Christopher Bulman
Monomoy,
Ballydaniel,
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Youghal,
Co. Cork.
P36 KR52

1st November 2026

The Secretary
An Coimisiún Pleanála
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,

I live approximately 640 metres from the proposed substation and wish to make this Observation on the application. It concerns only the 220kV substation and loop-in, as I believe this should be assessed in isolation as any further solar farm and battery storage will form separate applications and are not relied upon here. However, the substation is permanent. It will remain, and be handed to EirGrid, if any further proposed solar farm is decommissioned after 40 years. It must therefore be assessed in its own right.

Visual Impact

The proposed 220kV Air Insulated Substation (AIS) compound covers approximately 22,632 square metres (2.26 hectares) and includes a 438 square metre control building, a 590 square metre IPP building, two 220kV transformers, extensive outdoor electrical equipment, 2.6-metre-high security fencing, operational lighting, lightning protection masts approximately 18 metres high and lattice support structures reaching approximately 37.5 metres. This represents a substantial, permanent industrial installation within a rural landscape characterised by agricultural land, hedgerows and residential dwellings. The considerable height, scale and concentration of electrical infrastructure have the potential to fundamentally alter the rural character of the area and adversely affect the visual amenity of surrounding homes, including my property at Eircode P36 KR52.

The Landscape and Visual Impact Assessment (LVIA) acknowledges that residential receptors are

highly sensitive and reportedly identifies several dwellings surrounding the proposed substation on page 28. However, it does not appear to provide a sufficiently detailed assessment of the visual impacts on individual nearby residential properties. Viewpoints VP4 and VP5 are described as representative of local dwellings, yet the associated assessment appears to focus primarily on solar panels, hedgerows and landscape screening rather than the substantially taller substation infrastructure. **The assessment of solar panels with a maximum height of 3.4 metres cannot reasonably be relied upon to establish the visual acceptability of electrical structures reaching 18 metres and 37.5 metres.** The tallest structures would be approximately eleven times the height of the solar panels and may remain prominently visible above existing hedgerows and mature trees, even where lower-level equipment is screened.

Of particular concern is the apparent absence of a dedicated residential visual assessment, supported by appropriate Zone of Theoretical Visibility (ZTV) modelling and verified photomontages, demonstrating the full scale of the proposed substation from the nearest homes, including my own. Without such evidence, the Commission cannot readily establish the degree of visual intrusion, the extent to which the structures would dominate residential views, or the magnitude of the permanent change to the surrounding landscape. The visual assessment should specifically consider views from residential windows, gardens and regularly used outdoor spaces, taking account of the height of the infrastructure, local topography, viewing distances and the effectiveness of existing vegetation.

The LVIA also reportedly relies on proposed landscaping with a three-year establishment period. Such mitigation cannot be assumed to provide effective screening of structures up to 37.5 metres high. Newly planted vegetation will provide limited screening at completion, while even mature planting is unlikely to conceal the upper sections of the tallest electrical structures. The assessment should therefore demonstrate the likely visual effects at completion, after three years, after ten years and during winter when deciduous vegetation provides reduced screening. **Any residual visual impact must be assessed realistically rather than relying on optimistic assumptions about future planting.**

Furthermore, the choice of an outdoor Air Insulated Substation, with its extensive exposed electrical equipment and tall support structures, raises legitimate questions about whether a more compact or enclosed design could reduce the visual impact on nearby residents. The applicant should demonstrate that reasonable design and layout alternatives have been adequately considered, particularly where residential amenity may be significantly affected.

I am seriously concerned that the scale and permanent industrial appearance of this development could substantially diminish the enjoyment, rural outlook and residential amenity of my home, with potential consequences for its attractiveness, marketability and value. While property devaluation alone is not ordinarily a determining planning consideration, the underlying visual intrusion and loss of residential amenity are material planning matters. **I respectfully request that An Coimisiún Pleanála require a robust, property-specific assessment of the visual impacts of the entire substation, particularly its 18-metre and 37.5-metre structures, before determining whether the development is acceptable.** The acknowledged high sensitivity of nearby residential

receptors warrants particular scrutiny, and the visual effects of infrastructure of this scale should not be understated through reliance on screening assessments primarily concerned with much lower solar panels.

