To: An Coimisiún Pleanála
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Re: Formal Objection - Strategic Infrastructure Development – Ballinlee Wind Farm, Co. Limerick (Case Ref: 323780)

Date: 17 November 2025

Introduction and Project Overview

The Ballinlee Wind Farm proposal seeks a ten-year permission for 17 wind turbines (up to ~95 MW capacity) along with a new 110 kV substation and a high-voltage grid connection in east County Limerick[1][2]. The wind farm site spans multiple townlands and would connect to the national grid via an underground 110 kV cable route running approximately 16 km northwards from Ballinlee through Holycross and Grange village to the existing Killonan substation near Limerick City[3][4]. As a local resident of Grange, I am writing to strongly object to this planning application, particularly the grid connection route, on the grounds of its profound negative impacts on residential amenity, public health, traffic safety, and cultural heritage. The objections outlined below are evidence-based and cite national guidelines, case study precedents, and relevant studies to support a refusal of permission.

Proximity to Homes and Lack of Consultation

The proposed cable will pass extremely close to homes in Grange – in my case, less than 10 m from my front door. Such proximity raises immediate concerns about construction disturbance and longer-term safety. Despite this, affected householders along the grid route were not meaningfully consulted or notified in advance, a glaring omission in public engagement. The developer's consultation report claims "transparent and meaningful" community outreach[5], yet residents on the cable route (outside the turbine cluster) received no direct communication. This lack of notification violates the spirit of inclusive planning and has left families feeling ambushed by a development literally at their doorstep. It is unacceptable that those of us facing the most direct impacts – noise, vibration, and disruption within a few meters of our homes – were not afforded the courtesy of early information or input. Proper planning should require individual notices and meetings with residents along the grid connection in addition to the general project outreach. The failure to do so undermines confidence in the process and justifies an objection on procedural grounds.

Moreover, the "External Grid Connection" was treated as ancillary, yet for residents it is the most intrusive element. If the cable trench and heavy works are happening on the public road mere feet from someone's home, that is effectively a temporary construction site adjoining a dwelling, with all associated nuisance. No evidence has been presented that the applicant attempted to re-route the cable away from dense residential clusters or mitigate the proximity issue. This highlights a "cheapest route" approach over community well-being. At minimum, alternative routing or

additional protective measures should have been explored and discussed with us – but they were not.

Construction Traffic, Noise and Vibration Risks

Laying a 110 kV underground cable and transporting turbine components will involve intense construction traffic through Grange. The Traffic Management Plan (TMP) indicates use of local roads (R512, L1170/L1171, etc.) through Holycross and Grange to haul cable materials and turbine parts[6]. These are narrow rural roads with limited capacity and houses (like mine) extremely close to the carriageway. Heavy construction trucks and abnormal loads rumbling by at all hours pose serious safety and structural concerns. In Waterford, a similar wind farm was refused partly due to "*very serious concerns regarding the carrying capacity and safety of the local road network… to accommodate heavy construction traffic associated with the proposed development*"[7]. Those same concerns apply here in Grange: our local road was not designed for high-frequency HGV movements, and such traffic brings risk of accidents, damage to road infrastructure, and blockage of emergency access for residents.

Noise and vibration during the ~24-month construction phase will significantly impact our daily lives. My home being only ~10 m from the road means we will bear the full brunt of excavators digging trenches, breakers cutting through rock, and dozens of truck passes per day. The EIAR downplays these effects, but anyone who has experienced roadworks near their house knows the wall-shaking vibrations and noise can be distressing. Structural damage (cracked plaster, etc.) to nearby houses is a real possibility from sustained vibration – yet no structural surveys or precautionary measures are outlined for homes mere feet away. The human impact is even more immediate: constant noise, beeping machinery and dust make it impossible to maintain a normal home environment, especially for vulnerable family members (as discussed in the next section). Notably, since the COVID-19 pandemic there has been a shift toward working from home (WFH). Over 50% of Irish workers now operate remotely or in hybrid mode at least some of the week[8]. This means many residents (myself included) will be at home during daytime construction, trying to work or care for family. The incessant noise and vibration from road digging would directly interfere with our work and quality of life, something that might have been less of an issue a decade ago but is crucial now with widespread WFH arrangements.

The TMP proposals for traffic management offer little comfort. The plan mainly focuses on haul routes and timing, but how will it protect my family in Grange? Even if trucks avoid school drop-off times, the sheer volume (potentially hundreds of truck trips for cable laying and turbine delivery) is disruptive. There is no mention of advance structural surveys of adjacent dwellings or compensation mechanisms if damage occurs. Similarly, while "all works will be planned in consultation with the Council Roads Engineer", the lived reality for residents is sidelined[9]. In Waterford's Coumnagappul case (10 turbines), the local authority explicitly highlighted that the local roads' inadequacy for heavy traffic was a reason for refusal[7] – the same conclusion should be drawn here in Grange, where the road alignment and proximity to homes make it an unsuitable construction corridor for a project of this scale.

Another often-overlooked issue is pest control during excavation. Trenching along rural roads can displace vermin (rats, etc.) especially if old stone walls or drains are disturbed. The application

documents briefly note that a pest control plan will be in place, implying they anticipate rodents being flushed out during works. This raises alarm for homeowners: an influx of displaced rodents could infiltrate nearby houses and farms. The need for pest control itself underscores the level of ground disturbance and environmental upheaval this cable will cause. Local residents should not have to worry about rats invading their property due to a developer digging up the road.

