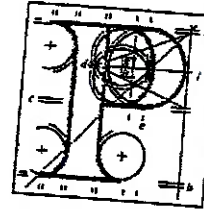


Our Case Number: ABP-317809-23



An
Bord
Pleanála

Swan Spink Wolfhill Luggarcurren Wind Aware Group
c/o Kieran Brophy and Peter Sweetman
Spink
Abbeyleix
Co. Laois

Date: 09 October 2023

Re: Proposed Coolglass windfarm and related works
In the townlands of Fossy Upper, Aghoney, Gorreelagh, Knocklead, Scotland, Brennanshill,
Monamantry, Coolglass, Crissard and Kilenabehy, Co. Laois.

Dear Sir / Madam,

An Bord Pleanála has received your recent submission in relation to the above mentioned proposed development and will take it into consideration in its determination of the matter. Please accept this letter as a receipt for the fee of €50 that you have paid.

The Board will revert to you in due course with regard to the matter.

Please be advised that copies of all submissions / observations received in relation to the application will be made available for public inspection at the offices of the local authority and at the offices of An Bord Pleanála when they have been processed by the Board.

More detailed information in relation to strategic infrastructure development can be viewed on the Board's website: www.pleanala.ie.

If you have any queries in the meantime, please contact the undersigned officer of the Board or email sids@pleanala.ie quoting the above mentioned An Bord Pleanála reference number in any correspondence with the Board.

Yours faithfully,

PP EM
Evan McGuigan
Executive Officer
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Dublin 1

2nd October 2023

Case Reference: PA11.317809

Development address; In the townlands of Fossy Upper, Aghoney, Gorreelagh, Knocklead, Scotland, Brennanshill

To Whom it Concerns

We, Kieran Brophy and Peter Sweetman, on behalf of the people of 'The Swan, Spink, Wolfhill, Luggarcurren Wind Aware Group, representing approximately 200 families, wish to make the following observations regarding the proposed Coolglass SID Windfarm Development.

1. Decision to Designate the Project as an SID

- a. The proposed development is described as a windfarm with two distinct clusters. The EIA report (Vol 2 EIAR Chapter 3 Section 3.1.2) states:

"The Proposed Development is divided into two distinct areas identified as the northern cluster and the southern cluster...."

The 2 distinct clusters are in two completely different locations and townlands (Wolfhill and Fossy Mountain). This proposed windfarm development should be classed as not one but two separate windfarms and therefore require two separate planning applications. As the proposed development should be classed as two windfarms, the power output from the southern Wolfhill windfarm (based on the larger 7.2KW turbine) would be 43.2MW which is below the required 50MW threshold for SID. The power output from the northern Fossy mountain windfarm would be 50.4MW, close to the limit for SID. However, the application describes a range of potential turbines 7.2MW and 6.6MW. When the 6.6MW turbines are considered power output for the northern cluster drops to 46.2MW in total which is below the required 50MW threshold for SID. A decision on an SID should not be made on a windfarm where the exact proposed turbine is not known. Therefore, as the proposed development should be classed as 2 separate windfarms, the power output from each separate cluster alone does not exceed the required threshold of 50MW for SID.

- b. These massive 180m 7.2MW turbines have been available and used in offshore windfarms and are new to the onshore market in Ireland. Based on available data from 16 other countries, the weighted average power rating of onshore wind turbines was 3.3MW. Reference paper "Data investigation of installed and output power densities of onshore and

offshore wind turbines worldwide by Peter Enevoldsen, Mark Z. Jacobson, 2020 and Wind Europe 2020. The developer Statkraft have merely put in larger turbines to expedite planning as an SID development.

c. Chapter 3.8 of the EIAR states:

"The total installed capacity of the proposed development is between 85.8 to 93.6MW (please note: the MW output is stated here based on turbines of a 6.6MW and a 7.2 MW output and only for the purposes of assessment of benefits towards climate as set out in Chapter 6"

However, this is not reliable information in which its sole purpose is to justify the project as an SID. The An Bord Pleanála scoping exercise should have noted that while performance is listed as 7.2MW per turbine, the actual performance of turbines is only approx. 38% efficient. Based on this efficiency, the actual performance of the 13 proposed 7.2MW turbines is 35.5MW, well below the required 50MW for SID. The change of the planning act from 100MW to 50MW for SID must be challenged with the actual performance even lower. It is against all planning principles to allow structures of such size and magnitude (manufactured for the offshore markets) to be built onshore and in such proximity to people's homes and communities. This reason alone should refer this application as non-compliant to industry and planning guidelines.

1.1 No Grid Connection/Project Splitting

The current application is incomplete and does not comply with the EIA Directive. Please note O'Grianna and others v. An Bord Pleanála {2014} EHC632 which determined that the environmental impact should be assessed as a whole under article 2(1) of the EIA Directive as:

- a. All work at EirGrid's Laois Kilkenny Reinforcement Project (Coolnabacky 400kv Substation) has currently ceased as directed by Laois County Council pending a planning challenge and currently under review. There is currently no substation or grid connection for the proposed development. How can a Wind Farm development of this magnitude or any windfarm for that matter, be approved for planning if it has no confirmed grid connection? It is also noted that the developer states in their application (Section 2.1 of Coolglass Wind Farm Vol 1 – Non-Technical Summary) that the proposed grid connection substations are "under construction". This is again incorrect information in this application as the substations are currently not under construction.
- b. In addition, if the grid connections are approved, it is neither confirmed nor documented in the application that the proposed substations will have the capacity for the electricity that may be generated from the proposed development.
- c. The planning application includes permission sought for an on-site 110 kV substation. Has a site suitability assessment been completed for the proposed location of this substation and all associated works?

