

An Coimisiún Pleanála

64 Marlborough Street

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D01 V902

Re: Observation / Objection to Cooloo Wind Farm – Strategic Infrastructure Development

Case reference: 323761

Applicant: Neoen Renewables Ireland Ltd.

Location: Townlands of Cloondahamper (Blake), Cloonascragh, Elmhill, Cooloo, Lecarrow, Dangan Eighter, Lissavally & Slievegorm, Co. Galway

Date: 21st of November, 2025

Dear Sir/Madam,

We, John and Eileen O’Connell, And John Christopher O’Connell of Dangan, Tuam, Co. Galway, hereby make this formal submission in respect of the proposed Cooloo Wind Farm Strategic Infrastructure Development (SID). We are active farmers and farm a small suckler holding with lands up to 634m from turbine T1 918m from T2, and our family home is 1km from T1, T2 and the on-site 110 kV substation and Battery Energy Storage System (BESS) as shown on the planning site layout drawings and grid connection drawings. We live beside Horseleap Lough, a treasure to the local community that provides a great habitat for flora, fauna and wildlife. We are also consumers of the Bearnadearg Group Water Scheme & Brierfield group water scheme. We are therefore directly and severely affected by the proposed development in terms of noise, visual impact, shadow flicker, traffic, safety, water sources/hydrology and impacts on our farming operations and residential amenities.

For the reasons set out below we strongly object to the proposed development and respectfully request that An Coimisiún Pleanála refuse permission.

This objection is founded on serious legal and environmental concerns, as outlined below, including non-compliance with the Planning and Development Act 2000 (as amended), EU water protection directives, Irish groundwater protection laws, and unacceptable direct risks to a critical drinking water supply. We set out our grounds in detail for the Board’s consideration (and for the record of any oral hearing or judicial review, if required).

1. Legal Basis for Refusal under Planning Act 2000 (Sections 37E and 37G)

Duty to Protect the Environment: Under the Planning and Development Act 2000 (as amended), An Bord Pleanála is obligated to ensure that any permission granted is consistent with the proper planning and sustainable development of the area, which explicitly includes protection of the environment. In the context of a Section 37E

application for Strategic Infrastructure, the Board has the same duties to rigorously assess environmental effects as a planning authority under Section 34, but with the added authority to decide nationally important projects. Section 37E(3) requires the Board to consider the environmental impact assessment report (EIAR) and all environmental information before making its decision. Section 37G empowers the Board to grant or refuse permission and to impose conditions as necessary to protect the environment. Crucially, the Board is not obliged to grant approval simply because other consents (such as EPA licences or water permits) might later regulate certain environmental emissions. The Board may refuse permission outright on environmental grounds if significant doubt remains about the project's safety.

This principle has been affirmed in practice. For example, in 2015 the Board refused permission for the 48-turbine Cluddaun Wind Farm in Co. Mayo specifically because it was "not satisfied that the development as proposed would not have the potential to impact negatively on the surface and groundwater hydrology"

In other words, faced with uncertainty and risk to the water environment, the Board rightly exercised caution and refused the project. The same duty to protect against environmental risk applies here under the Act. No other statutory license or future assessment can relieve the Board of its primary responsibility to safeguard the environment at the planning stage. We submit that the Board not only has the authority to refuse this project on the grounds of environmental risk, but indeed has a legal duty to do so if the evidence shows a potential unacceptable impact on the environment (in this case, on groundwater and drinking water sources). Section 37G(2)(a) of the Act (as amended) provides that the Board may outright refuse a proposed development if it contravenes the proper planning and sustainable development of the area – which, given the hydrological vulnerabilities detailed below, is clearly the case here.

Furthermore, we note that Section 37E(1) required the application to be accompanied by an EIAR. That EIAR must fully assess all likely significant effects on the environment and propose adequate mitigation. As we will outline, the EIAR's treatment of groundwater risk is deficient and relies on mitigation measures that are uncertain or deferred. Under Irish law, the Board cannot approve a project where significant adverse effects remain or where mitigation is not fully integrated into the consent. In summary, the Planning Act framework empowers and obliges the Board to refuse permission due to the high risks identified, notwithstanding any argument from the developer that subsequent permits (e.g. a discharge licence) would manage those risks. The Board's mandate is to prevent environmental harm at source, at the planning stage, especially for Strategic Infrastructure in sensitive locations.