In summary, the construction phase impacts of the grid route – intense noise, vibration, traffic danger, dust, and even pest disturbances – are completely at odds with the quiet rural character of Grange and surronds and the reasonable expectation of residents to enjoy their homes. These impacts, concentrated in a small village zone never meant for industrial activity, are unacceptable and warrant refusal. Should the Board consider approving, we insist on robust conditions: restricted work hours, structural monitoring of homes, vibration limits, pest control, real-time noise monitoring, and compensation/relocation offers if necessary. However, given the choice, we strongly prefer the outright avoidance of this route through our community. The negative effects are not "temporary inconveniences" – they represent a serious deterioration of living conditions and well-being for the duration of works, and likely beyond.

Health Concerns of High-Voltage Cables Near Dwellings

The proposal entails a 110 kV high-voltage cable running underground through Grange. Residents are understandably anxious about the health effects of having a heavy-duty power line so close to our homes – especially for households like mine with young, neurodivergent children who may be more sensitive to environmental stressors. While the developer cites the EirGrid/ESB brochure "EMF & You" claiming there are no significant electromagnetic field (EMF) risks[10], independent scientific studies urge caution. Extremely low frequency EMFs from high-voltage transmission lines have been associated in some research with health issues, including childhood cancers. For instance, multiple epidemiological studies (including a large British study by Draper et al. 2005) observed a doubling of childhood leukemia risk for those living within 200 m of high-voltage lines, prompting the World Health Organization's IARC to classify low-frequency magnetic fields as "possibly carcinogenic" (Group 2B)[11]. While consensus on causation is not reached, this evidence cannot be ignored when a 110 kV cable is literally at our gate.

Of particular relevance to us, a peer-reviewed study in *PLoS One* (Huang et al. 2013) examined schoolchildren exposed to a 500 kV line and found indications that long-term low-level EMF exposure might impair neurobehavioral function in children[12]. The children near the power lines performed worse on memory and attention tests compared to those farther away[13]. The authors concluded that prolonged exposure to transmission-line EMF "*might have a negative impact on neurobehavioral function in children*" and called for further research[14]. As a parent of neurodivergent children (one with autism), I find this especially concerning. Many autistic individuals have heightened sensory sensitivities – studies estimate 50–70% of autistic people are hypersensitive to everyday sounds and stimuli[15]. While EMF itself is not a sensory input, any potential neurological stressor can exacerbate conditions. Additionally, the process of installing the cable (noise, vibration, disruption of routine) will be acutely distressing for neurodivergent kids who rely on stable, calm environments. My child experiences extreme anxiety and sensory overload from loud, chaotic situations – a prolonged construction outside our home could trigger meltdowns

or lasting regression in their progress. This health aspect was not considered at all in the application: there is no assessment of impacts on sensitive individuals or neurodivergent children, treating all "humans" as identical in tolerance. This one-size-fits-all approach fails our family and others like us.

Electromagnetic fields from underground cables do attenuate with distance, but at very close range (a few meters) the magnetic field can still be a few microteslas during peak load – not far below levels linked to health risks in some studies[16]. The precautionary principle should apply: if an alternative route or design could keep high-voltage lines further from homes, that would be far preferable. Burying the cable under the public road does not eliminate EMF; it simply puts it a bit farther from living spaces than an overhead line. I would urge the Board to require independent EMF modeling for the specific cable configuration and a demonstration that magnetic field exposure at the closest houses will remain below recognized precautionary limits (e.g. the 0.4 μT level associated with increased leukemia in some studies[17]). To date, we have only been given generic assurances from industry, which is not sufficient. The Health Service Executive (HSE) should have been formally consulted on potential health impacts – indeed, HSE notification is mandatory for strategic infrastructure with potential health effects[18]. Troublingly, it has emerged that in other wind farm cases An Bord Pleanála *claimed* the HSE was notified when in fact the HSE never received the plans[19]. A 2024 investigation found that *"the vast majority of wind farm planning applications have not been sent to the HSE"* despite rules – a situation a health advocacy group called "shocking," noting that HSE recommends the 2018 WHO noise limit of 37 dB for wind farms to protect public health[20][21]. We have to ask: has the HSE been notified about Ballinlee? If not, who is looking out for public health in this process? The absence of public health input is glaring, and it reinforces our concern that health matters (whether noise, EMF, or stress) are being swept under the rug.

In summary, there are valid health-based objections to placing a high-voltage cable so near homes and sensitive populations. The scientific community has flagged potential risks (even if low-level) ranging from small increases in childhood leukemia to cognitive/developmental impacts[12][11]. Given these uncertainties, it would be irresponsible to blithely install such infrastructure almost on top of where children live, play, and sleep daily. Our family's situation – with children requiring a stable, low-stress environment – amplifies these concerns. This project as proposed could negatively affect our children's health, development, and daily functioning, a consequence we find utterly unacceptable. Unless the route is altered to maintain a safe distance or the project is rejected, we are effectively being forced to become unwitting subjects in a long-term health experiment. That is an unreasonable ask of any community, and one that should carry great weight in your decision.

Cultural Heritage: Grange Stone Circle and Archaeology

The Grange Stone Circle in Lough Gur – Ireland's largest stone circle and a National Monument – lies in the vicinity of the grid connection route. This Bronze Age monument (113 standing stones in a perfect 45m circle) is an irreplaceable piece of our heritage, dated to ca. 2,000 BC[22][23]. It holds deep cultural and spiritual significance, aligned with ancient festivals (Samhain sunset) and used in sacred rituals[24]. The proposed cable route passes directly along the local road just outside the

circle's protected area[25], raising two concerns: physical risk to archaeological remains and degradation of the cultural landscape.