2. Laois County Development Plan 2021 – 2027

- a. The planning statement in the EIAR states 4 of the southern turbines are within areas 'Open for consideration' for wind energy development. This is incorrect information from the developer. Only one turbine, T11, is in an area 'Open for consideration'. 12 of the 13 proposed turbines are in areas '**Not Open for Consideration**' per appendix 5 Wind Energy Strategy of LCDP 2021 - 2027.
- b. In addition, there are inconsistencies between the maps showing the proposed layout of the development in the EIAR and the planning application drawings. This incorrect information needs to be taken note of by the Bord and needs clarification.
- c. Laois county council are the local authority for the area, have the most knowledge and expertise for county Laois and have performed a thorough assessment with relevant subject matter experts to determine areas open and not open to consideration for wind farm development. The developer's EIAR attempts to justify the site by contravening the Laois County Development Plan.
- d. In 2022, a ministerial directive was submitted to Laois County Council to update Appendix 5 of the LCDP 2021 – 2027 to remove the set-back distance of 1.5Km from a residential property to a turbine. The LCDP was subsequently updated and then reviewed and approved by the council and the planning regulator, indicating that the planning regulator was **satisfied** with the content including Laois County Councils assessment in determining areas **Not Open for Consideration**

3. Wind Speed Data and Wind Mast

- a. Vol 2 EIAR Chapter 3 Section 3.7 states:

"Available wind speed is a key factor in determining the economic viability of potential wind energy locations. The Sustainable Energy Authority of Ireland (SEAI) Wind Mapping System¹ identifies the site as having an average wind speed of...."

However, as stated on the SEAI Wind Atlas website (<https://gis.seai.ie/wind/>) section 1.1 scope (see screenshot in Figure 1 below):

"Use of the provided information is for indicative and general information purposes only. The quality and detail of the information is such that no commercial, legal, or other contractual or developmental decisions should be made on the basis of what is provided herein."

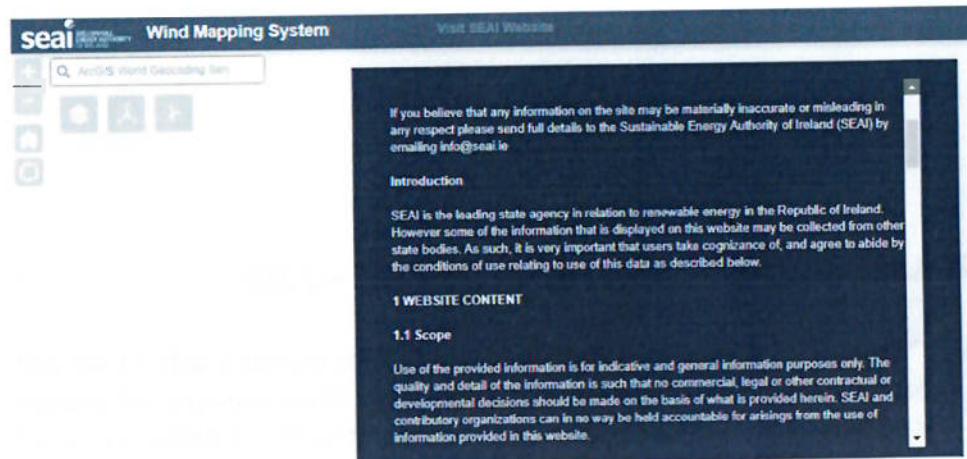


Figure 1: Screenshot from SEAI Wind Mapping System

In addition, as stated in section 4.6 of the 2019 draft Wind Energy Guidelines:

“Whilst the potential location of a wind energy development will be informed by data on wind speeds and directions, it will be necessary to ensure the feasibility of a particular site before detailed work is undertaken. The wind speed at a particular site may be affected by topography, screening (by tall buildings or trees), or even turbulence from existing wind turbines in the area, and therefore in some instances it may be prudent to measure the average wind speed at the site. Planning applications for wind anemometers and measuring masts are generally sought for a limited period only (usually 12 months but might be longer). Permissions should be granted for approximately a two-year period, in consultation with the developer, to allow a wind resource analysis to be carried out.”

There is no evidence that a site wind resource analysis using wind anemometers and measuring masts was carried out for the proposed windfarm.

In addition, as stated in the Laois County Development Plan 2021 – 2027 Appendix 5 Section 7:

“However, at least one year's measured data is required before a project can be developed. This will entail erecting a 40m or 50m wind monitoring mast within the site and recording data for a minimum of 12 months. Planning permission, usually for 2 years, is required for this mast.”

There is no evidence of this measured wind speed data from the proposed site with the application, which is therefore contravening the Laois CDP. It is our contention that there is insufficient wind data relating to the two different clusters of the proposed development which differ greatly in terms of topography and elevation.

Furthermore, as stated in section 4.6 of the 2019 draft Wind Energy Guidelines and section 4.2 of the 2006 Wind Energy Guidelines:

“It would be inadvisable for the planning authority to grant planning permission for a wind measuring mast in an area where there is a presumption against wind energy development in the development plan.”

Per the Laois County Development Plan 2021 – 2027 Appendix 5, the proposed wind measuring mast is in an area '**Not Open For Consideration**' for wind farm development. Therefore, it would be inadvisable for the planning authority to grant planning permission for

4. Non-Compliance with Community Engagement Requirement under the Aarhus Convention

- a. The shift to renewable energy is exacerbating social injustice issues, particularly affecting indigenous communities and disadvantaged populations. Despite the need for a 'just transition', infrastructural inequalities, high costs, and a lack of proper consultation often hamper these communities. Experts recommend increased involvement of local communities, securing their consent for projects, and increased government regulations to ensure non-discriminatory decisions.
- b. The European Union founded guarantees of fundamental rights. The Charter of Fundamental Human Rights, the Treaty on the Functioning of the EU, and the Lisbon Treaty, included rights to protect the environment and give citizens the right to participate in environmental decision making, and have their contribution taken into account by decision makers with reason given for decisions. The EU signed the Aarhus Convention, which ensures the right to participate is provided for by the SEA Directive 2001/42/EC and in particular Article 6 and 7 thereof.
- c. The Aarhus Convention grants the public their rights and imposes on Parties and public authorities' obligation regarding access to information and public participation. In fact, the preamble directly links environmental protection to human rights norms, and expressly recognises that every person has the right to live in an environment adequate to his or her health and well-being.
- d. The preamble connects the concept that adequate protection of the environment is essential to the enjoyment of basic human rights, with the concept that every person has the right to live in a healthy environment and the obligation to protect the environment. It concludes that to assert this right and meet this obligation, citizens must have access to information, be entitled to participate in decision-making, and have access to justice in environmental matters.

