Elaine O'Brien
4 Inch na Rince
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2nd November 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,

I live between 500 metres and 1 kilometre from the proposed development and wish to make this Observation. It concerns the substation and loop-in only. I do not object to renewable energy in principle. However, the substation is permanent. It will remain, and be handed to EirGrid, if the solar farm is decommissioned, so it must be assessed as permanent infrastructure in its own right.

Water Pollution

The site drains to the Carignass, Knocknappagh, Ballyleague, Ballygarvin and Youghal Park streams and to the Tourig and Glendine rivers, which flow to the River Blackwater, a European designated site. The CEMP (Appendix F, Section 3.2) describes an extensive network of historic drains and unmapped channels, which gives pollution a pathway downstream. The CEMP (Sections 3.1 and 3.5) also accepts that EPA designated drinking water rivers are sensitive receptors.

The earthworks are substantial. CEMP Appendix B (Spoil Management Plan) refers to about 13,600 cubic metres of topsoil and 39,690 cubic metres of subsoil, with recontouring of 4.71 hectares. This leaves bare ground exposed to rainfall and silt-laden runoff. The site is largely underlain by the Glenville Groundwater Body, a locally important aquifer. Groundwater vulnerability is mostly high, and extreme near rivers and to the south. Despite this, drainage relies on infiltration and soakaways, including a 5m x 5m x 1.8m soakaway in the compound. Two 33/220kV transformers will contain oil. Appendix C (Section 11.5.4.4) acknowledges that a risk of accidental spillages and leaks remains despite mitigation. The extent of the controls proposed, including silt fences, settlement tanks, flocculation, turbidity monitoring and daily pH testing, shows that the applicant itself regards the risk as significant. The applicant should state what water will reach the soakaway and how it will be treated before infiltration. Given the connectivity to the Blackwater, the Commission must be satisfied under Article 6(3) of the Habitats Directive that adverse effects can be excluded.

Hydrology and Flooding

Appendix N confirms that the substation will have a "moderate, adverse and permanent" effect on the land it occupies. It records excavation of up to about 3.6 metres and about 9,320 cubic metres of imported

capping stone. Local observation is that this ground is frequently wet and waterlogged.

Appendix N (Section 1.8.3) states that the site is outside mapped flood zones. It also acknowledges that the adjoining Tourig_020 and Glendine_010 watercourses have mapped flooding in low and medium probability zones. It further records that "local knowledge has also indicated that local flooding is occurring within the same river sub-basin". The Flood Risk Assessment (Section 1.9.1.1) calculates a net increase in runoff in a 1-in-100-year event of about 0.016 to 0.185 cubic metres per second, up to about 4.15 percent of the relevant micro-catchment. It accepts that, without mitigation, flooding could occur on site or downstream. The absence of a flood zone beneath the platform does not mean the absence of risk. The applicant should demonstrate with site-specific evidence that flow paths, infiltration, storage and the timing of downstream flows will not worsen flooding elsewhere in the sub-basin.

Cumulative Effect

In its assessment of Planning Ref. 25/6876, Cork County Council asked for a cumulative assessment of the proposed solar farm and the permitted Lyrenacarriga Wind Farm. I understand that the later submission under Planning Ref. 26/2133 did not adequately provide it, and did not properly take this 220kV substation into account. Two substations are now proposed about 4 km apart, the permitted 110kV substation (PA04.309121) and this 220kV substation. Construction traffic for both is proposed to use the R634. The fact that these are separate applications should not prevent the Commission assessing their combined landscape, visual and construction effects. These include traffic, noise, dust and road safety, where construction periods overlap. The assessment should be both spatial and temporal.

Emergency Risk and Fire

The station will contain up to two 220kV transformers, switchgear, a diesel generator and a fuel tank (Planning and Environmental Report, Section 4.3). The EIA Screening Report (Section 3.7.8 and Table 4.1) rates the risk of major accidents as "Low" but does not assess a fire at the oil-filled transformers or the diesel tank. That is a gap, given the requirement of Schedule 7 of the Planning and Development Regulations 2001, as amended, to consider the risk of major accidents and disasters.

Drawing 300101185-DR-200 shows a full-retention separator and soakaways, and notes "Bunds to be fitted with TBC at Detailed Design". The oil volume is not stated. Nothing shows that a bund would retain transformer oil together with firefighting water, rather than passing contaminated water towards a soakaway above a vulnerable aquifer. These matters should be demonstrated now and not left to detailed design.

Emergency access is also unaddressed. The access sought is the red route to Site Access No. 1 on the R634 (Drawing 300101185-DR-100B). The application contains no fire appliance swept path, gate width or turning assessment for that route, and Appendix M is a traffic assessment for the energy park, not this route.

Noise and Vibration

Appendix S is titled for the Greenhills Renewable Energy Park and covers the solar farm, battery compound and substation together. It is not an assessment of this application. The distances in Table 1.1 (5 m and 8 m) are to the energy park boundary, not to the substation platform, and no distance is given from the compound or access to any house. Chapter 15 of the Planning and Environmental Report and Section 3.7.6 of the Screening Report rely on that appendix, and there is no EIAR.

The report's own BS 5228 test is 65 dB at a house for more than 10 days in any 15, or more than 40 days

in six months. Section 5.5.6.1 puts these works at about 16 months, yet the level has not been calculated for the platform, the access or the haul route to the R634. The fill figures are also inconsistent. Drawing 300101185-DR-213 gives a cut of 17,304 cubic metres and a fill of 34,649 in its summary, but 36,649 in its notes, plus 9,490 of capping stone. Section 5.5.6.1 gives 25,013 and says all excavated material will be reused. On the drawing figures, fill exceeds cut, so material must be imported, with associated traffic and noise on the R634.

Conclusion

For these reasons I respectfully ask the Commission to refuse permission. At a minimum, I ask that it request further information on drainage and groundwater protection, flood risk, cumulative assessment, fire and emergency access, and a site-specific noise and vibration assessment of this development.

Is mise,

Elaine O'Brien