2. Obligations under EU Water Framework Directive & Groundwater Directive

“No Deterioration” of Water Status: The proposed development is also subject to Ireland’s obligations under EU water protection law. The EU Water Framework Directive (2000/60/EC) requires Member States to protect all waters (surface water and groundwater) with the aim of achieving at least “good” status and, importantly, ensuring no deterioration in the existing status of water bodies

This no-deterioration principle is binding on all public authorities. Any project that carries a risk of lowering water quality or altering a water body’s status class (for example, from good to poor) is fundamentally at odds with Article 4 of the WFD. The Groundwater Directive (2006/118/EC), as a daughter directive to the WFD, reinforces these obligations for groundwater. It requires that Member States prevent or limit the input of pollutants into groundwater and ensure no deterioration in the status of groundwater bodies

In practical terms, this means developments must not contaminate groundwater or cause sustained upward trends in pollutant levels. Competent authorities (including planning authorities) must refuse consent to any activity that would contravene these requirements.

Protection of Drinking Water Sources (Article 7 WFD): Additionally, under Article 7 of the Water Framework Directive, water bodies used for drinking water abstraction (so-called Drinking Water Protected Areas) require special protection. Member States must ensure that such water sources “are protected with the aim of avoiding deterioration in their quality in order to reduce the level of purification treatment required” for potable use (WFD Art. 7(2) and 7(3)). In this case, the development area directly overlaps the source catchment of the Barnaderg Group Water Scheme and Mid-Galway Public Water Supply, which are drinking water sources for our community (discussed further in Section 4 below). These sources are effectively protected areas that warrant heightened safeguards. The Groundwater Directive and Ireland’s implementing regulations also impose more stringent standards in such zones – for example, prohibiting certain hazardous substances entirely and mandating that no inputs of pollutants be allowed that could cause pollution of a drinking water aquifer

Any development consent must therefore be refused if it poses a threat of causing even a slight deterioration or requiring more advanced water treatment to ensure safety.

It is our submission that permitting nine industrial-scale turbines (each with deep foundations and extensive earthworks) and a battery energy storage system in the immediate catchment of a karstic drinking water supply would breach the no-deterioration principle and violate the preventative intent of the WFD/Groundwater Directive. The Board, as a public authority, must exercise its functions in compliance with these directives. Indeed, the Board is precluded from authorizing a development that could result in deterioration of a water body status or compromise a protected drinking water source.

The precautionary approach required by EU law dictates that if there is uncertainty about potential water pollution or hydrogeological impacts, the development should not proceed. We will show that significant uncertainty and risk exists here.

3. Irish Groundwater Protection Laws and Standards

Ireland has transposed the above EU obligations into national law, and these domestic laws underscore the need to protect groundwater from this development's risks. The European Communities Environmental Objectives (Groundwater) Regulations 2010 (S.I. No. 9 of 2010) implement the WFD and Groundwater Directive in Irish law. These Regulations legally oblige authorities to prevent groundwater pollution and deterioration, set quality standards, and require that groundwater bodies do not suffer any harm or contamination from new activities. They also identify and protect groundwater sources used for drinking water. Any consent for the wind farm must be consistent with these regulations – which in effect means that if there is a risk of polluting the Barnaderg/Mid-Galway water source, the project cannot be permitted.

Additionally, the Environmental Protection Agency Act 1992 (as amended) and the Local Government (Water Pollution) Acts establish that causing groundwater pollution is an offence unless licensed. The EPA Act's provisions on integrated pollution control and water quality reinforce that developments must not be allowed to proceed if they would likely cause unlicensed discharges or contamination of waters. While the wind farm itself may not require an EPA licence, any contamination of groundwater would contravene the general obligations of these statutes. The Board is therefore bound to consider the potential for such illegal environmental harm and to act to prevent it by withholding permission.

Groundwater Vulnerability – Karst Aquifer: Of particular relevance are the EPA/GSI guidelines on groundwater vulnerability and protection schemes, which local authorities and An Bord Pleanála routinely use in assessing developments. These guidelines classify the vulnerability of groundwater to pollution based on factors like soil/thickness and the presence of karst features (sinkholes, swallow holes, springs, etc.). Karst limestone aquifers, such as that underlying the Cooloo site, are known to be highly sensitive – pollutants can travel rapidly through solution channels with little natural filtration. According to GSI, areas with shallow soil or rock near the surface, or areas close to karst features, are rated “Extreme” vulnerability (E) because any contaminants can quickly reach groundwater. Areas with slightly more cover are “High” (H) vulnerability. Essentially, where recharge to the aquifer is easy, the aquifer is extremely vulnerable to pollution.

Notably, the developer's own EIAR confirms that the site spans vulnerability categories from Low to Extreme. Large portions of the wind farm site, especially in the southern sector, have thin or peaty soil cover and karstified limestone bedrock, resulting in High to Extreme vulnerability ratings. Specifically, the EIAR mapping shows that turbine T1 and

the temporary construction compound are located in an area of “High” groundwater vulnerability, and parts of the grid connection route within the site are classed as “Extreme” vulnerability. The presence of a karst spring in the vicinity (noted by the GSI) further elevates concern. Under EPA/GSI guidance, extreme vulnerability zones (especially around karst features) merit the maximum protection – typically a presumption against any activity that introduces risk of contamination. Good practice dictates that where a source protection area has extreme vulnerability, potentially polluting works should be kept well away or not permitted at all. Here, the proposal places heavy construction exactly in such sensitive zones. The Board should heed these established guidelines and the precautionary principle embedded in them.