Noise and Vibration

I wish to raise serious concerns regarding the adequacy of the noise and vibration assessment for the proposed 220kV Air Insulated Substation and its potential impacts on my home at Eircode P36 KR52. My property is situated within the surrounding rural environment, where existing background noise levels may be relatively low, particularly during evenings and at night. The introduction of prolonged construction activity, heavy goods vehicle movements and permanent electrical infrastructure could materially alter the existing acoustic environment and adversely affect the peaceful enjoyment of my home and garden.

Appendix S, titled *Greenhills Renewable Energy Park: Noise and Vibration Impact Assessment*, addresses the wider solar farm, trenching, battery compound and substation collectively rather than providing a clearly identifiable, site-specific assessment of the infrastructure proposed under this application. Table 1.1 identifies distances of 5 and 8 metres to the wider energy park boundary, rather than distances from the actual substation platform shown on images. Crucially, no clearly established separation distance is provided between the proposed substation compound, its construction access routes and my home at P36 KR52. Without identifying residential receptors and their distances from the principal noise sources, it is difficult to determine whether the assessment adequately represents the likely impacts on nearby residents.

Section 1.2.5.1 refers to the BS 5228 construction noise assessment criterion of 65 dB(A) at residential receptors, where the relevant noise level persists for more than 10 days in any 15-day period or more than 40 days in six consecutive months. **The planning case VA04.324632** indicates a construction period of approximately 16 months. This creates a clear potential for prolonged disturbance, although the duration criterion alone does not establish that the noise threshold would be exceeded. No site-specific prediction has been demonstrated for my property in respect of excavation, earthmoving, compaction, construction machinery, vehicle movements or material deliveries associated with the substation platform and the haul route to Site Access No. 1. Construction vibration from heavy machinery and compaction should also be assessed, including potential disturbance within nearby dwellings.

Further concerns arise from apparent inconsistencies in the proposed earthworks quantities. **Drawing DR-213** identifies approximately 17,304 cubic metres of cut and 34,649 cubic metres of fill, while its accompanying notes reportedly specify 36,649 cubic metres of fill plus 9,490 cubic metres of capping stone. These discrepancies require clarification because the stated quantities indicate a substantial requirement for imported material, potentially generating significant heavy vehicle movements along the R634. The applicant should provide a reconciled earthworks balance, predicted vehicle numbers, construction traffic frequency and an assessment of the resulting noise and vibration at affected homes, including P36 KR52.

Of equal concern is **the permanent operational noise from the two 220kV transformers and**

associated electrical equipment. Transformers can generate continuous low-frequency and tonal humming, which may be particularly noticeable against a quiet rural background, including at night when other environmental noise diminishes. Prevailing south-westerly winds may influence sound propagation towards my property, depending on the relative locations of the equipment and dwelling. I have not identified an assessment demonstrating the predicted operational noise levels at P36 KR52 under representative daytime, night-time and meteorological conditions. A site-specific baseline noise survey and operational assessment in accordance with **BS 4142:2014+A1:2019**, including appropriate consideration of tonal and low-frequency characteristics, should be required.

The conclusions in the EIA Screening Report appear to rely on assessments of the wider energy park rather than clearly demonstrating the effects of this specific substation application. Given that no EIA Report solely specific to the current application has been submitted, the adequacy of the screening information and supporting noise evidence warrants particular scrutiny.

I respectfully request that An Coimisiún Pleanála require a dedicated construction and operational noise and vibration assessment identifying my property at P36 KR52 as a residential receptor, with verified separation distances, baseline monitoring, predicted noise levels, construction traffic calculations, appropriate mitigation measures and enforceable operational noise limits where necessary. Without this information, I submit that the potential effects on my residential amenity have not been adequately demonstrated and that the Commission should not assume these impacts to be insignificant.

Lack of Regulation

I have further concerns regarding the absence of specific national planning guidance addressing the siting, scale and environmental impacts of large 220kV Air Insulated Substations in proximity to established rural homes, including my property at Eircode P36 KR52. In the absence of sufficiently detailed national guidance for electrical infrastructure of this nature and scale, I respectfully submit that detailed examination must be given to the potential impacts on nearby residents, the rural landscape and the existing residential environment.