First, any ground excavations near a sensitive archaeological complex carry risk. While the trench is in the road, one cannot rule out the presence of undiscovered sub-surface archaeology or artefacts in the area – Lough Gur is a dense archaeological landscape with ring forts, wedge tombs, crannogs, etc. Vibration from heavy machinery could also impact the stone circle's stability or that of nearby earthworks. We recall how, in other projects, developers must employ archaeological monitors for even minor digging near known monuments. It is not evident what safeguards (if any) are planned here. If the cable works were to cause even hairline shifts in these megaliths or disturb associated ground strata, the damage would be irreversible. The OPW's guidance for protected sites stresses a cautionary approach – yet running a major construction project next to a 4,000-year-old monument seems the antithesis of caution. This is simply not an appropriate location for such works and should spur either re-routing or refusal.

Second, there is the intangible heritage value and setting. Grange Stone Circle is currently experienced in a pastoral, quiet environment that allows visitors to connect with the ancient past. Introduce months of construction noise, fencing, and traffic on the adjacent road, and that atmosphere is shattered. Even post-construction, the presence of an underground high-voltage line so close adds an industrial element to an otherwise historical landscape. We must consider the integrity of the cultural landscape as a whole, not just the stones within the fenced area. UNESCO and national heritage policies emphasize protecting not only the site but its setting and context. Here, the context is a tranquil rural setting by Lough Gur. It is frankly jarring to imagine, say, a tourist or local family visiting the stone circle to enjoy a sunset (as people have for millennia), only to hear trenching machines and smell diesel fumes from a grid construction site a few hundred meters away. This diminishes the cultural asset.

The EIAR's own visual assessment acknowledges the stone circle as a receptor (Viewpoint 17 was from within Grange Stone Circle)[26]. It claims that the wind turbines would not be visible from the circle and thus visual effects are "imperceptible"[27]. That may be true strictly for turbine visibility, but it ignores the construction-phase intrusion and other impacts on the monument. Visual impact is just one dimension; noise, vibration, and activity are others. Additionally, any claim of "no visibility" hinges on current vegetation – a dubious approach since leaves fall and sightlines change. Even if the turbines themselves are out of view, the route to connect them (the cable) literally runs past the site, which *is* an impact in itself. Notably, local observers have pointed out that the cable route runs "*directly past the Grange Stone Circle – disaster!!!*"[28]. This reflects genuine community alarm that our heritage is being put in harm's way for an industrial project.

In County Waterford, An Bord Pleanála has shown sensitivity to heritage and landscape in similar cases. The Dyrick Hill Wind Farm (12 turbines) was refused in 2024 partly because it lay in an upland designated "Most Sensitive" in the landscape plan, where it would interfere with the distinctive character of the area[29]. The Board found the project would contravene policy LO2 to protect the county's scenic and natural assets from undue visual intrusion[29]. By analogy, routing a grid connection through the Lough Gur heritage landscape, which is arguably of even higher cultural sensitivity, conflicts with Limerick's development plan objectives on protecting heritage. If

a wind farm can be refused for scenic landscape impact, surely one can be refused (or re-routed) for impacting a national monument's setting.

In conclusion, the proximity of the grid route to Grange Stone Circle is a serious concern on both tangible and intangible heritage grounds. This monument has stood for 4,000 years – we owe it to past and future generations to ensure nothing we do today jeopardizes its preservation or meaning. I urge that the Board either require the cable to be re-routed well away from the monument or, if that is not feasible, to refuse permission in defense of our shared heritage. The National Monuments Acts 1930–2014 oblige authorities to avoid harm to such sites[30]. Approving the current plan would, in my view, be a dereliction of that duty.

Visual Impact and Inappropriate Viewpoints

Visual amenity is another facet of residential and community impact. The 17 turbines (up to 185 m tall, though exact tip height not stated here) will be new dominant features on the skyline around Bruff and beyond. However, my objection here is focused on how the Visual Impact Assessment (VIA) was conducted – specifically, the selection of viewpoints that may understate impacts on key community locations. A glaring example is Viewpoint 16 (VP16) for Bruff. The VIA documents indicate VP16 was taken from the R512 on the southern outskirts of Bruff, on the bridge over the Morningstar River[31]. Local knowledge reveals that this vantage point is behind a treeline, such that the view toward the proposed turbines is partially obscured. Crucially, just beyond that treeline lies the local primary school (and indeed the wider village). By photographing from the bridge (with trees blocking part of the open view), the developer provides an image that likely minimizes visibility of turbines from Bruff town. Yet if one stepped just the other side of the tree line – essentially the view the schoolchildren and teachers would have – the turbines could be far more prominent. This feels like a selective presentation of visuals.

Why was there not a viewpoint from the school or from an open area in Bruff? Why choose one "tucked away" behind vegetation? The same might be said for some other viewpoints: the EIAR notes that two of the chosen views (VP17 at Grange Circle and VP18 at a wedge tomb) are "relatively enclosed" by surrounding features[32]. While enclosure can be relevant, one must question if the most representative views for community receptors were truly selected. It is in a developer's interest to show turbines as hidden or tiny on the horizon. But planners must also consider the worst-case or typical views, not just the rosiest. By not including a clear viewpoint from Bruff's main populated area (aside from the obscured one) or from Grange village itself (aside from inside the stone circle enclosure), the assessment may have underplayed the visual impact on daily life in these communities. For instance, many Grange residents frequent Bruff for school, shopping, etc. – the turbines will likely be visible along that route and from parts of the village, affecting the visual character of our area.

Another aspect is that viewpoints in EIA are static, but real life is dynamic. As one drives or walks, turbines may "peek out" from behind trees intermittently. The VIA's Zone of Theoretical Visibility (ZTV) map shows broad areas (up to ~8 km) around the site with theoretical visibility of multiple turbines[33][34]. This suggests that even if a viewpoint was screened, nearby there could be clear lines of sight. I fear the visual assessment's methodology might fail to convey how intrusive the

development could feel to us on a daily basis – for example, seeing turbine blades flicker in the distance as we drive the kids to school or go to the shop.