In summary, Irish law and accepted hydrogeological practice both demand stringent protection of vulnerable karst groundwater. The combination of the Environmental Objectives (Groundwater) Regulations and the EPA/GSI vulnerability mapping sends a clear message: a project that threatens to pollute an aquifer of “Regionally Important Karstified” status (as the GSI classifies the bedrock here) and that provides drinking water, must not be allowed to proceed without absolute certainty of safety – a certainty which, as we outline next, the application has not provided.

4. Direct Environmental Risks to the Barnaderg Group Water Scheme

Perhaps the most immediate and unacceptable impact of the Cooloo Wind Farm would be the risk posed to the Bearnadearg (Barnaderg) Group Water Scheme and the related Mid-Galway Public Water Supply. We cannot overstate the importance of this water supply: it serves many families in our community with drinking water and has been identified as an “extremely sensitive” water source by the developer’s own assessment. The proposed development site lies directly within the catchment and recharge area feeding this water supply – a fact clearly documented in the application EIAR:

Approximately 50 hectares of the southern part of the wind farm site are inside the mapped Source Protection Area (SPA) for the Mid-Galway Public Water Supply, which is hydrologically connected to the Barnaderg GWS. The SPA mapping (established by the EPA/GSI in 2012) delineates the zone of contribution of the karst springs that supply these schemes. Turbine locations T1 and T2, as well as the temporary construction compound, fall within this Source Protection Area. In other words, key project infrastructure is sited squarely in the groundwater catchment that feeds the drinking water source.

The Mid-Galway PWS abstraction point is on the Lecarrow (Barnaderg) 30 Stream, approximately 2–3 km downstream of the proposed turbines. This public supply is largely fed by numerous karst springs along the banks of that stream. During dry periods the surface flow in the stream bed ceases, indicating the supply is predominantly groundwater from springs. The Barnaderg GWS source (a series of springs and at least one borehole) is

located just upstream of the PWS intake and shares the same groundwater system. Both water schemes draw on what is essentially the same karst aquifer and spring cluster. The EIAR explicitly notes that the Barnaderg GWS and Mid-Galway PWS sources “share the same groundwater zone of contribution”.

Crucially, turbines T1 and T2 and the construction compound are located in the surface water catchment upstream of Horseleap Lough (the small lough through which the Lecarrow Stream flows). This means any runoff or pollutant from those project elements naturally drains toward the very springs and stream that supply the schemes. The wind farm footprint is uphill/upgradient of the water supply. By any reasonable assessment, this is a direct hydrological pathway from the project to the receptors (the drinking water sources).

Given this physical context, the potential environmental risks include: fuel or oil spills, concrete and grout contamination during turbine foundation pours, sediment (silt/peat) release from soil stripping and excavation, alteration of groundwater flow paths by deep excavations, and increased turbidity (suspended fine particles) in the spring water due to blasting or rock breaking. Each of these could have serious consequences: for instance, a diesel spill could poison the karst water (which travels quickly with little filtration), or a surge of turbidity in the springs could render the water untreatable (filter blockage, bacterial intrusion) and force a supply shutdown. The Board is aware that Group Water Schemes in karst areas are highly vulnerable – e.g., even a mild disturbance can cause cloudy water or worse, pathogen contamination if manure or septic pollutants get in via new conduits.

The application’s own Hydrology and Hydrogeology chapter acknowledges some of these dangers. It states that “Potential groundwater quality effects at the Site would be mainly from hydrocarbon and cement spillage and leakages at excavation locations”, and that poor-quality surface runoff from the works could enter the Lecarrow Stream and potentially reach the abstraction point downstream. In fact, the EIAR identifies the pathway: water could carry contaminants from the wind farm to Horseleap Lough and then into the spring-fed stream, ultimately impacting the Barnaderg/Mid-Galway sources. Even before mitigation, the EIAR concedes the potential impact on the GWS/PWS water quality would be “Negative, slight... indirect, short-term, [and] unlikely” (classification given as the pre-mitigation potential impact). We strongly dispute the characterization of this impact as “slight” or “unlikely” – in our view, this downplays the significance of any pollution of a drinking water source. However, even that admission proves that the project, as proposed, can cause negative effects on the water supply if things go awry. The developer’s confidence that such an event is “unlikely” is no comfort; the consequences of being wrong are dire. Planning decisions must be made on a worst-case realistic scenario, not on optimistic assumptions.