The proposed development represents a substantial industrial electrical installation within a rural setting. Its scale, including lattice structures reaching approximately 37.5 metres, outdoor transformers, associated electrical equipment and extensive compound infrastructure, raises legitimate questions regarding the suitability of its location and the protection of neighbouring residential amenity. The absence of specific planning guidance should not result in reduced scrutiny or an assumption that such infrastructure is acceptable simply because it supports renewable energy generation and national climate objectives.

While I acknowledge the importance of national renewable energy targets, electricity infrastructure and climate action policies, **these objectives must be considered alongside the statutory requirement to assess the environmental and planning consequences of the proposed development**. Section 15 of the Climate Action and Low Carbon Development Act 2015, as amended, requires relevant public bodies to perform their functions consistently with specified

climate objectives and plans, insofar as practicable. It does not automatically override other applicable planning and environmental obligations or remove the requirement to consider adverse effects on neighbouring residential properties.

I also refer to **An Bord Pleanála Reference 307935**, which I understand involved consideration of the character and suitability of a proposed small scale development. I request that the Commission examine the relevance of that decision and apply a consistent, evidence-based approach to the assessment of the present proposal, while recognising that each application must be determined on its own planning merits.

Of particular concern is the extent to which the applicant's supporting documentation adequately assesses the specific impacts on my dwelling at P36 KR52. The potential effects of industrial-scale infrastructure on residential visual amenity, construction and operational noise, landscape character and the peaceful enjoyment of established homes must be properly considered. These concerns should not be discounted solely because the development contributes to wider renewable energy or electricity network objectives.

I respectfully request that An Coimisiún Pleanála undertake its own independent and critical examination of the applicant's planning and environmental information, including the adequacy of any Environmental Impact Assessment screening determination and the potential for significant effects on nearby residential receptors. Where material information is absent, inconsistent or insufficiently substantiated, the Commission should seek appropriate clarification or further assessment before reaching its decision.

In conclusion, I submit that **national climate policy cannot, of itself, justify an otherwise unacceptable impact on residential amenity or the rural environment**. The Commission must be satisfied, on the basis of adequate evidence, that the proposed development is appropriately located, that its environmental effects have been properly assessed and that the legitimate interests of neighbouring residents, including those at P36 KR52, have received appropriate consideration.

Site Location

I further wise to raise my concerns regarding the selection of the proposed 220kV Air Insulated Substation site, situated approximately **640 metres from my home at Eircode P36 KR52**, and the apparent absence of a transparent and comprehensive assessment of reasonable alternative locations. Given the substantial scale, permanent nature and potential environmental impacts of this infrastructure, I consider it essential that the applicant demonstrate why this particular location was selected over other potentially suitable sites along the proposed 220kV grid connection route.

The application documentation does not appear to provide a detailed comparative assessment of alternative substation locations, particularly in relation to their proximity to established homes, visual impacts, construction and operational noise, drainage and flood risk, ground conditions and suitability of local access roads. Instead, landowner availability appears to have been a significant

factor influencing site selection. While land availability is a legitimate practical consideration, **it should not take precedence over the proper assessment of environmental impacts and residential amenity**, particularly where alternative locations may offer greater separation from sensitive residential receptors.

My home is approximately 640 metres from the proposed compound, and I am concerned that the site selection process has not adequately considered the potential effects on my property. These include the visual prominence of structures reaching approximately 37.5 metres, continuous operational noise from high-voltage transformers, construction disturbance, heavy goods vehicle movements and the cumulative industrialisation of the surrounding rural landscape. The applicant should demonstrate whether alternative locations or compound configurations could materially reduce these impacts on my home and other nearby residences.
The applicant's own community engagement summary reportedly identifies **342 residential properties within 1.5 kilometres** of the proposed development. This demonstrates the importance of residential amenity in the site selection process and raises questions about whether sufficient consideration has been given to locating the infrastructure farther from established dwellings. The number of nearby homes does not, by itself, establish an unacceptable impact, but it reinforces the need for a robust assessment of the chosen location and reasonable alternatives.