One particularly troubling visual phenomenon not adequately covered is shadow flicker. Chapter 15 of the EIAR presumably addresses shadow flicker, but given the turbine heights, any dwelling within a few kilometers at certain sun angles could experience moving shadows if line-of-sight is present. The developer likely claims compliance with the 30 hours/year guideline for houses within 10 rotor diameters, but if any house was missed or if modeling was optimistic, residents could suffer the strobing effect which is known to cause headache and distress (especially for neurodiverse individuals, as in my family's case). I mention this because it is part of visual-residential impact and has been cited by planners in the past. In fact, many county development plans (including Limerick's) emphasize protecting residential amenity from noise, shadow flicker, and visual intrusion in their wind energy policies. If any such impacts cannot be fully mitigated, it contradicts these policy objectives and strengthens the case for refusal.

In summary, the credibility of the visual assessment is questionable due to seemingly strategic viewpoint choices like Bruff VP16. The Board and decision-makers should not rely solely on the developer's photomontages but consider local testimony on actual sightlines. Given the large scale of the turbines, the project would introduce industrial-scale structures in a rural landscape, altering views from many homes, roadways, and community sites. The downplaying of this effect in the application is noted as a point of contention. Proper planning should err on the side of caution where visual impact on communities is concerned – a lesson learned in other refusals (e.g. Coolglass Wind Farm in Laois was initially refused by ABP for, among other things, adversely impacting the visual amenity of an area not designated for turbines[35]). If the viewpoints are inappropriate or insufficient, the visual impact conclusions are unreliable. Thus, the likely visual dominance and nuisance (shadow flicker) add yet another reason to object to this development as currently proposed.

Minimal Community Benefit and Socio-Economic Doubts

A recurring argument for wind farms is the "greater good" of clean energy and some local benefits. However, for the community of Grange (and surrounding townlands), the benefits are negligible while the burdens are significant. There is no evidence presented that this project will lower our electricity bills or directly improve local services. The new substation at Ballinlee will export power into the national 110 kV network – none of the generated electricity is earmarked for local supply. Our homes will not draw from that substation, and in any case electricity pricing is national, so living next to a wind farm does not grant one cheaper energy. In fact, developers in Ireland typically sell the power via the Renewable Electricity Support Scheme (RESS) or PPAs, with profits returning to the company (in this case, an Irish-owned venture, but nonetheless a private entity).

While the Renewable Energy Support Scheme does mandate a Community Benefit Fund (CBF) of €2 per MWh produced[36][37], this is a token amount spread across a wide area. For a ~90 MW project at maybe 30% capacity factor, that fund might be on the order of €400k/year split among many communities – not a life-changing sum, and often going to grant schemes that may or may not directly compensate those most affected. RESS also now includes annual dividend payments of €1,000 for households within 1 km of the turbines[38]. However, Grange residents along the cable

route fall outside that radius, since the turbines are several kilometers away. Thus, the families enduring the construction and cable in their front yard get *nothing* – no yearly €1k, no say in the benefit fund (which often prioritizes areas nearer the turbines). This is patently unfair. It creates a situation where our community bears all the downsides (noise, traffic, visual intrusion, etc.) with virtually none of the compensation. Even those within 1 km of a turbine might argue €1k/year is poor recompense for potential property devaluation or amenity loss, but at least it's something. Those communities affected but outside the radius get zero.

Promises of jobs and economic boost are also not convincing. The EIAR admits that construction jobs will be mostly short-term and many will be specialized roles likely filled by external crews[39][40]. It estimates perhaps 80 jobs during construction, mostly not local, and negligible long-term employment (a few maintenance roles)[39]. The local economy might see a small uptick from workers buying lunches or staying B&Bs, but this is marginal and temporary. Meanwhile, any minor gains are outweighed by potential losses to local amenity and tourism. Lough Gur and its heritage sites (including Grange Circle) attract visitors; a wind farm on the horizon or disruption during construction could deter tourists, impacting local businesses. If one quantifies it, the cost-benefit to the immediate community is actually negative: we lose quiet enjoyment of our homes, possibly see property values drop (studies from Canada and Europe have shown wind farms can reduce nearby property values by 20–40%[41]), and face years of disruption – all for a notional climate benefit that could be achieved in a less populated area or at sea.

It's also worth noting the resentment and division such projects can sow in rural communities. When benefits are scant, people naturally feel that their area is just a sacrifice zone for national targets. This is exacerbated when planning appears to discount local voices – as many feel is happening. There is no community co-ownership in this project (e.g. no share offer or co-op structure), which in other countries has helped acceptance. Here, we're effectively expected to accept noise, potential health concerns, and landscape change *for someone else's profit*. Even the climate argument, while valid, must be balanced against proper siting: Ireland has ample less-inhabited uplands or offshore opportunities that do not encroach on villages. The Climate Action Plan does not mandate putting turbines next to heritage sites or cables through front yards; it calls for renewable development in tandem with proper planning and public acceptance[29]. An Bord Pleanála itself acknowledged in a recent refusal that rejecting a particular wind farm does *"not militate against the wider ability for wind projects to be secured…subject to proper planning"*[29]. In plain terms, saying "no" here in Grange does not mean saying no to wind energy everywhere – it means this proposal is not the right fit for the location.