Hydrogeological Uncertainty: The applicant undertook some site investigation (drilling of two boreholes near T1/T2, geophysical surveys, etc.) and argues that they did not encounter obvious karst conduits in those limited probes. They conclude that the bedrock is “competent” and of low permeability in that spot, and that peat cover limits recharge. We submit that these conclusions are not definitive and do not eliminate risk: Karst systems are inherently heterogeneous – a borehole 50m away might miss a solution cavity that exists under a turbine foundation. The EIAR itself admits that if “significantly deep excavations” such as a turbine base extend below the top of rock, they “could have the potential to significantly affect flows to the source springs” by intercepting a conduit or groundwater flow path. T1 and T2 are among the closest to the source and will involve large concrete foundations and dewatering during construction; even the possibility of hitting a water-bearing fracture or conduit during these works raises the alarm for us. Moreover, while the EIAR asserts that drainage design will “mimic” existing conditions and that hardstands will not impede recharge, these claims remain unproven and theoretical.

Inadequate Mitigation and Monitoring: The mitigation measures proposed (as we understand them from the EIAR) include standard construction management practices: silt traps, buffer zones of 50m from watercourses, use of impermeable liners when pouring concrete, spill kits on site, water quality monitoring during construction, etc. While these are necessary steps, they are not infallible safeguards – human error or heavy rainfall can defeat the best silt fence, and a karst aquifer can convey pollution faster than a response can be mustered. The EIAR suggests ongoing water monitoring of the GWS during works, which implicitly acknowledges things could go wrong and need detection. But by the time contamination is detected at the spring, it may be too late – the water supply would already be polluted. In short, the mitigations rely on everything going perfectly and on quick remediation if not. There is no demonstrated “plan B” (e.g., an alternative water supply) if the Barnaderg source is impacted. This is an unacceptable gamble with our drinking water. The Board is empowered to require a development to avoid risk ex ante, not simply respond to disaster after the fact.

In sum, the location of this wind farm adjacent to and within the hydrogeological catchment of a public/group water supply presents a direct conflict with the environment’s protection. We assert that the environmental risk is unacceptably high: The project could introduce pollutants or disturbances that no mitigation can confidently guarantee against, given the nature of karst systems. This is precisely the kind of scenario where the Board should exercise its precautionary duty and refuse permission. To do otherwise would jeopardize a critical water resource and public health, contravening both the spirit and letter of environmental law.

5. Relevant Legal Precedents and Case Law

Our position is strongly supported by past decisions of An Bord Pleanála and judgments of the Irish courts and the Court of Justice of the EU, which have consistently prioritized thorough environmental assessment and the prevention of risk to vital resources like water. We draw the Board's attention to the following precedents, which we urge be considered:

ABP Refusal of Cluddaun Wind Farm (2015): As noted earlier, the Board refused a large wind farm in Mayo expressly due to inadequately addressed hydrological impacts. The Board's decision stated it was "not satisfied that the development as proposed would not have the potential to impact negatively on surface and groundwater hydrology"

That project, like this one, was near sensitive water features. The principle from Cluddaun is clear: if there is any reasonable doubt about protecting water, the Board must err on the side of caution. We submit that the same reasoning applies to Cooloo – if anything, the facts here (direct overlap with a drinking water zone) present an even stronger case for refusal than Cluddaun.

Roache v An Bord Pleanála [2024] IEHC 311: In this recent High Court case, a wind farm permission was challenged due to concerns about its impact on a family's sole drinking water supply (a mountain spring). The development overlapped the spring's catchment. The court's factual summary highlights that the objectors' central objection was the "alleged failure to properly assess the impact of the proposed development on their sole drinking water supply", which came from a spring in the development area

The case underscores that robust assessment of private/group water supplies is a legal necessity. While the full judgment is complex, it is notable that the Board's decision in that case was found wanting regarding how it considered the spring. We understand that the High Court in Roache was critical of any assumption made in the EIAR or by the Board that did not accord with the actual hydrogeological reality, and of the Board's failure to give reasons addressing the spring impact. By analogy, in the present case, if ABP were to grant permission without absolute clarity and reasoning on the protection of Barnaderg GWS, it would likely face similar legal vulnerability. Roache v ABP teaches that water source impacts can overturn a permission – a precedent the Board will be keen to avoid by making the correct decision now (i.e., refusing a project that imperils a drinking water source).

Ó Grianna v ABP [2014] IEHC 632 & O'Grianna (No. 2) [2017] IEHC 7: The Ó Grianna series of cases involved a wind farm in Cork and established important principles about project splitting and environmental assessment. The High Court (Peart J., 2014) quashed a wind farm permission because the grid connection had been excluded from the EIAR; it ruled that the wind farm and its grid connection were one project and must be assessed

cumulatively. Subsequent proceedings reaffirmed that all components of a renewable energy project need assessment upfront

The relevance here is that no aspect of environmental impact can be deferred or left unassessed. In the Cooloo application, the developer has included the grid connection, which is proper. However, we invoke Ó Grianna to argue that similarly, all environmental mitigation measures and impacts (such as on water) must be considered as part of this application – nothing can be left to later approval. The Board cannot say, for example, “we’ll let the developer sort out groundwater protection during construction with the Council/EPA.” That would offend the integrated assessment principle from Ó Grianna. Every mitigation measure must be in the EIAR and before the decision-maker now, which, as we will note in Section 6, is a standard not met by the present EIAR.