I am also concerned about the suitability of the proposed site in terms of drainage and ground conditions. The available drainage investigations appear to have been undertaken during unusually dry conditions witnessed in recent times, despite the area's reported susceptibility to wet ground conditions. I request that the Commission examine whether the drainage and flood risk assessments adequately reflect seasonal groundwater levels, prolonged rainfall and potential effects on surrounding lands and properties. These matters should form part of any meaningful comparison of alternative sites.

Furthermore, I have not identified a formal letter of support or site-specific endorsement from EirGrid confirming the suitability of this substation location. While such a letter is not necessarily a statutory requirement, clarification of the relevant grid connection and technical siting considerations would assist in establishing whether the chosen location is justified. I am also concerned that the local road network serving the site may be unsuitable for the volume and weight of heavy goods vehicles required during construction, particularly given the proposed earthworks and importation of construction materials.

Where Environmental Impact Assessment is required, Schedule 6 of the Planning and Development Regulations 2001, as amended, requires a description of the reasonable alternatives studied by the developer and the main reasons for the option chosen, taking account of environmental effects. Although a case specific EIAR has not been submitted, this does not remove the need for adequate environmental screening or a sufficiently reasoned planning justification for the selected site. I respectfully request that the Commission examine whether the absence of a case specific EIAR is justified and whether the application contains sufficient information to assess the environmental consequences of the chosen location.

I therefore request that An Coimisiún Pleanála critically examine the site selection process and require a clear, evidence-based explanation of why this location was chosen, including consideration of reasonable alternative sites, residential separation distances, drainage conditions, environmental impacts and construction access arrangements. In the absence of such justification, I submit that the suitability of locating a permanent 220kV substation approximately 640 metres from my home at P36 KR52 has not been adequately demonstrated.

Lack of Public Consultation

I wish to express apprehension regarding the adequacy, transparency and effectiveness of the public consultation undertaken for the proposed 220kV Air Insulated Substation, located approximately **640 metres from my home at Eircode P36 KR52**. Despite the substantial scale and permanent nature of this industrial electrical infrastructure, I have not been afforded a meaningful opportunity to engage with the applicant on the detailed substation proposal as a distinct development. The information available to me concerning its final design, scale, location and potential effects on my property has principally emerged through the formal planning application documentation, rather than through informed consultation before the application was submitted.

Appendix A, the applicant's community engagement summary, reportedly identifies approximately **342 residential properties within 1.5 kilometres** of the proposed development, with direct engagement involving 42 households within 1 kilometre. My home falls within this closer residential area, yet I am concerned that the consultation process did not adequately address the potential effects on my property. Appendix A also acknowledges that some consultation letters were returned undelivered because they did not identify residents by name. This raises legitimate concerns about whether reasonable efforts were made to ensure that affected households actually received information about the proposal. The distribution of newsletters cannot, in itself, demonstrate effective engagement where delivery was unsuccessful or residents were not adequately informed of the development's full nature and scale.

The consultation sessions held at **Inch Community Centre in August** also appear to have consisted primarily of pre-booked individual appointments rather than a fully open public meeting at which residents could collectively examine the proposed substation, question its location and discuss cumulative impacts. I understand that additional meeting requests from other residents were not facilitated. This approach potentially limited opportunities for affected households to raise shared concerns regarding the industrial scale of the development, residential proximity, visual intrusion, transformer noise, construction traffic, drainage and the combined effects of the wider renewable energy infrastructure.

Of particular concern is that **Newsletter 2 reportedly stated that the substation layout was still being drafted and that the information presented represented a study area rather than a finalised development proposal**. Residents raising concerns about the height, scale and visual effects of the proposed infrastructure were reportedly advised that photomontages would be provided with the planning application. Consequently, affected residents were not given a meaningful opportunity to examine and comment upon the final layout, structures reaching approximately 37.5 metres, or their potential visual effects before the application was lodged.

Consultation on an indicative concept cannot reasonably be presented as equivalent to informed engagement on the substantially developed proposal now before the Commission.

For my home at P36 KR52, approximately 640 metres from the proposed compound, the absence of detailed information during consultation is particularly concerning. I consider that I should have been given a reasonable opportunity to understand the likely visual impact from my property, potential construction and operational noise, the proposed access arrangements and the justification for selecting this location. These are matters directly affecting the residential amenity and long-term enjoyment of my home.

