OBSERVATION/SUBMISSION TO PLANNING APPLICATION

Case Reference: 323761

Gerard Burke

Gurrane

Barnaderg

Tuam

Galway

To: An Coimisiún Pleanála

64 Marlborough Street

Dublin 1

D01 V902

Date: 16 November 2025

Re: Observation/Submission to proposed wind energy development at Cooloo Wind Farm

Location: Cloondahamper, Cloonascragh, Elmhill, Cooloo, Lecarrow, Dangan Eighter, Lissavally, Slievegorm - Co. Galway

Applicant: Neoen Renewables Ireland Limited

Dear Sir/Madam,

I live in Gurrane which is 5km from the proposed windfarm development and I have land and farm building in Tygreenane which is located 1.5 km from proposed turbines T3 and T6. We depend on the Barnaderg/Gortbeg water scheme for the water supply to our house and are very concerned that the water supply will be disrupted or contaminated by this industrial scale development. The same water supply is also used for my farm land in Tygreenane. I have 2 children and I also fear for their future in the area, in particular I am concerned that they may not be able to build their homes on our family land in Tygreenane due to planning restrictions on the lands proximity to the wind farm. I also greatly fear the impact low frequency noise and shadow flicker will have on my health and wellbeing while working on the land in Tygreenane. I strongly urge An Coimisiún Pleanála to refuse the planning application for this windfarm for these reasons and the reasons listed below.

Community Consultation and Engagement

The basis that the community consultation process was carried out by Neoen and MKO for the proposed Cooloo Wind Farm has been fundamentally inadequate and does not meet the standards of meaningful

public engagement required under the Draft Revised Wind Energy Development Guidelines (2019) or An Bord Pleanála's Strategic Infrastructure Development protocols.

The consultation was poorly publicised, using the Irish Examiner, a Cork-based paper with minimal reach in north-east Galway, for statutory notices instead of the Tuam Herald, the area's primary local newspaper. This choice deprived many residents of awareness and opportunity to participate.

Claims of engagement with "local groups, clubs and schools" are inaccurate. Key organisations such as Killererin Community Council and Killererin GAA received no correspondence or invitations to contribute. Furthermore, no public consultation meeting was held in Moylough, where seven of the nine turbines are proposed, further excluding the most affected residents.

Reported "door-to-door engagement" reached just 55 homes within 1 km of the turbines, yielding only ten written responses which is an unacceptably low level of participation for a project of this scale. Reliance on online materials was ineffective given poor broadband in the area.

Overall, the process was selective, poorly targeted, and misleading in its presentation of local engagement. These failings undermine the project's compliance with public participation standards and should be given significant weight in An Bord Pleanála's assessment.

Planning Framework and Guidelines

The continued reliance on the Wind Energy Development Guidelines 2006 is no longer appropriate or proportionate given the significant evolution of wind energy technology and the clear advancements in scientific understanding since their publication nearly two decades ago. The 2006 Guidelines were developed in an era when turbines were typically less than 100 metres in height and generated 1–2 MW of power. The turbines in this proposed development will be 180 metres and produce approximately 6 MW of power. This will result in greater visual, acoustic, and environmental impacts than those contemplated in 2006.

The fact that the Wind Energy Development Guidelines 2006 has been acknowledged in the Dáil many times by many different people. In 2013 Deputy Michéal Martin told, the then Taoiseach, Enda Kenny that the guidelines were outdated and were never framed in the context of the new technology. Yet in 2025 Tánaiste Simon Harris is still saying in the Dáil that he acknowledges that the guidelines are outdated and that there is a specific commitment from the Government to prioritise the publication of new guidelines.

It is therefore unreasonable and contrary to the principles of proper planning and sustainable development for An Coimisiún Pleanála to continue to rely solely on the 2006 Guidelines. An Coimisiún Pleanála must make sure that any decision made is not based on outdated standards.