EU Court of Justice Case C-215/06 (Derrybrien Wind Farm Landslide): The European Court’s judgment (2008) in *Commission v. Ireland* (the Derrybrien case) is a stark warning. This case arose from the environmental disaster at Derrybrien, Co. Galway, where construction of a wind farm in 2003 triggered a massive peat landslide that devastated rivers and habitats. The CJEU found Ireland in breach of the EIA Directive for failing to properly assess that project and for not rectifying the situation afterwards. The Commission later described the 2km-long landslide as “environmentally devastating”

Ireland was eventually fined millions of euro for this failure. The Derrybrien saga underlines several points: (a) wind farm projects in sensitive landscapes (peatlands, karst, etc.) can have catastrophic consequences if not meticulously assessed and mitigated; (b) mitigation and analysis cannot be retrospective – it must happen beforehand, or else liability ensues; (c) environmental authorities must not rely on hopeful assumptions (“it probably won’t happen”) when evidence suggests a risk of severe impact. In the context of Cooloo, while the risk is groundwater contamination (rather than a peat slide), the principle is analogous – an irreversible impact on the water supply would be just as devastating for our community as the Derrybrien slide was for the environment. The lesson from Derrybrien is that proper sequencing of assessment and mitigation is vital: one must identify all risks and secure all precautions before ground is broken, because after-the-fact fixes may be impossible. We implore the Board not to repeat the mistakes of the past by allowing a high-risk project to proceed without absolute certainty of safety.

Heather Hill Wind Farm / Heather Hill Management CLG v ABP (2022): Although concerning a Strategic Housing Development, the Heather Hill case in the Supreme Court has been cited for its clarification of environmental litigation principles. One takeaway relevant here is the Court’s reinforcement that challenges based on environmental grounds (such as inadequate assessment or mitigation) must be taken seriously and that Ireland’s courts will strictly enforce compliance with environmental directives. The case has been noted (in Oireachtas debates and commentary) as providing “a great deal of clarity on the

existing rule” that protective costs apply when litigating environmental issues indicating the judiciary’s awareness that citizens must have access to challenge decisions endangering the environment. For our purposes, the Heather Hill principle is that all environmental protection measures should be embedded in the consent and assessed, rather than left to uncertain future resolution. It echoes a consistent theme in Irish case law: deferred mitigation is not acceptable when it comes to EIA or Appropriate Assessment. If a crucial detail – say, how groundwater will be guaranteed safe – is missing or pushed off to a later “construction management plan,” then the consent is vulnerable. We submit that the Cooloo Wind Farm application, as it stands, suffers from exactly that flaw: key specifics about safeguarding the aquifer are left vague or for future agreement, which is impermissible.

In summary, the above precedents form a compelling tapestry of legal rationale: they all point to refusal in the present case. ABP’s own past decisions show willingness to refuse wind farms on environmental risk grounds; the High Court has quashed permissions where water impacts were not fully addressed; and the Supreme Court and EU Court have underscored the need for front-loaded, comprehensive environmental assessment. We urge the Board to align with this body of authority. Approving the Cooloo Wind Farm despite its clear risks would not only depart from these precedents but could invite a costly legal challenge.

6. Deferred Mitigation and Requirement for Full EIAR Assessment

We have serious concerns that the approach taken by the developer relies on “deferred mitigation”, meaning measures or analyses that are postponed until after permission, rather than being integrated now. Irish planning law and An Bord Pleanála’s own practice dictate that all environmental mitigation measures necessary to avoid or reduce significant effects must be identified in the EIAR and conditioned in the permission. The Board cannot leave fundamental protective steps to be worked out later via condition or during construction, especially not in a case with such high stakes. Yet in the Cooloo application, several critical matters appear inadequately defined: for example, the detailed design of the drainage system to “mimic” natural hydrology is not provided – only a concept is given; the exact monitoring regime and emergency response plan if contamination is detected is not fleshed out; the method of turbine foundation construction in karst (e.g., use of impermeable liners or not, grouting strategy) is not certain. These omissions mean the EIAR is, in our view, incomplete with respect to water protection

Both the Board and the courts have frowned upon this kind of “assess impacts later” strategy. In *People Over Wind v ABP* (CJEU, 2018), the European Court held that mitigation measures cannot be taken into account at AA screening stage unless they are “strictly defined” and certain – by analogy, any mitigation must be concrete and committed, not aspirational. In cases like *An Taisce v ABP* (Edenderry Power extension), the Irish

High Court struck down a permission that tried to defer the environmental solution (a substitute consent for peat extraction) instead of having it in place initially. The Board's own inspectors and decisions in various wind farm cases have repeatedly recommended refusal where mitigation was insufficiently specified. We also cite the EU (Planning) Regulations 2018, which transposed the updated EIA Directive, requiring that the EIAR describe the features of the project and measures envisaged to avoid/prevent significant effects – implicitly, if a measure is not described, it cannot be relied upon.