4.1 What is public participation?

- a. Under the Convention, the public has a right to participate in decision-making regarding environmental matters. Public authorities should enable the public to comment on, for example, proposals for projects affecting the environment. The outcome of the public participation process should be taken into consideration in the decision-making process.

4.2 Public participation in decision-making:

- a. The public participation pillar of the convention is divided into three parts. The first part concerns the participation of the public that may be affected by or is otherwise interested in decision-making on a specific activity, and is covered by article 6. The second part concerns the participation of the public in the development of plans, programmes and policies relating to the environment.

4.3 When is public participation required?

- a. Public Participation is required from the 'concerned public' when activities affecting specific groups or individuals are being carried out, such as plans for construction (Article 6 of the Aarhus Convention).
- b. Public participation is required from 'the public' for the development of plans, programmes and policies relating to the environment. This includes issues such as climate policy (Article 7 of the Aarhus Convention).
- c. Public participation is required for the development of legal acts relating to the environment (Article 8 of the Aarhus Convention).

4.4 Public Participation in relation to the proposed Development:

- a. According to the SLR Planning Report submitted Case Reference: PA11.317809, in Section 2.6, *pre application request was made to ABP under reference ABP-313375-22 by the Applicant for a determination that an application of this scale would be considered to be SID. In ABP's letter dated 11th May 2023, ABP confirmed that the Proposed Development falls within the scope of paragraphs 37A(2)(a), (b) and (c) of the Act. Accordingly, ABP have decided that the Proposed Development would be SID within the meaning of Section 37A of the Planning and Development Act, 2000, as amended.*
- b. It appears that An Bord Pleanála failed in its duty to participate in effective community engagement before making its final decision that this application was an SID, and in doing so, failed to apply its due diligence regarding the relevant EU law, thus preventing the community at large the opportunity to gain a realistic understanding of what to expect from a proposed wind energy development.

5. Irish Government Guidelines on Community Engagement - Dialogue and Communication

- a. The Irish Government Guidelines set out that to achieve community and public acceptance of wind energy developments, an important building block is proper consultation with and participation by the community in progressing wind energy proposals from concept to approval and ultimately development.
- b. *Community consultation is the process through which a developer (in this case a wind energy developer) interacts with the local community enabling them to inform the decision-making processes of a wind energy development project, for example, at the siting and design stage.*
- c. The Guidelines set out to enable planning authorities to take into account the degree to which the applicants of wind energy projects *have meaningfully and properly consulted with the local community and facilitated public participation in developing their proposals.*
- d. These guidelines are a starting point when attempting to engage with the community at large, and while the Irish Government Guideline initiative endeavours to make sure that community consultation is carried out, it also fails to implement the EU standardised legislation as set out in the Aarhus Convention regarding public participation.

5.1 Community Engagement in relation to the proposed development:

- a. It would appear that Statkraft used the Irish guidelines to some extent, however, it can be argued that their venture to engage with the community at large was not to a considerable performance.
- b. The SLR Report in the application, Section 3.6 sets out that door to door engagement took place in both January 2023 and again in May 2023. Many members of the community never spoke directly to any members of the door-to-door groups, and many in the community merely received a brochure left at their door, thus Statkraft has not effectively conducted meetings with all households to inform them of the project.
- c. There was very poor community engagement from the developer with the local communities that will be impacted by this development. Not all houses in the local area impacted or within 2Km of the development were called to, as the developer states in section 5.0 of Coolglass Wind Farm Vol 1 – Non-Technical Summary. Calling unannounced to people's homes without appointment during daily working hours does not constitute meaningful community engagement.
- d. The developer claims feedback was "mostly positive" from the local community. This is questionable as this is not the general feeling amongst the local community impacted. No public group meeting or informational consultation was held in person by the developer with the local community at any stage. The developer was asked when they called to one residents' door unannounced, why a public community engagement meeting is not performed. The response from Statkraft was, they were advised by An Garda Síochána not to hold a public meeting due to fears for their safety. There is no evidence of this. Why would Statkraft fear for their safety if feedback was mostly positive? This ultimately shows that Statkraft had truly no intention of completing full meaningful engagement with the local community.
- e. It should also be noted, that it is unreasonable for Statkraft to justify launching a website in 2022, which was set up to provide key information to householders, when there had been no communication or dialogue publicly at this point, and in general local householders in the community had zero awareness of the proposed plan until January 2023 when the door to door brochures were issued. The government guidelines state that *a fair and transparent process should be employed to identify the appropriate groups to consult, and individual groups must not be cherry-picked.*
- f. The guidelines set out that *it is essential that local communities are properly involved in the planning process, as early inclusion improves confidence in the openness and fairness of the planning process.* Statkraft have failed in their due diligence according to the guidelines to involve the local community early in the planning process.

- g. Addendum 3, Consultation with An Bord Pleanála of the application sets out that *a pre-application consultation meeting was held with An Bord Pleanála via web conference on the 16th of June 2022. The meeting discussion was centred around the following key points:*
 - 1. *Introduction to the Project Team*
 - 2. *Background to the Coolglass Windfarm Project*
 - 3. *Project Proposals*
 - 4. *Legislative and Planning Policy Context*
 - 5. *Public Consultation*
 - 6. *Project Scoping*
 - 7. *EIA Studies*
 - 8. *Key Environmental Considerations*
 - 9. *Project Deliverables and Timelines*
- h. It also states that *a second meeting was held with An Bord Pleanála via web conference on the 16th of November 2022*, which shows that two meetings were conducted very early in the process with the planning board, again however in was 2023 before any interaction or general public awareness was raised, and no public meetings for the community were ever facilitated by Statkraft any point in the planning process.
- i. The guidelines state that planning authorities should require developers to engage in active public consultation with the local community in advance of and in addition to the statutory public consultation required as part of the planning application process.
- j. It also sets out possible methods of providing information to include Public meetings/community drop-in sessions or a presence at local community events, to which Statkraft never attended any of the public meetings arranged by the community.
- k. Renewable companies should aspire to fulfil the highest standard of international human rights law rather than only complying with local laws, and in this case Statkraft have failed to complete their basic human rights due diligence in correct community engagement under the Aarhus Convention.