Barnaderg Gortbeg Group Water Scheme

I use the water from Barnaderg Gortbeg Group Water Scheme as my main source of drinking water for my household. The water is of excellent quality and I am very concerned that pollution of various types such as silt, sediment and other contaminants will enter the water source, causing me and my family harm. With the location of two Turbines within the Source Protection Area (SPA) I believe the Cooloo Windfarm should not be granted permission whatsoever, especially in such a highly karsified and hydrologically sensitive area.

Right to Own/Transfer Property

Article 43.1.2 of Bunreacht na hÉireann provides that "the State accordingly guarantees to pass no law attempting to abolish the right of private ownership or the general right to transfer, bequeath, and inherit property." Granting permission for this wind farm development would effectively undermine this constitutional protection. Landowners and farmers within the affected area would face significant restrictions, as land situated near turbines would become unsuitable for residential development. This would prevent families from

transferring land for the purpose of building homes for future generations, thereby eroding their practical rights of ownership and inheritance.

Furthermore, Article 43.2.1 acknowledges that the exercise of property rights must be regulated by the principles of social justice. However, this proposed development cannot be regarded as socially just. It disproportionately burdens local residents while providing little to no direct benefit to the community. Those of us living in the area would experience substantial and lasting impacts — including increased traffic and road closures during construction, ongoing noise pollution, shadow flicker, and significant visual intrusion on our landscape. In addition, there remains insufficient scientific evidence to conclusively demonstrate that large-scale wind farms pose no long-term health risks to nearby residents. In these circumstances, permitting this development would be neither fair nor consistent with the principles of social justice recognised under Article 43.

Property Devaluation

The 2023 CERIS (Centre for Economic Research on Inclusivity and Sustainability) paper – 'Wind Turbines and House Prices Along the West of Ireland: A Hedonic Pricing Approach' – surveyed the prices of houses located near windfarms in seven counties.

The paper states that: 'The analysis finds a robust and significant reduction in property value of -14.7% within 1km of a turbine' and that 'Back-of-the-envelope calculations suggest that the total loss in value for houses within 1km of a turbine in the case counties is approximately €6.8 million.'

Galway County Council is an agent for the state of the Republic of Ireland and as such is responsible to uphold Article 40 of the Irish Constitution which states – 'the state shall in particular by its laws protect as best it may from unjust attack and in the case of injustice done vindicate the life, person, good name, and property rights of every citizen.'

I am aware that the Barnaderg Cooloo Wind Farm Action Collective have spoken to a local auctioneer, who said that he had trouble selling a house in County Mayo because it was close to several wind turbines. The auctioneer was able to site a specific instance whereby a married couple looked at the house and decided not to buy it. The auctioneer said that the presence of the wind turbines was a crucial factor in the couple's decision not to buy the house. The owners of this house ended up selling for less money than the couple had been initially willing to pay for the house.

Noise

The proposed Cooloo Wind Farm should be refused planning permission, citing the Irish High Court case Byrne & Moorhead v ABO Energy [2025] IEHC 330, in which wind turbine noise was legally recognized as a private nuisance, leading to the permanent shutdown of turbines in County Wexford. The objection highlights that the Cooloo proposal fails to address proven low-frequency and amplitude-modulated noise impacts similar to those measured in the Wexford case, where sound levels far exceeded safe limits and caused serious disturbance to residents living over a kilometre away. The Cooloo project's reliance on outdated ETSU-style noise standards, which disregard low-frequency and tonal effects, is therefore deemed inadequate to protect public health and residential amenity.

The proposed turbines at Cooloo—significantly larger than those involved in the Wexford case—are likely to generate even stronger low-frequency noise that travels farther and fluctuates more intensely under local atmospheric conditions. This increases the risk of nuisance and potential legal liability for both developers and planning authorities. Ireland's 2006 wind energy guidelines are outdated and fail to reflect modern scientific understanding of turbine acoustics. Until revised national standards are adopted, approving large-scale wind farms under obsolete criteria would be unsafe and contrary to the public interest. Planning permission should therefore be refused due to the clear and foreseeable risk of harm to residential amenities,

the inadequacy of current noise controls, and the legal precedent confirming wind turbine noise as a substantial nuisance.

