies, trigger levels, reporting requirements and corrective measures. There must also be a clear commitment to investigate and remedy any deterioration in water quality attributable to the development, including the provision of an alternative safe water supply where necessary.

The protection of our drinking water supply cannot be left to a general commitment to good construction practice. It requires clear, enforceable and site-specific safeguards.

2. Site Selection and Alternatives

The proposed substation is substantial electrical infrastructure and its location immediately beside existing homes requires careful justification. We do not believe the application has adequately demonstrated why this particular location is the most appropriate option.

The application file contains an EIA Screening Report, but we have been unable to identify a full Environmental Impact Assessment Report (EIAR). We also cannot identify a sufficiently

detailed comparison of reasonable alternative locations along the proposed 220kV connection route.

The Commission should be satisfied that the environmental information submitted is adequate to assess the proposed development and that reasonable alternatives have been properly considered where required. This should include consideration of alternative substation locations, alternative layouts and whether the development could be located further from existing residential properties.

The assessment should demonstrate that residential proximity, access constraints, groundwater vulnerability, drainage, landscape effects and construction impacts were all considered as part of the site-selection process.

The documentation does not, in our view, demonstrate a transparent, criteria based comparison showing why this location was selected over other reasonable alternatives. The availability of land or the convenience of connecting to the proposed grid infrastructure should not, on its own, determine the suitability of a location so close to existing homes.

The access from the R634 and the local road network also raises questions about the suitability of the site for the construction traffic required. The local roads are rural in character and are not designed for sustained movements of heavy construction vehicles. Access for emergency vehicles, particularly in wet conditions, also requires proper assessment.

We are familiar with the land and its drainage characteristics. The site is known locally to be wet, and we believe that the assessment must take account of conditions throughout the year rather than relying solely on investigations carried out during drier summer conditions. The drainage and ground investigations should demonstrate that the proposed development can be constructed and operated without transferring water management problems onto adjoining land or neighbouring properties.

We ask the Commission to examine whether the site selection process has adequately considered the proximity of homes, local road constraints, groundwater vulnerability, drainage conditions and the availability of alternative locations.

3. Noise and Vibration

Pat suffers from severe tinnitus and is undergoing significant treatment, while Patricia experiences hearing sensitivities. The potential effects of construction noise, vibration and ongoing operational noise are therefore a particularly important consideration for our household.

The Noise and Vibration Impact Assessment (Appendix S) is prepared for the Greenhills Renewable Energy Park as a whole. It covers the solar farm, trenching, the battery compound and the proposed substation. We do not believe that this provides sufficient clarity about the specific construction and operational noise impacts of the substation at our home.

The closest distances in Table 1.1, identified as 5 metres and 8 metres, relate to the energy park boundary rather than the substation platform shown on drawing 300101185-DR-213. The assessment does not clearly provide the distance from the substation compound or its access arrangements to our home.

The report refers to the BS 5228 construction-noise test of 65dB at a residential property for more than 10 days in any 15 day period, or more than 40 days in six months. Section 5.5.6.1 refers to works lasting approximately 16 months. However, the application does not provide a sufficiently clear calculation of the noise levels expected at our property from the substation platform, access works and the construction haul route to Site Access No. 1.

The duration of the works makes it particularly important that the actual noise levels at the nearest homes are properly assessed. A general assessment of the wider energy park does not remove the need to demonstrate the likely impact of the substation construction itself.

There are also inconsistencies in the stated fill quantities. Drawing DR-213 contains two different fill figures, while Section 5.5.6.1 gives a third figure of 25,013m³. The assumption that excavated material will be reused on site is not sufficiently reconciled with the quantities shown. If additional imported fill or capping stone is required, this could generate further heavy vehicle movements and construction noise which have not been adequately assessed.

We also note that the noise assessment states that octave-band data was not available for the proposed plant items and that an objective assessment of potential tonal noise could therefore not be undertaken at the pre-planning stage. The report indicates that characteristics such as low frequency noise and tonality may be investigated and measured following construction, typically in response to a complaint, with mitigation considered if significant adverse characteristics are verified.

This leaves an aspect of the potential operational noise impact unresolved until after the development is built. Given the proximity of our home, this is not satisfactory. The Commission should be satisfied before granting permission that the potential for low-frequency and tonal noise has been adequately assessed.