6. The Maastricht Principles on the Human Rights of Future Generations

- a. The Aarhus Convention links environmental rights and human rights and acknowledges that there is an obligation to future generations which establishes that sustainable development can be achieved only through the involvement of all stakeholders.
- b. The Aarhus Convention was the first international treaty to recognize the rights of both present and future generations to an environment adequate to their health and well-being. The rights of future generations have long been neglected in the analysis and application of human rights. Yet, human rights law does not limit itself to present generations.
- c. The *Maastricht Principles on the Human Rights of Future Generations* seek to clarify the present state of international law as it applies to the human rights of future generations. The *Principles* consolidate the developing legal framework and affirm binding obligations of States and other actors as prescribed under international and human rights law. They also

provide a progressive interpretation and development of existing human rights standards in the context of the human rights of future generations. They further recognise that States may incur additional obligations as human rights law continues to evolve.

- d. These *Principles* provide examples of how realising rights of future generations requires attention to the distinct rights of particular groups and peoples. The *principles* were adopted in Maastricht on 3 February 2023. Signatories include experts located in all regions of the world and include current and former members of international human rights treaty bodies, regional human rights bodies, and former and current Special Rapporteurs of the United Nations Human Rights Council. This initiative builds on expert legal opinions adopted in Maastricht.
- e. The human rights of future generations form an essential dimension of humankind's duty to uphold the inherent dignity, equality, and inalienable rights of all.
- f. Lastly, I refer to the case of *Fägerskiöld v Sweden* [2008] ECHR 37664/04 (25 March 2008) wherein the European Court of Human Rights considered a case of nuisance caused by a wind turbine, based on the right to respect for private and family life (art 8) and the right to protection of property (art 1 of Protocol No 1) of the *European Convention on Human Rights*.
- g. Specifically, art 8, applies to severe environmental pollution which may affect individuals' well-being and prevent them from enjoying their homes in such a way as to adversely affect their private and family life.
- h. It is important that the basic human rights set out in EU Law are not overlooked when considering this planning application and how it will affect the whole community at large.

7. Water

The location of the proposed development has the potential to impact two critically important water sources in County Laois - Kyle and Orchard Springs and Swan Public Water Supply Scheme. The developer has proposed to erect turbines inside the Source Protection Zone of the Kyle and Orchard Spring (*Figure 1*) and 75m above the Source Protection Zone of the Swan Public Water Supply (*Figure 2*). The whole area of the development lies in the catchment areas of the Groundwater Source Protection Zones of the above-mentioned Public Water Supplies which supplies over 2000 homes and businesses.

We urge the Bord to consider the following points.

- Water is a basic human right and is protected under European law through the Non Compliance with the Drinking Water Directive - Directive (EU) 2020/2184
 - o *'The objectives of this Directive are to protect human health from the adverse effects of any contamination of water intended for human consumption by ensuring that it is wholesome and clean, and to improve access to water intended for human consumption'*.
 - o *'Tackling emerging pollutants, such as endocrine disruptors and PFAs, as well as microplastics'* There is now evidence that blades coated with plastic are shedding into the environment as they degrade over time and polluting water sources. There is no mention of the potential impacts of blade degradation and micro plastic pollution in our environment from the developer.
- Geological Survey of Ireland have noted both water sources as highly to extremely vulnerable.
 - o Regard the Kyle and Orchard Spring the GSI note - 'Particular care should be taken when assessing the location of any activities or developments which might cause contamination at the springs. We believe not enough scoping has been done to protect and ensure a zero-risk approach is taken to the water supply of the local communities.
 - o In Chapter 9 of the application, Water, section - 9.6.12 *Water Environment Receptors and the significance and sensitivity/Importance*, The Swan Public Water Supply is mentioned in the opening paragraph but is not included in the companies tableted data showing the significance of the Supply. This is a critical piece of infrastructure that has potential negative implications to the water supply of a large community.
 - o GSI have raised serious concerns about the potential impacts to the water supply in their response to the developer – Appendix 2.1 Scoping Responses - <https://coolglasswindfarmsid.ie/>
- Swan Public Water Supply Scheme is already a stressed water supply to the local area with water being drawn in from other locations during dry summer months to service the local population when the aquifer is low. There is no other viable aquifer in the Swan to Tolerton region at the current time to service the needs of the community. We believe there should be zero risk taken in the catchment area of the aquifer due to the potential significant impact on the local populations water supply.

