

OBSERVATION/SUBMISSION TO PLANNING APPLICATION

Case Reference: 323761

Mary Burke

Tygreenan

Barnaderg

Tuam

Galway

To: An Coimisiún Pleanála

64 Marlborough Street

Dublin 1

D01 V902

Date: 14 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 am 90 years of age and living 1.74 km from proposed turbine T3. I have lived all my life in this area, my father, my grandfather and before that for generations going back to the 1800s and to think that these structures are now going to destroy the lands our fathers and forefathers worked so hard to maintain and keep for future generations. The impact these turbines could have on my health, such as sleep disturbance and increased stress associated living near wind turbines. The sleep disturbance could add to my existing health conditions.

I strongly urge An Coimisiún Pleanála to refuse this wind farm planning application for the reasons outlined 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 Killereen Community Council and Killereen 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.

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 Peaceful Enjoyment of Property

Article 1, Protocol 1 of the European Convention on Human Rights (ECHR) protects every individual's right to the peaceful enjoyment of their possessions. It provides that: "Every natural or legal person is entitled to the peaceful enjoyment of his possessions. No one shall be deprived of his possessions except in the public interest and subject to the conditions provided for by law and by the general principles of international law."

Granting permission for this wind farm development would seriously interfere with my right to the peaceful enjoyment of my property as a landowner and farmer. My land is not only my livelihood but also my home and heritage, and its value lies in its usability, productivity, and tranquillity. The construction and operation of large-scale wind turbines would bring constant noise, vibration, and shadow flicker, making it extremely difficult to work or live on the land without disruption.

During the lengthy construction period, the constant movement of heavy machinery, road congestion, and elevated noise levels would disturb livestock, damage rural roads, and make normal farm operations significantly harder to carry out. Once operational, the turbines would permanently alter the landscape, impacting both animal welfare and the environment in which I work daily. The cumulative effects of noise, flicker, and visual dominance would deprive me of the peaceful enjoyment and practical use of my land.

Such disruption cannot reasonably be regarded as proportionate or justified in the public interest, and therefore would constitute a breach of the protections guaranteed under Article 1, Protocol 1 of the ECHR.

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

Planning permission for the proposed Cooloo Wind Farm should be refused on the basis that it poses a clear and foreseeable risk of substantial interference with the normal use and enjoyment of nearby homes. In *Byrne & Moorhead v ABO Energy [2025] IEHC 330*, the Irish High Court found that wind turbine noise—specifically low-frequency and amplitude-modulated sound—constituted a private nuisance under common law, as it significantly disrupted residents' ordinary domestic life. The Court held that such noise amounted to an unreasonable and continuous intrusion, preventing the quiet occupation of the home and resulting in the permanent shutdown of three turbines in County Wexford.

The Cooloo proposal relies on outdated ETSU-based noise criteria that fail to account for the same low-frequency and modulated noise effects found to cause substantial nuisance in the Wexford case. Given the proposed turbines' greater height and rotor size, the likelihood of these harmful acoustic effects occurring at Cooloo is even higher. Approving this development under obsolete standards would disregard the High Court's findings and expose local residents to predictable and legally recognized interference with their right to the peaceful enjoyment of their homes. Planning permission should therefore be refused in full on these grounds.

Shadow Flicker

Given this proximity and the extraordinary scale of the proposed turbines, I believe the shadow flicker standards outlined in the Wind Energy Development Guidelines (2006) issued by the Department of Housing, Local Government and Heritage are no longer adequate to protect residential amenity or public health.

The proposed turbines represent a dramatic escalation in size compared to those contemplated in 2006:

- Tip Height: 180 meters
- Rotor Diameter: 162 meters
- Hub Height: 105 meters
- Swept Area: Over 20,000 m² per turbine

These dimensions significantly increase the area affected by moving shadows, extending the reach and intensity of shadow flicker events. The 2006 Guidelines do not account for turbines of this magnitude, nor the cumulative impact of multiple units in close proximity to residential receptors.

The Guidelines permit up to 30 hours of shadow flicker per year at any dwelling. This threshold is:

- Arbitrary and unsupported by contemporary health research
- Uniformly applied without regard to turbine scale or proximity
- Silent on cumulative exposure from multiple turbines

No scientific basis is provided for the 30-hour limit, and no differentiation is made between single-turbine

exposure and multi-directional flicker from clustered arrays.

Shadow flicker is often dismissed as a minor nuisance, yet growing evidence suggests more serious implications:

- Annoyance and Stress: The U.S. Department of Energy's WINDEXchange notes that even limited flicker can create persistent discomfort, especially during sensitive times of day.
- Sleep Disruption: A 2013 report commissioned by the Scottish Government (University of Salford) found that shadow flicker may contribute to sleep disturbance and reduced sleep quality.
- Photosensitive Epilepsy: Although rare, flicker frequencies between 3–30 Hz can pose risks. Complex interactions between blade movement, sun angle, and window geometry may approach sensitive thresholds.
- Motion Sickness-like Symptoms: The ClimateXChange report noted symptoms such as dizziness and nausea linked to visual stimuli like flicker.
- Mental Health and Quality of Life: A 2023 article by Fritz Energy documented community complaints about anxiety, reduced concentration, and general decline in wellbeing.
- The Guidelines make no distinction between general receptors and vulnerable groups (children, elderly, or those with neurological conditions).
- In ABP Case 318943, shadow flicker was cited as a material concern, particularly where receptors were located within 500m of turbines. The Environmental Impact Assessment recommended turbine-specific control measures.