We request a substation specific noise and vibration assessment which identifies our home as a sensitive receptor and provides predicted construction and operational noise levels at our actual property. It should include the transformers, generator, associated plant, deliveries, access works and construction traffic.

Any permission should include enforceable noise limits, restrictions on construction hours, appropriate independent monitoring at the nearest homes and a clear process for investigating complaints and requiring corrective action. The assessment should also address how noise will be controlled during abnormal operating conditions, maintenance and emergency generator use.

The particular hearing circumstances within our household make it especially important that the Commission does not rely solely on general noise predictions for the wider development.

4. Lack of Public Consultation

The applicant's Appendix A indicates that direct engagement was restricted to approximately 342 houses within 1.5 kilometres of the proposed development. We understand that some letters were returned undelivered because they did not include a resident's name.

The August consultation sessions were largely pre-booked individual appointments rather than open public meetings where residents could hear the information being presented, raise concerns collectively and understand the issues affecting neighbouring households.

We are also aware of residents who requested one-to-one meetings but were not facilitated. Newsletter 2 stated that the layout was still being drafted, while residents were advised that photomontages would only be available with the planning application.

This meant that residents were not given a meaningful opportunity to comment on the substation in its final proposed form before the application was submitted. In particular, there was no adequate opportunity for the applicant to hear and consider local knowledge about drainage, private wells, the condition and suitability of local roads and the wet nature of the land.

Given the scale and permanence of the proposed infrastructure and its close proximity to existing homes, meaningful engagement should have been an important part of the process. Consultation should not simply involve distributing newsletters or offering limited appointments. It should allow those most directly affected to understand the proposal and have their specific circumstances considered.

We do not believe the engagement undertaken adequately addressed the circumstances of households living immediately beside the proposed development.

5. Visual Impact and Residential Amenity

Our home is situated in very close proximity to the proposed development and looks towards lands included within the wider Greenhills development. The wider development extends around our established residential cluster. The visual impact of the proposed substation and associated grid infrastructure is therefore a significant consideration for us.

The Landscape and Visual Impact Assessment (LVIA) uses the Guidelines for Landscape and Visual Impact Assessment, Third Edition (GLVIA3), and includes 24 viewpoints. It acknowledges that residents are highly sensitive visual receptors and, at page 28, recognises that several dwellings surround the proposed substation.

Viewpoint VP8, located on the L7829 at Ballydaniel, is particularly relevant because it represents a public road viewpoint in the vicinity of our home. However, a viewpoint taken from a public road does not necessarily represent the views experienced from our home, garden or the private residential spaces in which we spend our daily lives. We do not believe the assessment provides a sufficiently detailed assessment of the visual impact of the proposed substation on our actual property.

It is also important that the visual effects of the proposed solar panels are not treated as equivalent to those of a large electrical substation and its associated infrastructure. The substation must be assessed in its own right, having regard to the height, scale and industrial character of the buildings, transformers, fencing and taller grid connection structures.

The proposed compound covers approximately 22,631m² and includes a 438m² control building, a 590m² IPP building, two transformers, 2.6-metre palisade fencing, lighting and lightning masts of approximately 18 metres. The loop-in infrastructure also includes lattice structures described as approximately 37.5 metres in height. These are substantial structures which will introduce a significant electrical infrastructure presence into the existing rural landscape.

Screening assessments based on the height and appearance of solar panels, which are approximately 3.4 metres high, cannot adequately demonstrate the visual effects of these much taller structures. The height, scale, materials and industrial character of the substation must be assessed separately.

The proposed planting will also take time to establish. The application should not rely on vegetation that will take several years to mature as though it provides immediate screening. The visual impact during construction and throughout the early operational years must be properly assessed.

We request a dedicated residential visual assessment from our actual home and garden, rather than relying solely on representative public-road viewpoints. This should include accurate photomontages showing the full substation, buildings, transformers, fencing, lighting and grid connection structures.

The assessment should include views at construction completion, approximately year 3 and year 10, and should consider winter conditions when deciduous vegetation provides less screening. A Zone of Theoretical Visibility assessment should also be provided to demonstrate the extent of visibility of the taller infrastructure.

Lighting is another important consideration. The application should clearly identify the proposed lighting locations, height, direction, intensity and operating arrangements. Lighting should be designed to minimise light spill and glare towards neighbouring homes, with enforceable controls on unnecessary night-time lighting.