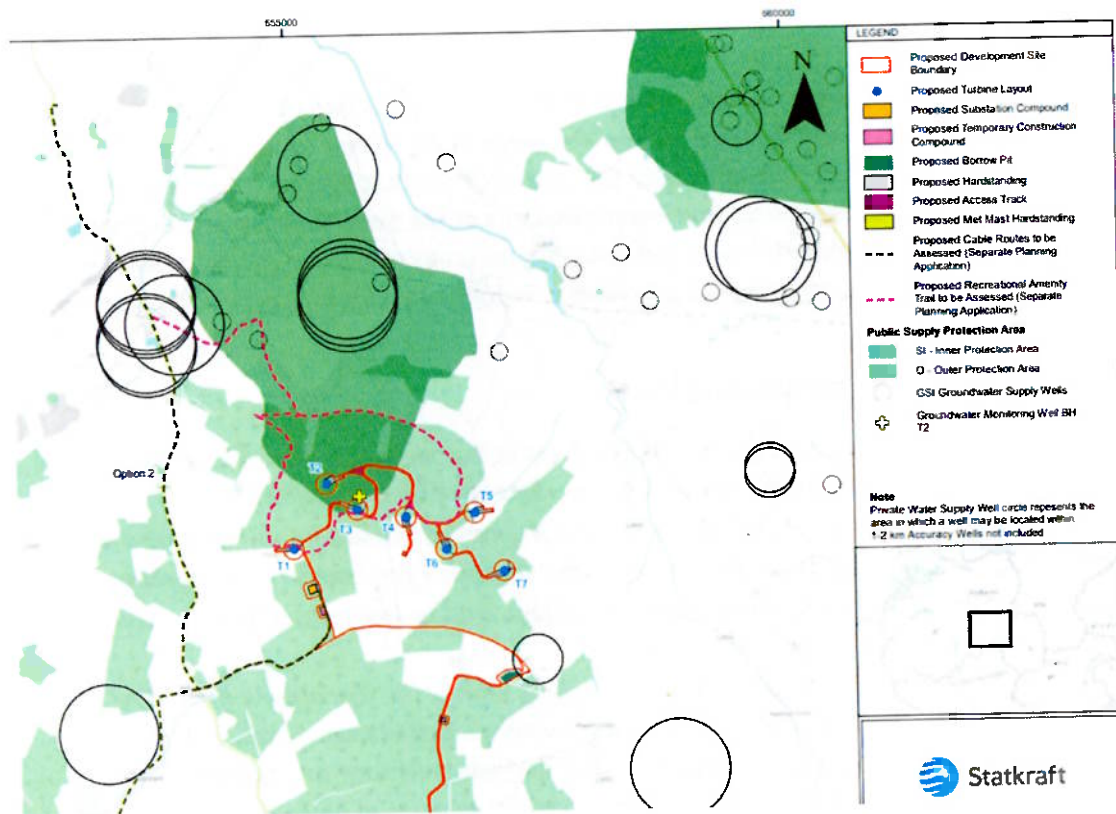


Figure 2. Map Showing Turbines Inside Kyle and Orchard Spring from ABP Submission

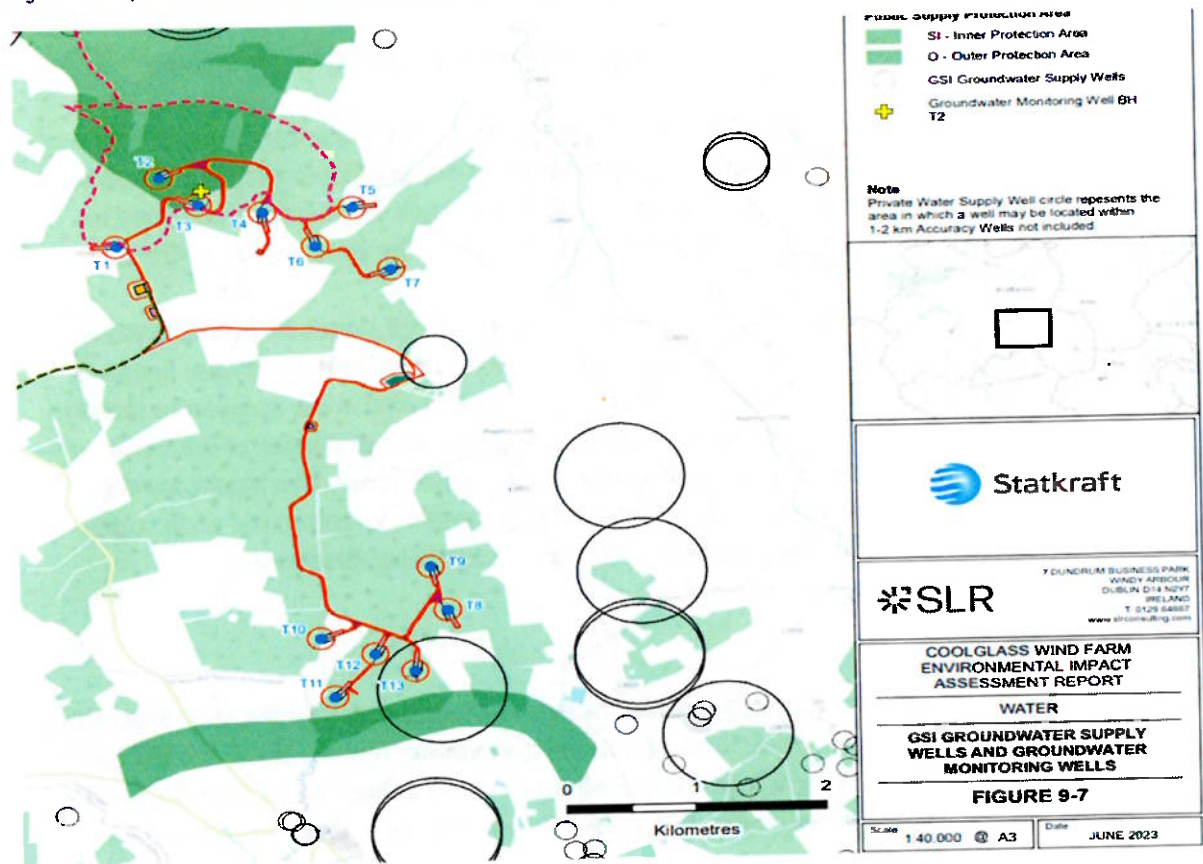


Figure 3. Map Showing Turbines Just Above Protection Zone Swan Public Water Supply from ABP Submission