Finally, consider the working-from-home (WFH) paradigm as a socio-economic factor. With more people working and studying from home post-pandemic, local environmental quality matters more than ever. Unwanted noise or unreliable infrastructure can directly impact productivity and well-being for remote workers. The National Remote Work Survey 2023 found that only 44% of workers are now fully office-based, with the rest either hybrid or fully remote[8]. This is a sea-change in how communities function. Our homes are not just our private space but also our workplaces, classrooms, and daycares. Thus, the cost of disturbances like those from this project can be quantified in lost work hours, mental health strain, and reduced quality of life on work-from-home days. None of this was factored into the EIAR's socio-economic assessment, which likely still views

impact in old terms (e.g. commuting workers away in daytime, etc.). Planning decisions need to catch up to this reality: a project that might have been tolerable in a 9–5 out-of-home context can be intolerable in a WFH context.

In summary, the community and socio-economic case for this development is exceedingly weak. Minimal local benefit, no compensation for Grange residents, and new burdens – this tilts the scales toward refusal when weighed against the multitude of adverse impacts described. Good planning should strive for community gain or at least consent; here we have neither. Thus, I urge that this objection be given substantial weight: the people of this area do not welcome this project as proposed, and objectively, it does not serve our community's interests in any meaningful way.

Relevant Planning Precedents of Refusals

It is instructive to look at other wind farm proposals across Ireland that have been refused at planning or appeal, especially on grounds similar to those we face. Such precedents show that the issues raised in this objection are not mere NIMBYism; they have been validated by authorities as legitimate reasons to refuse poorly sited or executed projects.

- **Coumnagappul Wind Farm, Co. Waterford (10 turbines)** – *Refused by ABP in 2025.* Key reasons included the local road network's inability to safely carry construction traffic and the fact that the site was in an area where wind farms were deemed not normally permissible due to landscape sensitivity[7][42]. In our case, the narrow local roads through Grange are similarly inadequate, and while Limerick's plan does designate much of east Limerick as suitable-in-principle for wind, it still requires avoiding impacts on residential amenity and heritage – which Ballinlee fails to do. The Coumnagappul decision shows ABP will reject projects that pose traffic hazards and violate local planning designations ("exclusion zones" or sensitive landscapes). Grange's stone circle and village should analogously be treated as sensitive receptors warranting exclusion of heavy infrastructure.

- **Dyrick Hill Wind Farm, Co. Waterford (12 turbines)** – *Refused by ABP in Oct 2024 (Case PA93.317265)*. The Board gave multiple reasons: (1) Material contravention of Waterford's renewable energy policy due to improper siting – yet they noted this refusal would not impede other wind projects in principle[29]. (2) The site was in an upland "Most Sensitive" landscape, and the wind farm's layout and scale would adversely interfere with the intrinsic character and distinctiveness of the landscape, contravening policy LO2 on protecting scenic areas[29]. (3) Biodiversity loss (3.5 ha of Annex I dry heath habitat) and inadequate consideration of protected species (hen harrier), contravening Habitats Directive Article 4(4) and development plan ecology policies[43]. These reasons are pertinent because they illustrate that harm to landscape character and ecology were taken very seriously. In Ballinlee's case, one could argue the Lough Gur/Grange area has a unique character (heritage landscape with tourism value) that would be similarly harmed. Also, although our objection hasn't detailed ecology, it's worth noting East Limerick is known to have Hen Harrier Special Protection Areas (SPAs) nearby. If Ballinlee could affect hen harrier or other protected species, that alone could be a fatal flaw (Dyrick's refusal on habitat grounds sets a precedent). The Board's willingness to refuse even medium-sized

projects (10–12 turbines) in 2024 shows a trend of stricter scrutiny on proper siting and impact avoidance.

- **Co. Limerick Cases**: Limerick itself has had contentious proposals. One example: an earlier 2021 proposal near **Meelick (Ballycar Wind Farm)** was initially refused by ABP due to proximity to a residential area – described by locals as "in the middle of a community" – and concerns over noise, visual impact, etc. (This was mentioned in an Irish Times piece on ABP's health scrutiny issues[44][45]). Another case, the **Knockfeerina wind farm** (proposed near a culturally important hill), was withdrawn or refused at Council stage due to landscape/cultural impacts, according to local media. These show that in Limerick, too, planners have acknowledged when a site is **too close to homes or heritage. In** one High Court case (*Roache v ABP 2024*), residents challenged an approval of a wind farm near Limerick city, citing the original Council refusal on visual/residential grounds. Although that challenge was dismissed[46], it highlights that community concerns have pushed wind farm decisions to high scrutiny.

- The **Coolglass Wind Farm, Co. Laois (13 turbines)** refusal by ABP (later sent for reconsideration after a legal challenge) is notable for its emphasis on *visual impacts and local policy*. ABP had cited the county development plan's designation of certain areas as not suitable for wind and noted the project would harm residential amenity by way of noise, flicker, etc.[35]. The High Court remitted it due to a legal technicality, but the case underscores that noise and shadow flicker impacts on residents are indeed legitimate planning considerations at the highest level.

What these cases collectively demonstrate is a pattern: **wind energy projects get refused when they clash with protection of residential amenity, public safety, environmental heritage, or local development policy**. Ballinlee Wind Farm, particularly the grid connection through Grange, triggers *all* of those clash points:

- **Residential Amenity**: We have shown how noise (construction and operational), vibration, shadow flicker, and EMF concerns all pose risks to the comfort and health of nearby residents – paralleling issues raised in other refusals. Development plan objectives in Limerick explicitly require wind proposals to avoid significant noise, shadow flicker and visual intrusion on homes. By any reasonable measure, a cable 10 m from a home and turbines within a few kilometers violate that, especially given the noise will exceed WHO health-recommended limits if not properly mitigated[45].

- **Public Safety (Traffic)**: Our local road situation is akin to Coumnagappul's – a strong reason for refusal there. The Council in that case stressed potential accidents and unsuitability of roads[7]. Here, too, the risk of a truck collision or even just daily hazard to pedestrians (children walking/cycling to friends or sports) is real if heavy trucks inundate the area. Lives should not be put at risk for turbine deliveries – planning must prioritize safety.