Shadow Flicker

Chapter 5 of the EIAR ('Population and Human Health') states that the nearest residential property is 720 metres away from the closest wind turbine (T8) However there is no mention of a house (Eircode H53 FF64) that is 530 metres away from Turbines 4 and 5 and 600 metres away from Turbine 8. This property is not accounted for at all in the EIAR.

The Wind Energy Guidelines of 2006 advise a setback distance between a wind turbine and a house of 500 metres. These guidelines are almost 20 years old and outdated.

The 2019 Draft Wind Energy Development Guidelines suggest a mandatory minimum setback distance of 500 metres between a wind turbine and the nearest residential property, and 4 times the tip height, whichever is greater.

Shadow flicker, caused by the rotating blades of wind turbines casting intermittent shadows, can have a significant impact on nearby residents. Prolonged exposure to these flickering shadows can cause visual discomfort, headaches, and even trigger migraines in susceptible individuals. Adequate setback distances and screening measures should be implemented to minimize the potential health effects associated with shadow flicker.

National Schools

The presence of wind turbines near schools can have a range of impacts on students, staff, and the overall learning environment. Wind turbines produce both audible noise and low-frequency infrasound, which can be noticeable inside buildings, which can cause a distraction. This constant distraction will interfere with children's attention and overall cognitive performance, making it more difficult for students to focus on learning.

- Cooloo NS is 1.59km away from the nearest wind turbine.
- Brierfield NS is 1.35 km away from the nearest wind turbine.
- Barnaderg NS is located approximately 3.49 km from the nearest wind turbine.

Shadow flicker caused by rotating turbine blades can create intermittent light in classrooms, which can be distracting and, in some cases, uncomfortable or stressful for children. The noise and shadow flicker will also greatly impact on the children in the school who have an additional need. There is a lack of research to state the impact on these children.

In addition to the above, during the construction phase and while laying the cabling, the roads will experience increased traffic and road closures. This will impact children travelling to and from school. While the severity of these impacts depends on distance from the turbines, it is clear that wind turbines in close proximity to schools have the potential to disrupt learning, reduce student wellbeing, and interfere with the overall educational experience.

Barnaderg National School

Barnaderg National School is located approximately 3.49 km from Turbine No 1.

The turbines being this close to the school will no doubt have an impact on the education of the children in Barnaderg NS. The school will suffer from noise pollution and infrasound. In addition to this, during the construction phase and while laying cabling the roads to and from the school will be impacted by road closures, traffic, additional noise and dust. Again, all of this will impact on the children of the school.

I am also concerned that if t planning permission is granted less people will be moving to or building in the area of Barnaderg. This will lead to fewer children in the community and may lead to the school losing teachers, and ultimately the school closure.

Farming

There are dairy and dry-stock farmers in Barnaderg, Cooloo and the surrounding areas, both full-time and part-time. Holdings vary in size. Many of these farmers depend on their livestock performing well in order to pay their bills. Also, those who are farming in the area enjoy the work they do, in the absence of shadow flicker, noise or visual pollution. If this development is granted their livelihoods will be impacted.

The 'Importance of Noise Hygiene in Dairy Cattle Farming – A Review' (Published November 1st of 2023 by Dimo Dimov, Toncho Penev and Ivaylo Marinov) details how vibration and noise from a milking parlour can negatively impact the milk yield and milk quality of a dairy cow. The paper also discusses how exposing animals to noise from an unfamiliar source can cause them stress.

It is also important to note that the developer has not taken into account the ways in which farmers depend on the local roads for moving cattle and for access to their land when going about their daily tasks within their farms.

Reference:

Dimov, D., Penev, T., and Marinov, I. (2023) 'Importance of Noise Hygiene in Dairy Cattle Farming – A Review'. Featured Position and Review Papers in Acoustics Science.

Available at: https://www.mdpi.com/2624-599X/5/4/59.