References

1. <https://eur-lex.europa.eu/eli/dir/2020/2184/oj>, Directive (EU) 2020/2184 of the European Parliament and of the Council of 16 December 2020 on the quality of water intended for human consumption (recast) (Text with EEA relevance)
2. https://gsi.geodata.gov.ie/downloads/Groundwater/Reports/SPZ/LS_PWSS_SPZ_Swan_November_2000_GSI.pdf, Swan Water Supply Scheme Groundwater Source Protection Zones Prepared by: Geoff Wright, Geological Survey of Ireland In collaboration with: Laois County Council November 2000
3. https://gsi.geodata.gov.ie/downloads/Groundwater/Reports/SPZ/LS_PWSS_SPZ_Kyle_and_Orchard_Springs_Stradbally_Ballylynan_and_Timahoe_November_2000_GSI.pdf, Kyle & Orchard Springs (Stradbally, Ballylynan & Timahoe Public Water Supplies) Groundwater Source Protection Zones Prepared by: Maeve McHugh and Geoff Wright Geological Survey of Ireland In collaboration with: Laois County Council November 2000
4. <https://coolglasswindfarmsid.ie/wp-content/uploads/2023/08/Technical-Appendix-2.1-Scoping-Response.pdf>
5. <https://coolglasswindfarmsid.ie/wp-content/uploads/2023/08/Chapter-9-Water-V3.1-FINAL-1.pdf>

8. Rivers

Given the potential risk and significant impact on the rivers and tributaries in the catchment area of the proposed turbine development we urge the Bord to consider the irreversible risk of damage to the habitats and environment in the local area. There are numerous reports of endangered species and rivers at risks which are protected under the Habitats Directive and Water Framework Directive. Although these are noted in the Developers Natura impact statement inadequate responses have been made to protect the wildlife, habitats and rivers. The rivers, flora and fauna effected in this development are protected by EU Law and with the current disregard for the environmental impact to the communities involved we firmly believe this project will have an irreversible damaging impact for generations and potentially never return to it current rich biodiverse state.

1. Non Compliance with the Water Framework Directive 2000/60/EC

The EU Water Framework Directive (WFD) is an important piece of environmental legislation which aims to improve our water quality. It applies to rivers, lakes, groundwater, estuaries and coastal waters. The Water Framework Directive was agreed by all individual EU member states in 2000, and its first cycle ran from 2009 – 2015.

It is our belief that the proposed development will undermine our obligations to improve the rivers in the catchment area of the Turbine development. The Clogh River 010 is classed as At Risk and under significant pressure under the WFD and we are obliged to improve this by EU law.

River And Lake Waterbodies: WFD Risk

The following river and lake waterbodies are in the subcatchment.

Code	Name	Type	WFD Risk	Significant Pressure
IE_SE_15C030300	CLOGH_010	River	At risk	Yes
IE_SE_15D070080	DININ (NORTH)_010	River	At risk	Yes
IE_SE_15H010300	HOLLY PARK STREAM_010	River	At risk	Yes
IE_SE_15D070250	DININ (NORTH)_030	River	Review	Yes
IE_SE_15D070400	DININ (NORTH)_040	River	Review	Yes
IE_SE_15C010100	CASTLECOMER STREAM_010	River	Not at risk	No
IE_SE_15D070200	DININ (NORTH)_020	River	Not at risk	No

Figure 4. Catchments.ie WFD Risk

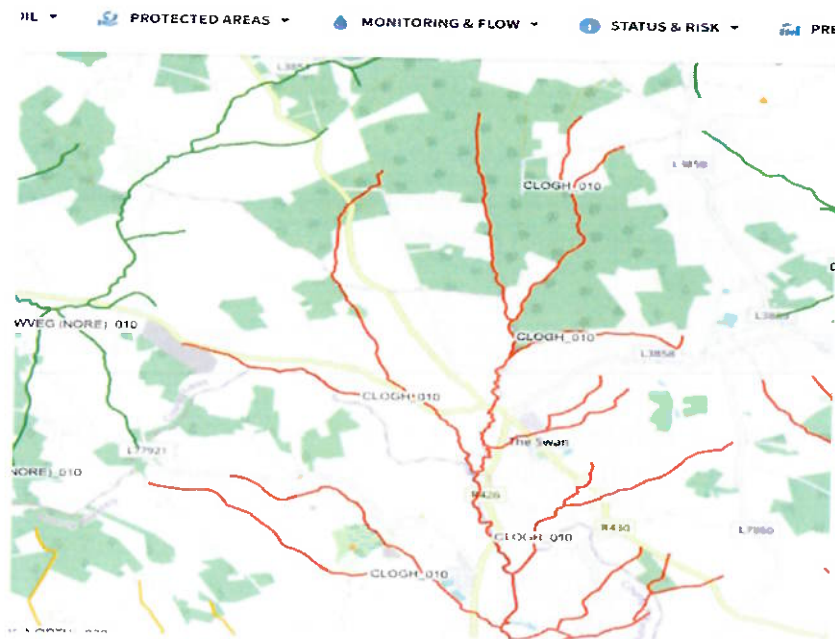


Figure 5. Exert from [gis.epa.ie/maps rivers at risk](https://gis.epa.ie/maps/rivers-at-risk)

2. The Habitats Directive

The Habitats Directive aims to protect over a thousand species, including mammals, reptiles, amphibians, fish invertebrates, and plants, and 230 characteristic habitat types.

The overall objective is to ensure that these species and habitat types are maintained, or restored, to a favourable conservation status within the EU. In addition to halting the further decline or disappearance of these species and habitats, the Directive aims to allow them to recover and thrive over the long-term.

The watercourses affected by turbine development maintain high levels of biodiversity and wildlife with multiple aquatic endangered species which are protected under Habitats Directive. On the development application multiple locations are highlighted to be of high importance locally and one being of International importance. As detailed below in a exert from the Aquatic Ecology Report prepared by Triturus Environmental Ltd. for SLR Consulting - December 2022.