In the present case, the mitigation measures for water (silt fences, management plans, etc.) – while laudable – do not eliminate the risk of a serious pollution event. There is an element of “we will manage it as we go,” which is precisely the kind of uncertain mitigation that Heather Hill and related case law warns against. We believe the Board cannot grant permission unless it is satisfied that no reasonable scientific doubt remains about the efficacy of the proposed mitigation. That bar is not met here. Indeed, a number of the measures seem reactive (e.g., monitoring springs for turbidity) rather than preventive. The Board's recent jurisprudence (and that of the Irish courts) has increasingly required that the developer demonstrate environmental protection up-front.

Therefore, we submit that the application is premature and deficient – the appropriate course is refusal. If the developer wishes to pursue this project, they should first conduct exhaustive hydrogeological investigations (over multiple seasons), design a foolproof protection system (if one even exists for karst), and perhaps even secure alternative water supply arrangements for the community as a contingency. None of these have been done. To approve now would be to allow a project where mitigation is left “to be figured out”, which is incompatible with the EIAR requirements and with Ireland's obligations under the EIA Directive as interpreted by our courts. The Board should not countenance such an approach in a sensitive case like this.

7. Policy conflict and material contravention – LARES “Generally to be Discouraged”

The Planning Report and EIAR acknowledge that a substantial part of the Application Site lies within an area zoned “Generally to be Discouraged” (GTBD) for wind energy in the Galway Local Authority Renewable Energy Strategy (LARES), which is incorporated into the Galway County Development Plan 2022–2028.

In Appendix 1, Instead of accepting this adopted zoning, the applicant argues that the GTBD designation is “unsubstantiated” and that national climate targets and RED III effectively override it.

However: LARES is an integral part of the statutory Development Plan, adopted in 2022, following public consultation and evidence-based analysis. GTBD areas are explicitly those where wind energy is unlikely to be favorably considered due to landscape, environmental or amenity constraints. Under sections 37, 37M and 143 of the Planning and

Development Act 2000 (as amended), the Commission must have regard to, and normally follow, Development Plan policies unless there is a robust site-specific justification for any material contravention. No such exceptional justification has been demonstrated. In particular, this site: Lies in a lowland rural landscape with significant residential presence (439 receptors within 2.5 km), Contains peatland and degraded raised bog, Is hydrologically connected to Lough Corrib SAC/SPA and WFD "At Risk" waterbodies.

We submit that the proposal materially contravenes the LARES wind energy zoning and related objectives of the Galway County Development Plan, and that the applicant's attempt to re-litigate the basis for the GTBD designation is inappropriate. Climate and renewable policy does not remove the need to respect a plan-led, evidence-based spatial strategy.

8. Severe impact on our home, farm and Horseleap Lough

Our home and farmyard lie immediately south of T1, T2 and the on-site 110 kV substation/BESS. This is one of the closest residential and agricultural receptors to the core of the project. We have always focused on improving the biodiversity of the holding and along with our neighbours are active members of the Agri – Climate Rural Environment Scheme (ACRES) scheme, an EU backed agri-environmental scheme which is designed to provide undisturbed winter foraging areas for overwintering geese and swans. We are worried the impact of the construction and operation of the proposed windfarm will disturb the wintering geese and swans and golden plover on our lands and dis-regard the good work that has been done to date in ensuring they have a suitable habitat to thrive.

The LVIA (Chapter 13 and Appendices 13-1 to 13-3) assesses landscape and visual impacts on the North River Clare Basin Landscape Character Area and residential receptors. The turbines (up to 180 m tip) and 100 m met mast will be immediately adjacent to our home and farm, fundamentally changing the character of the local landscape from mixed agricultural/peatland to an industrial wind farm setting. LVIA methodology uses matrices of sensitivity × magnitude, but then applies "residual" judgement which systematically downgrades significance from moderate/substantial to slight or not significant. Cumulative assessment admits multiple other wind farms in the area (Cloonlusk, Cloonascragh, Clonberne, etc.), but still concludes that overall cumulative landscape effects are only "slight". From our perspective, the turbines and substation/BESS would become the dominant defining feature of our surroundings. Our house and yard would sit at the fringe of an industrial energy installation, rather than in the rural agricultural environment that exists today. We do not accept that, for residents and farmers living at such close range, the visual and landscape impact can be honestly described as "slight".