- **Heritage and Landscape**: With Grange Stone Circle at stake, it echoes Dyrick's landscape sensitivity reason. Limerick's Development Plan (2022–2028) surely contains provisions to protect cultural heritage from inappropriate development. The fact that Ballinlee's EIAR itself took viewpoints from the stone circle shows it's within the study area, meaning the impact had to be considered[32]. If considered properly, they would conclude any potential interference (even temporary) with such a site is too high a price. The magnitude of cultural loss if something went wrong simply cannot be justified by a private energy project.

- **Environment and Health**: Although not the focus of my personal objection, I note that Ballinlee would presumably involve felling and peat excavation (for turbine bases) which raises carbon and water concerns, and potential habitat disturbance (bats, birds) as any wind farm does. Other refusals like Dyrick and a recent Cork case (Keeagh Wind Farm near Gougane Barra, nicknamed "Cork's biggest wind farm") cited habitat loss and inconsistency with climate goals when peatlands would be harmed[47]. If Ballinlee has similar issues (e.g. carbon payback time due to peat disturbance), that's yet another angle. On health, we saw ABP itself worry about lack of HSE input[19]. If ABP is under scrutiny for health oversight, approving a project with unresolved health questions (noise, EMF, etc.) without HSE comment would be tone-deaf and possibly legally risky.

In light of these precedents, I strongly encourage the decision-makers to stand by the principles demonstrated in prior refusals. Local communities and environments matter. The easy path might be to approve with conditions, but many past cases show that sometimes the only way to protect what needs protecting is to refuse outright. Wind energy can and should be pursued, but not at any cost and not in every location. Ireland has also moved toward more offshore wind – reducing pressure on onshore sites that are contentious. As one Waterford councillor said, "*offshore is the place for them*" when it comes to preserving our beautiful countryside[48][49]. While offshore vs onshore is a policy debate, it underscores that councillors and communities are not anti-renewable – they are asking for sensible siting. Ballinlee, in its current form, is not sensible or acceptable for Grange and surrounds.

Additional Observations and Objections

In addition to the major issues detailed above, I wish to raise a few other points that underscore why this proposal is problematic:

- **Property Value Depreciation**: It may be outside the narrow scope of planning laws (which typically don't account for land value), but it is a genuine concern for residents. Multiple studies (including a 2019 German study by the Leibniz Institute) have documented that proximity to large wind turbines can cause home values to drop, especially in rural areas, with reductions up to ~20% reported[50][51]. A Canadian court case even accepted a 50% value loss for a farm due to nearby turbines[52]. For many of us, our home is our primary asset. The prospect of it losing value – or worse, becoming hard to sell if someone doesn't want to live near cables/turbines – is distressing. While the greater good can sometimes override individual economics, it should be noted that no compensation is offered for this potential loss. If this project proceeds, will the developer compensate a homeowner who

finds their house worth significantly less or unmarketable? Highly unlikely. This asymmetry (they profit while we shoulder a private financial loss) feels unjust. At minimum, it adds moral weight to refusing a project that isn't community-supported.

- **Cumulative Impact & Future Precedent**: Approving 17 turbines here could open the door to more in adjacent areas, leading to a cumulative "wind farm landscape" across East Limerick. Already other projects (like Carrownagowan in Clare, just across the Limerick border) are in planning or in appeals, which combined with Ballinlee would surround communities with turbines from multiple sides. There are 9 planned for Bruree/Charelville, 6 planned for Coolcappa and another potential development for Grange/Ballyneety area. Each individual project EIA might say impacts are minor, but cumulatively the stress on residents and infrastructure can become overwhelming. For instance, traffic from multiple wind projects could mean one after another construction period hitting the same roads year after year. Noise from different wind farms can have additive effects. None of this is properly accounted for if each project is siloed. The Board should consider whether Ballinlee is a slippery slope for the locality.

- **Technical Concerns**: There are some technical aspects of the application that raise red flags. The Noise Impact Assessment (Chapter 13 of the EIAR) needs scrutiny – did it use the latest 2018 WHO guideline of 45 dB for wind turbine noise as a criterion[53]? If they stuck to older 2006 guidelines (43 dB night, 45 day) or did not incorporate potential amplitude modulation penalties, then the assessment may underpredict sleep disturbance risk. There is emerging evidence that amplitude modulation (the throbbing or beating aspect of turbine noise) causes special annoyance. In fact, ABP recently requested additional studies on amplitude modulation in at least one wind farm case (ABP-315656) and an inspector's addendum considered new research on it[54]. If Ballinlee's noise study ignored this, it is already outdated. The Board's own inspector in that case recommended refusal partly because of insufficient evidence about these new noise characteristics. If a refusal can happen on such a basis, Ballinlee should not get a free pass. We would face that noise for 30 years if they are wrong in their assumptions.

- **Shadow Flicker and Human Health**: I touched on flicker earlier, but I want to emphasize that shadow flicker isn't just an "annoyance"; for some individuals it can trigger migraines or even epileptic seizures (in those with photosensitive epilepsy). While guidelines set limits, enforcement is tricky (one can't turn off the sun). The safest way to eliminate flicker is to ensure turbines are far enough or oriented such that no home receives significant flicker. If any home is modeled to get flicker near the limits, that's a home potentially unliveable at certain times of year. The application likely proposes software shutdown of turbines at flicker times as mitigation – but this relies on perfect execution and ongoing compliance, which residents have to trust. If that fails, our recourse is limited. Thus it's another risk factor we shouldn't have to bear.