Road disruption during construction

I wish to object to the proposed development on the grounds of significant traffic and road safety impacts during construction, particularly in relation to abnormal load deliveries. The Traffic Management Plan (Appendix 15-2) lacks essential detail, including the number, timing and routing of heavy goods and turbine loads, and commitments to off-peak scheduling. Without clear and enforceable mitigation, there is a risk of damage to narrow rural roads, verges and drainage, along with conflicts between construction vehicles, farm traffic and school transport. No robust plan has been presented for road strengthening, maintenance or reinstatement. The absence of detailed community-specific measures leaves local access, amenity and safety inadequately protected. Until comprehensive information and binding commitments are provided, the proposal represents an unacceptable risk to road infrastructure and rural community wellbeing. Having roads closed for a combined 210 days (at a minimum) is unacceptable. It is also unacceptable for locals to have diversions of up to 13.7km per journey for the duration of this project.

Climate impact

I object to the proposed Cooloo Wind Farm because it would damage Ireland's ability to meet its climate targets under the Climate Action and Low Carbon Development Act 2021. By excavating peat and clearing mature forest, this project will release large amounts of stored carbon and increase emissions from the Land Use, Land Use Change and Forestry (LULUCF) sector, which is already a major source of greenhouse gases. Under the law, all public bodies must act consistently with national carbon budgets. Allowing a development that worsens LULUCF emissions contradicts that duty and the EU 'no debit' rule under Regulation (EU) 2018/841. Renewable energy projects are important, but they should not come at the cost of destroying carbon-rich habitats or undermining Ireland's long-term environmental obligations.

Battery storage and substation safety risks

I object on the grounds of unacceptable risks to public health, fire safety, and water contamination posed by the proposed substation and Battery Energy Storage System (BESS).

The developer's own Appendix 12-3 Battery Storage Noise Assessment (Sept 2025) identifies fifteen CATL EnerC+ battery containers containing lithium-ion (LiFePO4) systems manufactured by CATL. Predicted operational noise levels reach up to 31 dB LAeq at nearby homes, representing an increase of +11 to +14 dB above background levels. The report itself classifies this as a "significant adverse impact" on residential amenity. Scientific research shows that chronic noise above 30 dB can raise risks of cardiovascular disease and sleep disturbance.

Lithium-ion Battery Energy Storage System (BESS) installations worldwide have experienced fires and explosions that release toxic gases such as hydrogen fluoride and hydrogen cyanide. Research shows that fire-water run-off from lithium-ion battery fires can contain hydrofluoric acid, dissolved metals, and fluorinated organic compounds, which may contaminate nearby soil and waterways if not properly contained.

This proposed Substation and BESS would have a major impact on The Lough Corrib Special Area of Conservation, as a nearby stream eventually flows into Lough Corrib, potentially harming aquatic life and drinking water sources.

Based on the absence of any Fire Safety Management Plan within Appendix 12-3, it appears that nearby fire services are not equipped or trained to respond effectively to large-scale lithium-ion battery fires.

In Grace & Others v. An Bórd Pleanála (2017), the Supreme Court ruled that a residence within one kilometer of a proposed development site had standing to argue against consent. This case emphasizes the significance of thoroughly evaluating related infrastructure such as the substation and BESS, which ought to be included in the same consenting procedure as the wind farm itself.

With homes, farmland, and livestock within a few hundred metres of the proposed site, this industrial-scale development poses an unacceptable risk to community health, safety, and environmental integrity. Until independent noise, fire-safety, and hydrological risk audits are completed and verified by competent authorities, I urge An Bord Pleanála to refuse this application in accordance with the Precautionary Principle.

References:

- National Fire Protection Association (NFPA) (2020) Hazard Assessment of Lithium-Ion Battery Energy Storage Systems
- TNEI Ireland (2025) Appendix 12-3 Battery Storage Noise Assessment
- World Health Organization (WHO) (2018) Environmental Noise Guidelines for the European Region
- Irish Legal News (2017) Supreme Court: Challenge to wind farm development referred to CJEU

Bird collision risk

I object to the proposed development on the grounds that the Collision Risk Assessment (Appendix 7-6, MKO 2025) is methodologically and scientifically inadequate to protect legally protected bird species.