*'Site A15 on the Stradbally River was evaluated as international importance given its location within the River Barrow and River Nore SAC (002162). The site also supported Atlantic salmon, lamprey (*Lampetra* sp.), the Annex I habitat 'Water courses of plain to montane levels, with submerged or floating vegetation of the *Ranunculus fluitantis* and *Callitriche-Batrachion* (low water level during summer) or aquatic mosses [3260]' and highly regular otter activity, including a legally protected couch (resting area) for otter. The above species and habitats are also listed as qualifying interests for this European site.*

A total of 15 no. sites on the Crooked River (A6), Stradbally River (A11, A14), Cremorgan Stream (A12), Owveg River (B2, B3, B7, B8, B10), Clogh River (C2, C6 & C7), Brennanshill River (C3) and the Douglas River (D1) were evaluated as local importance (higher value) (Table 4.4). This evaluation was primarily due to the presence of salmonids (n=13 sites) and or

lamprey (Lampetra sp.) (n=7 sites). Other aquatic species of high conservation value, such as white-clawed crayfish (B7, B8, B10, C7) or otter (A12, A14, A15, C7) were also present at certain sites (Table 4.2. 4.3). Sites A11, B3, B8, C3, C6 and D1 also achieved Q4 (good status) water quality (Appendix B).'

Multiple Annex II protected species have the potential to be affected by the development of these Turbines around the river catchments identified.

- European Otter
- White Clawed Crayfish
- Lamprey

The Developer states certain sites claimed good status on the biological water testing carried out in their report we believe this is clouding the reality of a watercourse (Clogh river 010) at risk. For example, they state in the application site C6 achieved good status but reviewing the detail a sampling site C4 further upstream showed the river in poor condition. This sampling would be much closer to the Turbines development and have a higher risk of being impacted. Multiple testing sites showed poor quality status on the Owveg River yet two sites were stated as being in good condition. Again, this does not give a complete picture of the status of the river.

3. Pearl Mussel and The Nore SAC

Although no evidence was present in the immediate river catchments within the turbine development of the Pearl Mussel, we would have significant concerns of the potential of siltation and damage to the Nore SAC and the habitat of the critically endangered Pearl Mussel. The Clogh River 010 flows into the Dinin River 010 at Clogh Bridge which is the beginning of the Nore SAC. This is located less than 3km from the development of turbines. Given the critical nature of the Pearl Mussel high levels of protection and care, consideration needs to be given to any development upstream of The Nore SAC. The Ecology report states that conditions for testing for the Pearl Mussel were not ideal due to the conditions of rivers and we would question the accuracy of the testing.

4. The developer's application states it will maintain a 50m buffer zone between any watercourse and the development site of the turbines (Section 9 Water - 9.9.3.1 Buffer to Water Courses). T11 completely disregards the buffer zone claimed for all water courses and suggests part of The Clogh River 010 (Classed by the WFD as at Risk) will be flowing right through the development site. This in our opinion gives complete disregard for the status of the river and the integrity the Developers suggestion it will protect water courses.

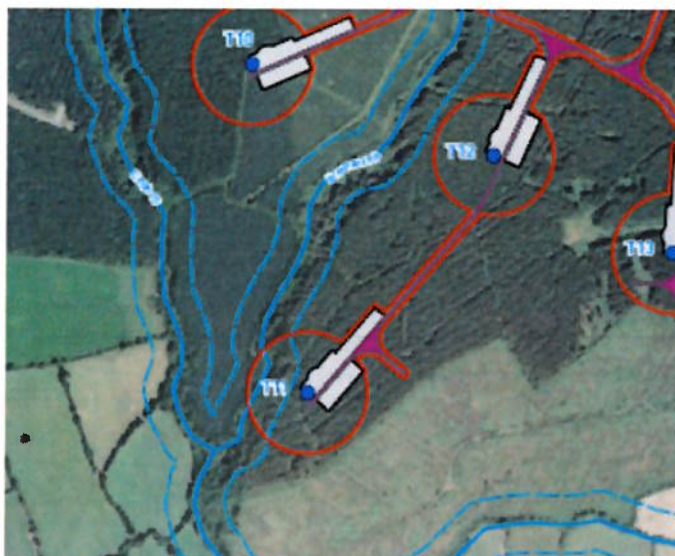


Figure 6. Turbine location Showing Buffer Zones

References

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https://www.catchments.ie/wp-content/files/subcatchmentassessments/15_12%20Dinin%5bNorth%5d_SC_010%20Subcatchment%20Assessment%20WFD%20Cycle%202.pdf

<https://coolglasswindfarmsid.ie/wp-content/uploads/2023/08/Chapter-9-Water-V3.1-FINAL-1.pdf>

<https://coolglasswindfarmsid.ie/wp-content/uploads/2023/08/Technical-Appendix-15.4-Aquatic-Ecology-Report.pdf>

9. Wildlife

According to the EU Habitats Directive, all Member States to establish a strict protection regime for species listed in ANNEX IV, both inside and outside Natura 2000 sites.

The overall objective is to ensure that these species and habitat types are maintained, or restored, to a favourable conservation status within the EU. In addition to halting the further decline or disappearance of these species and habitats, the Directive aims to allow them to recover and thrive over the long-term.

9.1 Peregrine Falcons:

- a. This area is well known locally for its breeding pair of Peregrine Falcons nesting in the Slatt area (in the Quarry) approx. 800m from the proposed Wolfhill cluster site. These birds are witnessed on a daily basis hunting over the site of proposed T11 and T13 sites. Their nesting site is noted with Birdwatch Ireland and NPWS and local licenced falcon handlers. (Bruce and Sean Wilkie of Slatt Lower, Wolfhill).
- b. Peregrine falcons catch all their prey on the wing, deploying hunting tactics that can see them plummeting towards the earth at 200kms an hour to snatch an unsuspecting starling right out of the air. Peregrines are an apex predator at the top of the food chain, they maintain the natural balance of the food web, keeping the populations of herbivores and lesser carnivores in check and if they were removed from the environment, an imbalance is created.
- c. The Peregrine is among other critically endangered and protected species which live and hunt within the proposed turbine sites: including, Barn owl, Golden plover, Kestrel, Red squirrel, Pine Martin, Woodcock, Snipe, Red Kite, Buzzard, Sparrow Hawk, Curlews and Hen Harriers. The presence of raptors in the area are indicator species that can tell us how healthy the ecosystem is. Removing them from this area will only cause what is referred to as *meso-predator release* which essentially means removing an apex predator from the food chain affecting not only their direct prey but a range of other species, as bats populations.
- d. Section 15.3.5 of Chapter 15 Biodiversity states:

"There is the potential for the bee species to be present within the Site, but not marsh fritillary, as there are no habitats supporting Devil's bit scabious Succisa pratensis (the caterpillar foodplant) present."