The ornithology chapters and appendices (Ch. 7, App 7-2 to 7-8) show significant use of the site and surrounds by waders and waterbirds such as golden plover, lapwing, whooper

swan, and also raptors;. Collision Risk Assessment estimates non-trivial numbers of potential bird collisions over the life of the wind farm for several species. A Bird Mitigation Plan proposes the use of deterrent kites and other measures to displace birds away from turbines.

We are concerned that Behavioral mitigation (scaring birds away) is uncertain in long-term effectiveness, especially in changing land-use and climate conditions. Displacement may impact birds' ability to use traditional foraging and roosting grounds. Cumulative collision and displacement effects with other wind farms in the wider Corrib/Clare catchment are not robustly quantified.

The bat surveys (App 6-2) and biodiversity chapter (Ch. 6) acknowledge bats as key receptors and propose operational curtailment and other mitigation. However, the success of such mitigation is dependent on future operational management and enforcement, not on fixed, verifiable measures at consent stage.

We submit that the ecological impact assessment is over-reliant on mitigation, management and monitoring, and does not eliminate reasonable scientific doubt about long-term impacts on protected species and Natura sites.

9. Operational wind turbine noise – outdated limits and modelling uncertainty

The Operational Noise Report (Appendix 12-2) confirms: 439 noise-sensitive receptors (NSRs) within 2.5 km of the wind farm, however, Only 10 locations were used as detailed Noise Measurement/Assessment Locations; Background noise levels at night are characteristically very low, typical of a quiet rural area. The assessment relies on the 2006 Wind Energy Development Guidelines, which allow up to 43 dB LA90 at night, and concludes that residual noise effects are “not significant”.

We submit that: The ratio of 439 receptors to 10 monitored locations is not sufficient in a flat, low-ambient landscape with many scattered dwellings, including our own. The 2006 guidelines are out of date and pre-date the WHO Environmental Noise Guidelines (2018) and the Draft 2019 Wind Energy Guidelines, which recognise greater health and amenity concerns at lower dB levels. The modelling is based on candidate turbines and a flexible design envelope up to 180 m, not on a fixed turbine specification. The EIAR expressly states that the final turbine model will be selected after a competitive tender post-consent, yet the noise predictions are treated as definitive. Given our proximity south of T1 and T2, we are at real risk of experiencing: Clearly audible turbine noise on a nightly basis, Amplitude modulation (“thumping”) and low-frequency noise, Increased stress and sleep disturbance, particularly during still nights when the ambient noise around our farm is very low. It is not credible, from our location, to describe such effects as “imperceptible” or “not significant”.

10. Shadow flicker and visual overbearing

The EIAR and shadow flicker study (Appendix 5-4) claim that, with controls, shadow flicker impacts will be acceptable. However: Our dwelling lies broadly south/south-west of turbines T1 and T2 and will be within the potential shadow flicker zone, The report's reliance on automatic turbine shut-down to meet guideline thresholds means that ongoing operational controls are required simply to prevent unacceptable flicker.

Visually, the 180 m turbines at T1 and T2, plus the substation/BESS, would **dominate the skyline directly north of our home and yard**. Photomontage assessment in Appendix 13-3 shows that from nearby viewpoints (e.g. Horseleap Cross), turbines occupy much of the field of view, yet residual effects are often classified as "slight". From our location, the change in outlook would be drastic and overwhelming.

11. Population & human health – selective literature and local realities

Chapter 5 of the EIAR leans heavily on literature such as Chapman (2015) "Wind Turbines and Health" and other studies concluding that no direct health effects arise from wind turbines. It also cites a Scottish study (ClimateXChange, 2016) concluding that wind farms have little effect on house prices. These reviews are not specific to 180 m turbines in a dense rural housing pattern, They pre-date evolving WHO noise guidance and more recent work on sleep disturbance and annoyance, Consider national-scale averages rather than the very localised situation at Dangan.

Additionally, The EIAR does not adequately address the cumulative effect of turbines, BESS/substation and traffic noise on our health, the psychological and stress impact of living under constant visual and noise dominance from industrial structures directly north of our home and farmyard, potential impacts on property value in a small rural community with a concentration of large wind projects.

We submit that the population and human health assessment is overly generic and unbalanced and fails to capture the lived reality of residents like ourselves immediately south of T1, T2 and the substation/BESS.