The assessment relies on the theoretical Band Model, which assumes fixed avoidance rates and static behaviour, without validation using telemetry or local field data. Survey coverage is temporally and spatially limited, missing key migration and nocturnal flight periods. This approach fails to capture the real-world behaviour of birds in the area.

The use of a 99.5% avoidance rate for Whooper Swans, without local validation, significantly underestimates the risk of collision. Evidence from Irish Wetlands Bird Survey (I-WeBS) and BirdWatch Ireland indicates that Whooper Swans routinely commute between Horseleap Lough and surrounding feeding areas at low altitudes that overlap turbine rotor heights. The conclusion of 'negligible risk' is therefore unsupported and unreliable.

The report fails to consider cumulative impacts with other regional wind farms or infrastructure, contrary to EU Directive 2009/147/EC (Birds Directive) and Article 6(3) of the Habitats Directive. This is a serious omission

given the presence of multiple wind energy developments in the region.

Mitigation measures are undefined and untested. Key figures such as flightline maps (e.g., Figure 7-6-1) are omitted, hindering independent review and transparency. Without clear, evidence-based mitigation strategies, there is no guarantee that collision risks can be managed effectively.

Under the Birds Directive (2009/147/EC) and the Habitats Directive, Ireland has a legal obligation to protect migratory and resident bird populations. The assessment as presented does not provide sufficient evidence that these obligations can be met.

I respectfully request that the planning authority reject or defer this application pending an independent, peer-reviewed reassessment. This should include:

- Full telemetry and radar data for local bird populations
- Expanded seasonal coverage including migration and nocturnal periods
- Transparent disclosure of all field survey data and model assumptions
- Cumulative impact assessment with regional wind farms
- Defined, evidence-based mitigation strategies

References:

- MKO (2025). Appendix 7-6 Collision Risk Assessment, Cooloo Wind Farm EIA
- Band, W., Madders, M. & Whitfield, D. (2007). Developing field and analytical methods to assess avian collision risk at wind farms
- Scottish Natural Heritage (2018). Avoidance Rates for the Onshore Wind Farm Collision Risk Model
- NatureScot (2021). Research Report 909: Using a collision risk model to assess bird collision risks onshore wind farms
- Rees, E. (2006). Whooper Swans: Biology and Conservation. T & AD Poyser
- Crowe, O. et al. (2019). Migration and Roosting of Whooper Swans. Irish Birds 43
- BirdWatch Ireland (2024). Whooper Swan Species Profile & Irish Wetlands Bird Survey (I-WeBS)
- European Commission (2021). Wind Energy and Natura 2000

Visual Impact

The proposed turbines would be highly intrusive and visually dominant, overwhelming the existing rural character of the local landscape. Their visibility from multiple vantage points would transform a natural and agricultural setting into an industrial-scale development.

The proposal is out of scale with the surrounding environment. The turbines' extreme height and size would cause visual clutter and a loss of scenic amenity, remaining visible even at long distances and creating continuous visual intrusion.

When combined with existing or approved wind farms in the region, this development would lead to visual saturation and skyline dominance, further eroding the landscape's character and reducing its recreational value.

The developer's visual impact assessment understates the visibility and significance of the turbines. Photomontages appear selective and fail to represent the true extent of visual intrusion likely to be experienced by residents and visitors.

The proposal would diminish the rural amenity, tranquillity, and identity of the local region. It threatens the area's sense of place and the quality of life for residents who value the natural and agricultural landscape.

The local wind farm's size and visual impact are excessive and inconsistent with the character of the area. While supporting renewable energy, developments must respect the local landscape — this project does not. The proposal should therefore be refused on the grounds of unacceptable visual and landscape impacts.

Conclusion

In light of the serious concerns outlined above I respectfully urge An Coimisiún Pleanála to refuse permission for this development. The proposal is not compatible with the principles of proper planning or sustainable development and would have lasting negative effects on local residents, farmers, and the wider community. I therefore strongly object to this proposal and ask that it be refused in full.

If permission is not refused outright, I request that an oral hearing be held so that local residents, farmers, and the wider community can have our say on the impacts of this development.

Yours Sincerely,

Name: Gerard Burke
Date: 16 November 2025