The visual impact must be considered in the context of our home and its immediate rural surroundings, not simply in terms of whether the development can be screened from selected public viewpoints.

6. Cumulative Effects

The proposed substation cannot be assessed in isolation from the wider Greenhills development or other nearby electricity infrastructure.

Cork County Council requested a cumulative assessment of the solar farm and the permitted Lyrenacarriga Wind Farm under Planning Reference 25/6876. The later submission, Reference 26/2133, did not, in our view, adequately address the cumulative effects in a manner that resolves the concerns raised.

A separate 110kV substation, permitted under PA04.309121, is located approximately 4 kilometres away. Both substations propose to use the R634 for construction traffic. The potential for overlapping construction periods and shared use of the local road network must therefore be considered.

The Commission should assess the combined effects of the proposed 220kV substation, the wider Greenhills solar farm and battery development, the permitted 110kV substation and other relevant nearby infrastructure.

This should include cumulative construction traffic, noise, dust, visual effects, drainage and the combined impact on the rural residential environment. The assessment should consider

the timing and duration of construction activities as well as the long term operational presence of the infrastructure.

Separate planning applications should not result in the cumulative effects on neighbouring residents being overlooked. The Commission must have sufficient information to understand the combined impact of the development proposals on the surrounding area and on homes such as ours.

7. Emergency Risk and Fire Safety

The proposed station will contain two oil-filled transformers, a diesel generator and a fuel tank. Given the proximity of our home and our reliance on a private well, the potential consequences of a fire or significant accidental spill require careful and specific assessment.

Section 3.7.8 and Table 4.1 of the EIA Screening Report rate major accident risk as low. However, we cannot identify sufficient detail demonstrating how the potential consequences of a fire involving the transformers or diesel storage have been assessed, particularly in relation to neighbouring homes, groundwater and the proposed drainage arrangements.

Drawing 300101185-DR-200 states that the bunds are "TBC at Detailed Design". The oil volume of the transformers is not stated, and the application does not clearly demonstrate the capacity of the proposed containment arrangements or how contaminated firefighting water would be retained.

It is essential that any bunding and containment system is designed to accommodate the relevant oil volumes and that the drainage system can be isolated in an emergency. Contaminated water from firefighting operations must not be allowed to pass into a separator, soakaway, groundwater or neighbouring drainage channels without appropriate treatment and containment.

The application also does not provide sufficient detail about emergency access. We cannot identify a fire appliance swept-path assessment, gate-width details or a turning assessment for the red route to Site Access No. 1. Given the rural road network and the close proximity of our home, the Commission should be satisfied that emergency vehicles can access the site safely and efficiently in all relevant conditions.

Appendix M relates to the wider energy park. We ask the Commission to establish whether the emergency and fire arrangements have been specifically assessed for the substation and its proposed equipment, rather than relying on general arrangements for the wider development.

We request that the applicant provide detailed transformer oil volumes, bund capacity calculations, fuel storage details, firewater containment arrangements, drainage isolation measures and a site-specific emergency access assessment. The arrangements should also be informed by consultation with the relevant fire service.

The potential for a major accident may be considered unlikely, but the consequences of an incident must be properly assessed, particularly where existing homes and private water supplies are located in close proximity to the proposed development.

8. Regulation, Permanence and Future Obligations

There is limited specific guidance on the assessment of large electrical substations located immediately beside existing homes. This makes it particularly important that the Commission undertakes a thorough and independent assessment of the application and the environmental information submitted.

As competent authority under Directive 2011/92/EU, as amended by Directive 2014/52/EU, the Commission must satisfy itself that the environmental effects of the proposed development have been adequately identified and assessed, including relevant cumulative effects. It should not simply rely on the applicant's conclusions where important information remains unclear or incomplete.

The proposed substation is intended to become permanent electricity infrastructure and will be handed over to EirGrid. It is therefore not appropriate to assess it as though it will be removed when the solar farm reaches the end of its operational life.

The Commission should consider the long term implications of the substation remaining in this location, including its maintenance, noise, lighting, drainage, security and potential future requirements. The application should clearly establish the extent of the development being permitted and the infrastructure that may remain in place.

Any permission should clearly define the approved development and prevent future expansion or material alterations from taking place without the necessary planning approval and assessment.

We also request enforceable conditions covering noise limits, construction hours, drainage maintenance, groundwater and private-well monitoring, lighting, emergency arrangements and ongoing environmental monitoring. These conditions should identify who is responsible for carrying them out, how compliance will be checked and what action must be taken if standards are not met.