- **Glint/Glare and Aviation**: A minor note – the proposal is situated in an area used by the local airstrip (Coonagh) or Shannon airspace. Have all aviation safety concerns been

addressed, including reflections or interference? The documentation shows an Aviation Impact Assessment was done[55]. Assuming no issue, that's fine, but I raise it to be thorough.

- **Quality of Life and Mental Health**: Beyond physical health, the prolonged stress of this situation must be acknowledged. Already, the prospect of the wind farm has caused anxiety and sleepless nights for many in the community (we constantly worry if our home will become a construction zone, if our kids will cope, etc.). If it goes ahead, the construction period will be a time of great mental strain – noise can cause irritation, inability to concentrate, and even cardiovascular stress responses in the long run. The WHO has explicitly linked chronic environmental noise to health outcomes like hypertension and diminished well-being. It is telling that wind farms rank among the most contentious rural planning issues, often leading to legal challenges[56]. This is because they fundamentally alter people's environment. So when weighing this decision, the Board should factor in not just tangible metrics but the intangible: Will this project make the lives of the local people better or worse? All evidence here points to "worse" by a considerable margin for those in Grange and its vicinity.

Additional Grounds of Objection – Critical Analysis of Appendix 2D (Grid Connection Route Report)

This section provides a dedicated, fully detailed critique of Appendix 2D – Grid Connection Route Report, as it relates to both the proposed turbines and the 110 kV grid connection. It is intended to be read together with the main body of this objection and the arguments already set out therein.

Appendix 2D purports to describe and justify the grid connection route and associated works. However, when examined in detail, it falls materially short of what is required under the Planning and Development Regulations and the EIA Directive. In particular, it fails to properly address: (a) residential amenity and health; (b) noise and vibration; (c) shadow flicker and associated stress; (d) ecology and biosecurity; (e) cultural heritage; (f) traffic and road safety; (g) floodplains, drainage and hydrology; and (h) cumulative and construction-related impacts, including pest displacement.

First, Appendix 2D treats the grid connection as a largely technical, linear piece of infrastructure, rather than as an intensive construction project running directly past homes, schools, farms and heritage assets. There is no meaningful receptor-based assessment of how deep trenching, repeated road-opening, heavy machinery, and haulage will affect residents living within a few metres of the works. In Grange, the cable is routed within approximately 10 metres of occupied dwellings, yet Appendix 2D does not include any specific analysis of health, amenity or psychological effects on those households, nor any discussion of alternative alignments to avoid them.

Second, the report is silent on construction noise and vibration as experienced at the façades of nearby homes. While Chapter 13 of the EIAR attempts to set generic noise limits, Appendix 2D does not bridge that analysis to the actual grid route, road by road and property by property. There is no modelling of continuous excavation noise, breaker hammer use, plate compaction or HGV

movements along narrow lanes with dwellings hard up against the carriageway. Nor is there any attempt to quantify vibration levels at foundations where trenches will be excavated mere metres away. This omission is particularly serious for properties under 10 m from the trench, where international guidance recognises an increased risk of cosmetic and, in some cases, structural damage.

Third, Appendix 2D takes no account of how turbine-related factors such as low-frequency noise and shadow flicker interact with grid construction impacts. For residents, the project is not experienced in silos – a cable one year and turbines another – but as a single development. The report does not assess how prolonged construction noise, dust and traffic, followed by operational turbine noise and flicker, will cumulatively affect sleep, stress and mental health in communities along the route, especially where there are neurodivergent children or other vulnerable persons.

Fourth, in terms of ecology, Appendix 2D treats the grid corridor as a neutral line on a map rather than a series of actual habitats. Hedgerows, treelines, drains and riparian margins are referenced only in passing. There is no robust appraisal of how trenching, verge stripping and compound areas will fragment habitats, impact bat commuting routes, disturb ground-nesting birds, or increase sediment and pollutant loads to watercourses. Equally, there is no discussion of biosecurity or pest-related issues – for example, how disturbing roadside banks and farmland margins may displace rats and mice into nearby homes, or how invasive species present along the route could be spread by soil movement and machinery.

Fifth, the report gives inadequate consideration to cultural heritage and landscape character along the grid corridor. Sensitive assets such as Grange Stone Circle and the wider Lough Gur heritage landscape are acknowledged elsewhere in the EIAR, but Appendix 2D does not assess how repeated heavy construction traffic, temporary compounds, trenching and reinstatement will affect their setting, visitor experience or long-term perception. There is no visibility mapping, no vibration risk discussion for archaeological features, and no clear avoidance or mitigation strategy specific to the grid works.

Sixth, the treatment of traffic and road safety is high-level and generic. Appendix 2D relies heavily on the Traffic Management Plan but does not critically interrogate whether narrow local roads, pinch-points, junctions and bends are actually capable of safely accommodating the predicted volumes and vehicle types e.g. local farmers in tractors, bailers, milk trucks. Many sections of the route cannot safely take two HGVs passing; sightlines are limited; pedestrians and cyclists (including schoolchildren) use the same carriageway. Yet there is no route-specific risk analysis, no swept-path testing presented, and no contingency proposals for breakdowns, diversions, or emergency vehicle access during trenching and single-lane traffic management.

Seventh, Appendix 2D gives insufficient attention to floodplains, drainage and temporary or permanent changes to surface-water behaviour. In locations already prone to flooding, excavating a deep trench along the road edge and then backfilling it with different materials risks creating preferential flow paths, dams, or under-drains that alter how water moves through the landscape. The report does not adequately cross-reference the temporary surface-water calculations in other appendices, nor does it map the interaction between the cable trench, existing culverts, and

designated flood zones. There is no clear demonstration that the grid works will not exacerbate flooding at vulnerable properties or downstream receptors.