12. Grid connection, project splitting and cumulative impacts

The Planning Report and EIAR clearly state that the "Proposed Project" for EIA includes the wind farm, on-site 110 kV substation, BESS and 110 kV underground cable to Cloon 110 kV substation, all of which are described in Chapter 4 and the grid connection drawings. However, the planning application PAX07.323761 is only for the wind farm site, with the grid connection and BESS to be the subject of a separate future application under s.182A. We submit that the wind farm cannot operate without the grid connection and BESS Treating them as separate applications amounts to project splitting, contrary to the

spirit of the EIA Directive which requires assessment of the whole project. Important impacts of the grid route (hydrology, traffic, peat, road stability, noise) are therefore not fully embedded in this consent. Given that our home and farm lie directly south of the substation and BESS, the separation of these elements into another future application is especially unacceptable to us: we are asked to accept the turbines now while the details of the most intrusive infrastructure beside us are parked for later.

13. Conclusion and Formal Request

In light of all the above points – the legal duties, the EU law obligations, the national regulations, the specific vulnerabilities of the site, the precedent cases, and the deficiencies in the application – we conclude that the proposed Cooloo Wind Farm poses an unacceptably high environmental risk and fails to comply with Irish and EU law. It threatens a vital groundwater-derived drinking water supply in a manner that cannot be adequately safeguarded. Approving this development would contradict the precautionary principle and the Board's mandate to protect the environment and public health. It would also set a dangerous precedent that strategic renewable energy projects can override fundamental water protection; in truth, properly planned renewable projects and water protection must go hand in hand, and here the planning is fundamentally flawed.

The proposal materially contravenes the Galway County Development Plan 2022–2028 and LARES, particularly the “Generally to be Discouraged” zoning. The development would cause serious injury to our residential amenity and health through noise, BESS hum, shadow flicker and overwhelming visual impact. The EIAR's assessments of population & human health and property are generic and do not reflect our local context. The landscape and visual impact on our home and the wider rural area is under-stated; the scheme would industrialise a previously agricultural landscape. There are significant risks and uncertainties regarding peat disturbance, peat stability, carbon emissions and the long-term effectiveness of restoration. Hydrology and WFD assessments do not convincingly demonstrate no deterioration in already-pressurised catchments or safeguard drinking water interests. Ecological and Natura 2000 conclusions are heavily dependent on unproven mitigation and optimistic assumptions, with reasonable scientific doubt remaining. The separation of the wind farm and the grid/BESS into different applications is inappropriate project splitting, especially when the substation/BESS is immediately adjacent to our home. Traffic and construction impacts on local roads and farming operations are underplayed and left to be addressed by future TMPs and conditions. The EIAR systematically downplays residual significance by assuming perfect mitigation over decades.

We therefore formally request that An Bord Pleanála refuse permission for the Cooloo Wind Farm (ABP-322632-25). The Board is empowered to refuse for the reasons outlined in this objection, and we urge it to do so in order to:

Protect the Environment and Public Health: The local karst aquifer and water schemes must be shielded from pollution or disturbance, as required by law and the common good. No development should proceed that endangers the drinking water of communities.

Ensure Compliance with Law: A grant of permission would, in our view, violate the WFD's no-deterioration obligation and the Groundwater Regulations, and would not withstand legal scrutiny given the identified assessment gaps. Refusal is the only decision consistent with Ireland's environmental obligations.

Uphold Proper Planning and Sustainable Development: "Sustainable development" demands that renewable energy projects do not compromise other critical resources like water. In this instance, the scheme conflicts with proper planning considerations (water protection, community welfare) so profoundly that it cannot be approved without betraying that principle. Sustainable planning is about balance – here the balance tips heavily against the project when all factors are considered.

Finally, we note that we are not opposed to renewable energy or wind energy in appropriate locations; our objection is specific to this site and this proposal, which is plainly the wrong development in the wrong place. We trust the Board will weigh our submission carefully alongside the evidence. We would be prepared to elaborate these points at an oral hearing, should one be convened, and to assist the Board in any way necessary to highlight the environmental stakes.

For all the foregoing reasons, we respectfully urge An Bord Pleanála to refuse permission for the Cooloo Wind Farm. This refusal would demonstrate the Board's commitment to environmental protection and the rule of law, and would prevent what could otherwise be a serious environmental and public health issue for the region.

Thank you for your consideration of our objection.

Yours faithfully,

John O'Connell

John J O'Connell

Eileen O'Connell

Eileen O'Connell

John Christopher O'Connell

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Cooloo Wind Farm Strategic Infrastructure Development Application, ABP-322632-25

Application Documents – Cooloo Wind Farm

MKO, Environmental Impact Assessment Report (EIAR) for Cooloo Wind Farm (2025), including:

- Chapter 4: Project Description
- Chapter 5: Population and Human Health
- Chapter 9: Hydrology and Hydrogeology
- Non-Technical Summary

Appendix 5-1: Chapman S, Wind Farms and Health: A Rapid Review of the Evidence (University of Sydney, 2015)

Appendix 5-2: ClimateXChange, The Impact of Wind Turbines on House Prices in Scotland (2016)