I recognise that the statutory Strategic Infrastructure Development process provides an opportunity for formal public observations and that the adequacy of pre-application community engagement must be distinguished from compliance with statutory consultation requirements. Nevertheless, **the applicant's engagement record should not be treated as evidence of informed public acceptance or comprehensive consultation with affected residents**, particularly where the detailed design and supporting visual information were unavailable during the engagement process.

I respectfully request that An Coimisiún Pleanála critically examine the applicant's consultation record, including the undelivered correspondence, the extent of direct engagement with households within 1 kilometre, the nature of the Inch Community Centre sessions and the information actually available to residents at that time. I further request that the Commission give appropriate consideration to the concerns of residents such as myself who are now seeking to assess the full implications of a permanent 220kV substation close to their homes. Where material environmental information remains inadequate, the Commission should seek the necessary clarification and ensure that any applicable statutory public participation requirements are fully observed before determining the application.

Cumulative Effect

A major concern for my household is the apparent failure to adequately assess the cumulative impacts of the proposed Greenhills 220kV substation alongside other permitted and proposed energy infrastructure developments in the surrounding area. Planning permission has reportedly been granted for the **17-turbine Lyrenacarriga Wind Farm and a separate substation under An Coimisiún Pleanála Reference PA04.309121**. These developments, together with the Greenhills Solar Farm applications under **Cork County Council References 25/6876 and 26/2133**, and the current substation application **VA04.324632**, must be considered collectively when assessing their potential cumulative environmental effects.

Of particular importance worth observing is that **Cork County Council had already requested a cumulative assessment of the solar farm and Lyrenacarriga Wind Farm under Planning Reference 25/6876**. I am concerned that this request was not adequately addressed in the subsequent application under Reference 26/2133. The Commission should give appropriate weight to the Council's previously expressed concerns and establish whether the cumulative assessment it requested has been satisfactorily provided.

The submission of separate planning applications must not result in relevant cumulative environmental effects being overlooked. Where Environmental Impact Assessment screening is undertaken, the potential cumulative effects with other existing and approved developments must be considered in accordance with the applicable statutory requirements. The Commission should also examine whether the overall development context gives rise to likely significant environmental effects requiring further assessment.

A significant concern for my household at **Eircode P36 KR52**, approximately 640 metres from the proposed Greenhills substation, is the cumulative impact of construction traffic using the **R634**. Both substation developments may require substantial heavy goods vehicle movements, abnormal loads and imported construction materials. Overlapping or successive construction programmes could significantly increase noise, vibration, dust, road deterioration, traffic disruption and road safety risks, potentially extending disturbance to local residents over several years.

The cumulative effects should be assessed both spatially, across the affected road network and surrounding residential properties, including overlapping and successive construction periods. It is insufficient to assess traffic, noise and disturbance from each development separately if their combined effects may be materially greater.

I am equally concerned about the cumulative visual and operational impacts of two substantial high-voltage substations and associated renewable energy infrastructure within the same rural area. Their combined presence could materially alter the existing agricultural landscape, increase industrial infrastructure and adversely affect the rural outlook, residential amenity and peaceful enjoyment of nearby homes, including my own.

I respectfully request that An Coimisiún Pleanála require a comprehensive and coordinated cumulative impact assessment encompassing all the above planning references, expressly addressing Cork County Council's earlier request for cumulative assessment. This should consider construction traffic, noise, vibration, dust, road safety, landscape and visual effects, and the potential for overlapping or successive construction periods.

Until these cumulative effects have been properly assessed, and Cork County Council's previously identified concerns demonstrably addressed, I submit that the Commission should not conclude that the proposed development would have an acceptable impact on the surrounding rural community or residential amenity.

<u>Emergency Risk and Fire</u>

I wish to highlight serious concerns regarding the apparent inadequacy of the fire safety, major accident risk and emergency access assessments for the proposed permanent 220kV Air Insulated Substation, located approximately **640 metres from my home at Eircode P36 KR52**. Given the scale of the proposed electrical infrastructure, the presence of oil-filled transformers, a diesel generator and associated fuel storage, I consider it essential that the applicant demonstrate that foreseeable fire and accident scenarios have been adequately assessed and that effective emergency response

arrangements can be provided without unacceptable risks to surrounding residents, properties and the rural environment.