Eighth, the cumulative impact analysis in Appendix 2D is largely absent. The report looks at the grid connection in isolation, without factoring in: concurrent wind farm construction; other consented or proposed developments; existing pressures on the road network; or the long history of incremental change within the Lough Gur/Grange area. From a resident's perspective, the grid route is part of a much larger pattern of infrastructure encroachment, but Appendix 2D does not acknowledge or assess this reality.

Ninth, there is a notable lack of route-selection transparency. Although Appendix 2D suggests that alternative corridors were considered, it does not document a robust multi-criteria assessment which weighs technical feasibility against health, amenity, heritage, ecology, hydrology and traffic. In particular, there is no explanation as to why a corridor passing within approximately 10 m of occupied homes was chosen over more remote options, nor is there any serious effort to refine the alignment away from the most constrained frontages. This runs counter to the core EIA principle of avoidance – impacts should be designed out at source, not simply mitigated after the fact.

Finally, Appendix 2D must be viewed in light of the lived reality described in the main body of this objection. Families along the route face months of disruption from trenching, noise, vibration, dust, road closures and potential pest displacement, all for a project from which they derive minimal benefit. The report does not acknowledge that imbalance, nor does it put forward compensatory measures, monitoring commitments or binding conditions to address it. As such, it cannot be considered a complete or reliable basis for decision-making.

In summary, Appendix 2D – Grid Connection Route Report is materially deficient in its treatment of health, noise, vibration, shadow flicker context, ecology, heritage, traffic, floodplains, cumulative effects and pest-related issues. It fails to provide the level of route-specific, receptor-focused analysis required for a project of this scale and proximity to homes and heritage assets. These shortcomings reinforce the broader conclusion of this objection: that the proposed turbines and grid connection, taken together, would result in unacceptable impacts on the community of Grange and surrounding areas, and that permission should therefore be refused.

Additional Summary – Appendix 2D Failings Relevant to Grounds for Refusal

• Failure to assess health and amenity impacts on homes within 10 metres of trenching.

• Inadequate modelling of construction noise, vibration, and structural risk to nearby dwellings.

• No receptor-based assessment of cumulative impacts with turbine noise and shadow flicker.

• Insufficient ecological and biosecurity analysis, including habitat fragmentation and pest displacement.

• Lack of heritage protection measures for Grange Stone Circle and associated archaeological landscapes.

• Traffic safety analysis is generic and not route-specific, with no emergency access planning.

• Under-modelled floodplain and hydrological impacts with no flood-neutral demonstration.

• Absence of a transparent alternatives study explaining routing beside occupied dwellings.

• Failure to provide a compliant cumulative impact assessment under the EIA Directive

Conclusion

In conclusion, I strongly urge the relevant authorities to **refuse permission** for the Ballinlee Wind Farm as proposed, or at the very least to require substantial redesign (especially of the grid connection route) to address the issues raised. This detailed objection, written in a resident's voice but backed by evidence, has highlighted:

- The **extreme proximity** of the grid connection to homes (under 10 m) and the unacceptable noise, vibration, and safety hazards this entails. Our daily lives and health would be directly and adversely affected, with particular risk to vulnerable family members (neurodivergent children) from sensory and health standpoints.

- The **public health uncertainties** around high-voltage EMF exposure and wind turbine noise. Best practice would demand a precautionary approach – including consulting the HSE and adhering to WHO guidelines – none of which we are confident has happened. People's well-being should not be an afterthought.

- The **disregard for cultural heritage**, exemplified by running the cable adjacent to Grange Stone Circle, a national monument of immense importance. This shows a lack of respect for our shared heritage and contradicts conservation obligations.

- The **flawed portrayal of impacts** in the application, such as selective viewpoint photography and optimistic assessments that don't align with on-the-ground reality (especially given the WFH context). The potential for shadow flicker, property devaluation, and cumulative effects are downplayed or ignored.

- The **paltry benefits versus significant costs** to the local community. There is no evidence of local gain (no local power discount, minimal jobs, and we largely don't qualify for the community fund), yet very clear evidence of local pain. This imbalance fails to meet any reasonable test of sustainability or just development.

- The **planning precedents** wherein similar or smaller projects were turned down for reasons directly applicable here: road safety, noise/amenity, landscape/heritage protection, etc. Approving Ballinlee in spite of these parallels would set a poor precedent and could undermine public trust in the planning system's consistency and fairness.

Finally, I would ask the decision-makers to put themselves in our shoes – the residents of Grange and surrounding areas. If it were your own family home 10 m from this haul route, your children whose school has turbines overlooking it, or your community's ancient monument at risk, would

you feel this project is acceptable? I suspect the honest answer would be **no**. Development must be balanced with protecting existing communities. In this case, the balance is wildly off. Therefore, the only *"proper planning and sustainable development"* outcome (to use the legal phrasing) is to **refuse permission** for the Ballinlee Wind Farm and its grid connection as currently sited, and encourage the proponents to consider alternative locations or designs that do not jeopardize the health, safety, and heritage of communities like ours[29].

Thank you for considering this objection. Having listed all these objections, I want to stress that my family and I are not anti-renewable energy. We understand Ireland's climate goals and the need for clean power. But we also believe in ethical, community-centric planning. Renewable projects must be developed "the right way, in the right place" – a mantra often repeated by policymakers. That means rigorously avoiding harm to communities and treasured landscapes. Unfortunately, the Ballinlee Wind Farm, as currently designed, fails that test. It asks a small rural community to shoulder outsized burdens for a project whose gains largely bypass them.

We trust that the Board will give due weight to the points raised and make a decision that upholds the long-term welfare of both the local population and the environment we cherish.

Yours Sincerely,

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