The long term nature of the infrastructure means that these obligations must be practical, enforceable and capable of being monitored throughout its operational life.

9. Our Home and Adjoining Land

Our home is situated in an established rural and agricultural setting. We own approximately 9 acres of land surrounding our home and immediately adjoining the red-line boundary of the wider development. We have lived in this area all our lives and have a detailed understanding of the land, its drainage characteristics and its use.

The proximity of the proposed substation means that construction activity and changes to the land could have effects beyond the development boundary. These include potential changes to surface water drainage, runoff, soil conditions, dust and access arrangements.

The applicant must demonstrate that the proposed drainage system will manage water within the development site and will not transfer additional runoff or drainage problems onto adjoining agricultural land or neighbouring properties. This is particularly important given the historic and unmapped drains identified in the application and the wet nature of the surrounding land.

The construction and operation of the substation should not adversely affect the safe and practical use of adjoining land. The assessment should consider the potential effects of construction traffic, site access, fencing, drainage works and any proposed planting or landscaping along the boundary.

The development will also fundamentally change the character of the immediate surroundings of our home. A substantial electrical compound, with transformers, buildings, fencing, lighting and tall grid connection structures, is a significant industrial feature in a rural residential setting.

We recognise the need for electricity infrastructure, but its provision should not come at the expense of inadequate assessment of the people and properties immediately beside it. The fact that the development is required for wider energy infrastructure does not remove the obligation to demonstrate that this is an appropriate location and that neighbouring residents and landowners will be properly protected.

Conclusion
We respectfully submit that the application has not adequately demonstrated that the proposed 220kV substation is suitable for this location, given its scale, permanent nature and proximity to our home and adjoining land.

In particular, we believe there are significant gaps in the assessment of private wells and groundwater protection, substation-specific construction and operational noise, low-frequency and tonal noise, residential visual impact, fire safety, emergency access, drainage and cumulative effects.

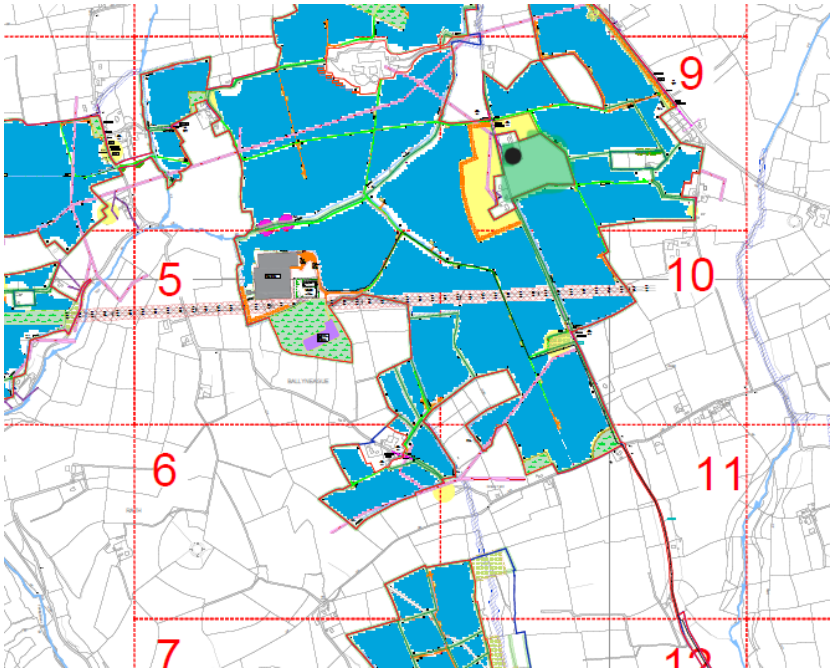
Our concerns are not simply about the presence of electricity infrastructure. They arise from the specific circumstances of this proposal, a substantial permanent substation located in close proximity to our home, in an area with identified drainage and groundwater sensitivities, beside a private well and adjoining agricultural land.

We therefore respectfully ask the Commission to refuse permission. Thank you for considering our Observation.

Yours faithfully,

Pat & Patricia McCarthy

Extract from Applicant's Site Layout Plan Showing Relationship of Proposed Development and our dwelling, marked with a black dot.



Existing views from the front of our property directly overlooking lands included within the proposed solar farm development