Section 4.3 of the Planning and Environmental Report identifies two transformers, a diesel generator and a fuel tank, while the site notice describes the transformers as oil-filled and bunded. However, **Section 3.7.8 and Table 4.1 of the EIA Screening Report** reportedly classify the risk of major accidents as low without providing a clearly identifiable, site-specific assessment of potential transformer fires, diesel fuel fires, oil releases or contaminated firefighting water.

Appendix H also does not appear to address these scenarios in sufficient detail. Schedule 7 of the Planning and Development Regulations 2001, as amended, requires consideration, where relevant, of the risk of major accidents and disasters in determining whether a development is likely to have significant environmental effects. A general classification of risk as low should therefore be supported by an explanation of the likelihood, potential consequences and proposed mitigation of credible accident scenarios.

Of particular concern is **Drawing 300101185-DR-200**, which reportedly identifies transformer bund arrangements as **"TBC at Detailed Design"**. The application does not appear to specify the transformer oil volumes, proposed bund capacities or demonstrate how contaminated firefighting water would be safely contained during a major incident. There is also insufficient clarity regarding whether firefighting runoff could enter the proposed drainage system, pass through an oil separator and ultimately discharge to a soakaway. An oil separator should not be assumed to provide adequate treatment or containment of potentially contaminated firefighting water. Given the permanent nature of the installation, the applicant should establish at planning stage that a technically feasible and environmentally acceptable containment strategy can be implemented, with appropriate design details secured before construction and operation.

For my home at P36 KR52, I am particularly concerned about the potential consequences of a serious transformer or fuel-related fire, including smoke emissions, possible airborne contaminants, environmental pollution and disruption to local roads during an emergency response. Although my property is approximately 640 metres from the proposed compound, the potential effects of a significant incident should be considered in the context of prevailing wind conditions, local topography, nearby woodland and the location of surrounding dwellings. **I am not suggesting that a major fire is inevitable, but that the reasonably foreseeable consequences should be assessed and appropriate safeguards demonstrated before permission is granted.**

I also have significant concerns regarding the adequacy of emergency vehicle access. The submitted documentation does not appear to include a fire appliance swept-path analysis from **Site Access No. 1 to the transformer bays**, nor does it clearly establish the available gate widths, turning arrangements, access road load-bearing capacity or the suitability of the route identified in red on **Drawing DR-100B**. Appendix M reportedly addresses the wider energy park rather than demonstrating the suitability of this specific emergency access route. From my local knowledge, the rural roads serving the site are narrow and may present difficulties for large emergency vehicles, particularly during prolonged wet weather. The proximity of woodland further reinforces

the importance of assessing fire spread potential and ensuring that emergency services can reach the installation safely and promptly.

The applicant should demonstrate that suitable access arrangements are available for emergency appliances, including during adverse weather, and that the proposed layout provides sufficient manoeuvring space around critical equipment. Consideration should also be given to emergency water supplies, fire separation distances, transformer fire protection measures, emergency isolation procedures and arrangements for containing contaminated runoff, particularly in an area where most households rely on wells for drinking water.

I respectfully request that An Coimisiún Pleanála require a site-specific fire and major accident risk assessment, including credible transformer and diesel fuel fire scenarios, verified bund and firefighting water containment arrangements, and a detailed emergency access assessment supported by swept-path drawings. The Commission should also establish whether the proposed safeguards are sufficient to protect nearby residential properties, including P36 KR52, and the surrounding environment.

In the absence of adequate evidence demonstrating that foreseeable fire risks, pollution pathways and emergency access constraints have been properly addressed, I submit that the Commission should not simply accept the applicant's conclusion that the risk of major accidents is low. These matters are fundamental to determining whether a permanent high-voltage electrical installation of this scale is appropriately located and can operate safely within a rural residential environment.

Conclusion

For these reasons I respectfully ask the Commission to refuse permission. At a minimum, I ask it to request further information on the matters raised, including a residential visual assessment, a noise assessment specific to this station and access, a cumulative assessment, an assessment of alternatives, and a fire and emergency access assessment.

Thank you for considering this Observation.

Is mise,

Christopher Bulman