The 2006 Wind Energy Development Guidelines offer minimal direction on how shadow flicker should be assessed, modelled, or mitigated. This omission is particularly problematic in the context of modern turbine arrays, where cumulative impacts and technological scale far exceed what the original standards contemplated.

The Guidelines do not specify:

- Which modelling tools should be used (e.g. WindPRO, WAsP, or bespoke GIS-based systems)
- What input parameters are required (e.g. rotor dimensions, sun path algorithms, terrain shading)
- Whether modelling should account for worst-case scenarios or realistic exposure windows

This opens the door to inconsistent and potentially misleading assessments. Developers may use optimistic assumptions (e.g. average sunshine hours, limited exposure angles) that understate the true impact on nearby dwellings.

There is no requirement to assess:

- Overlapping flicker events from multiple turbines
- Multi-directional exposure due to turbine layout
- Seasonal variation in sun angle and flicker duration

The Guidelines do not require developers to implement or even consider:

- Automated curtailment systems that shut down turbines during predicted flicker windows
- Physical shielding (e.g. planting, screens) to block flicker paths
- Real-time monitoring or complaint-based response protocols

This leaves residents like us with no enforceable protection. Even if flicker exceeds tolerable levels, there is no mechanism to compel mitigation unless it's voluntarily offered by the developer or imposed by planning conditions.

Other jurisdictions have moved beyond static thresholds:

- Germany requires modelling based on actual sunshine hours and mandates curtailment if flicker exceeds 30 minutes per day.
- Scotland recommends site-specific modelling and mitigation, especially near sensitive receptors.
- The Netherlands uses dynamic modelling and requires flicker-free zones around homes.

Ireland's 2006 Guidelines fail to reflect these advances, leaving communities exposed to outdated standards that do not match the realities of modern turbine design.

The shadow flicker provisions in the 2006 Wind Energy Development Guidelines are outdated and insufficient for assessing the impacts of modern wind farms, particularly in residential settings like mine. The scale and proximity of the turbines proposed near my home significantly increase the risk of adverse effects, yet the current standards offer no meaningful protection.

I respectfully urge the planning authority to:

- Apply a precautionary approach
- Require robust modelling and mitigation
- Consider the lived experience of residents
- Reject applications that fail to demonstrate compliance with updated standards

References

- Wind Energy Development Guidelines (2006) – Department of Housing, Local Government and Heritage
- ABP Case 318943 – Chapter 11: Shadow Flicker
- WINDEXchange – U.S. Department of Energy
- ClimateXChange – Report on Health Impacts of Wind Turbines (2013)
- Fritz Energy – Wind Turbines and Shadow Flicker (2023)
- Clean Power – Wind Turbines and Public Health

Biodiversity impact

I object to the proposed development on the grounds of its significant and permanent impact on biodiversity, including legally protected habitats and species.

The project's Environmental Impact Assessment Report (EIAR) acknowledges a residual adverse effect on Degraded Raised Bog (habitat 7120), a habitat of County Importance with capacity for natural regeneration (EIAR Ch. 6, p. 142). Construction of the proposed floating access road between turbines T7 and T9 will directly remove approximately 0.18 ha of this sensitive peatland and disrupt its hydrological balance (EIAR Ch. 6, Sec. 6.5.2.1.1). This is contrary to the conservation obligations set out under the EU Habitats Directive (92/43/EEC).

The site supports cutover bogs (PB4) and Marsh Fritillary (*Euphydryas aurinia*), an Annex II species protected under European law. Breeding webs were recorded near turbine T5 within metres of proposed construction works (EIAR Ch. 6, Sec. 6.4.3.3). The disturbance, dust, and drainage changes associated with turbine and road construction threaten the species' survival locally, directly conflicting with Ireland's duty to maintain favourable conservation status for Annex II species.

The EIAR highlights potential effects on hydrology and connected wetland systems that could degrade otter (*Lutra lutra*) habitat and aquatic fauna (EIAR Ch. 6, Sec. 6.5.2.1.1 and 6.2.2). Otters are also protected under Annex II of the Habitats Directive, and any degradation of their habitat represents a breach of Ireland's legal obligations.

These outcomes are inconsistent with the objectives of the National Biodiversity Action Plan 2023–2030, which seeks to prevent net biodiversity loss. Allowing this development to proceed would contradict national policy commitments and international conservation obligations.

Given the acknowledged residual adverse effects on protected habitats and species, I respectfully request that An Coimisiún Pleanála refuse permission for this development. The permanent loss and degradation of biodiversity cannot be justified, particularly where protected species and habitats are involved.

References:

- EU Habitats Directive (92/43/EEC)

- National Biodiversity Action Plan 2023–2030
- EIAR Chapter 6 (Biodiversity)
- An Coimisiún Pleanála Case 323761

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. This proposal has also divided our community and in time, if this development is allowed to go ahead, it will destroy relationships within the community and no doubt have an impact on the population of the community.

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

Yours Sincerely,

Mary Burke

Name: Mary Burke

Date: 14 November 2025