This is incorrect information from the developer. There are areas close to the forestry plantations within the site development boundary which contain Devil's Bit Scabious Succisa pratensis, the foodplant of the protected Marsh Fritillary butterfly (Annex II protected species). It is noted no specific field study was performed for the Marsh Fritillary butterfly, as from the developer's assessment of desktop data, there are no habitats supporting the butterfly's foodplant.

A proper field study should be required due to the presence of Devil's bit scabious Succisa pratensis at the proposed development site.

10. HERITAGE

- a. No site visit was conducted by SLR. Given the heritage and archaeological significance of the area which includes over eighty archaeological sites within the 5km zone of the proposed site and the presence of eight National Architectural sites also within in the 5km zone of the proposed site, as well as dozens more significant archaeological areas within the 10km zone of the proposed development. This surely would require a site visit, as per guidelines set out by the Department of Housing, Local government and Heritage 2019. 5.5 wind energy guidelines.
- b. The report states "There are 10 known prehistoric cultural heritage sites within the 1km buer zone, comprising one megalithic structure, two barrows, and seven Fulacht fia (burnt mounds). The majority of the Fulacht fia are noted as no longer existing, with no visible surface remains, mainly due to damage during agricultural land use. The presence of these prehistoric cultural heritage assets within the 1km buer is suggestive of localised prehistoric activity." Such cultural significant and ancient sites should be considered extremely important to our area and safeguarding its future should be of upmost importance for future generations. Even though no visible surface remains for such important archaeological sites, their significance and potential for further archaeological remains to be found cannot be ruled out as raised by An Bord Pleanála in the preapplication meeting. SLR themselves say in the report "However, no site visit was carried out as part of this assessment and as such, their presence cannot be entirely ruled out" The conservation of sites whether visible or not is mentioned in European Convention on the Protection of the Archaeological Heritage (Revised) *Valetta, 16.I.1992 Identification of the heritage and measures for protection Article 2.

Each Party undertakes to institute, by means appropriate to the State in question, a legal system for the protection of the archaeological heritage, making provision for:

- ii. the creation of archaeological reserves, even where there are no visible remains on the ground or under water, for the preservation of material evidence to be studied by later generations;.
- c. The Druids Altar in the townland on Monamanry is a megalithic structure at Monamanry , 'Móin na Manraí' – 'the bog(land) of the enclosure, paddock / bog of the mangers' (LA025-013) is marked on the OS map and the Historic maps as 'Druids' Altar' It is a circular mound 9m to 10m in diameter and 0.75m in maximum height. A kerb of small stones survives around almost all the circumference but are somewhat concealed in the ground at the west. Two set stones, about 1m inside the kerb in the NE quadrant, indicate an inner kerb and there is a hollow measuring 3.50m in length and 2m in width at the centre of the mound where a slab, aligned NW-SE, 1.2m in length and 0.80m in width, lying slightly elevated above the ground which may be the roof of a tomb. In their book, 'History of Queen's County', O'Hanlon & O'Leary give a brief mention of the Monamanry structure. They wrote that 'in the townland of Monamanry and parish of Tullomoy, about a mile and a-quarter west from the Ass's Manger, there is a Dolmen marked Druids' Altar on the Ordnance Survey Town-land Map' (O'Hanlon & O'Leary, vol.1, p. 56). Borlase in 'The Dolmens of Ireland, Vol. 2', also gives a very brief mention of Monamanry. He wrote that 'in the Townland of Monamanry, and Parish of Tullomoy, a mile and a quarter W. of the Ass's Manger, is a dolmen marked Druids' Altar in Ord. Surv. Map No. 25' (Borlase, W., vol. 2 p.374). Descriptive remarks from the Ordnance Survey Parish Name book dated 1838 stated that

'...there is a druid's altar in the east portion, ancient druid's place of worship'. This megalithic structure is still used today as a sacred site or sacral site. It is of highly significant cultural heritage and an intangible heritage site for locals, national and international visitors.

- d. The Dún of Clopook is located approximately 2.5km from the proposed windfarm site. This highly significant Class II Hillfort heritage site isn't even referenced in the application report.

A prominent limestone hill rises above the valley and was created during the Tertiary period (65-2.8 million years ago). Also known as Cloch an Phúca or the Stone of the Phúca. As the title suggests the word Dún is associated with a fort. Believed to be built during the transitional period between the Bronze and Iron ages (2000-3000 years ago) The cave located at the Dun is associated with St. Fiacc, abbot and bishop of Sleaty, Co. Laois. who is said to have had a lenten retreat in the cave. In the 1880s a ploughman found remains and artefacts under a cist associated with the bronze age. The significance of this historical site surely should have been referenced in the application, considering its historical impact and potential tourism that the heritage site provides. It also has mythological significance, a well-known and referenced story associates the Dun with Two Giants and the folklore of the pond located at the foot of the Dun. The Dun of Clopook is a settlement of vast significance and importance in prehistoric Laois.

- e. Timahoe is considered a cultural heritage town and is an Architectural Conservation Area consideration. Timahoe is highly cultural significant and includes an ecclesiastical complex, round tower and built and buried historic settlement remains. Preservation of the village would be upmost importance and in accordance with Laois County Council Local Planning Policy and Development Control. Relevant Local Planning Policy is provided in the Laois County Development Plan 2021-2027 (adopted January 2022) aim is to protect, conserve and manage the archaeological and architectural cultural heritage of County Laois and to encourage sensitive sustainable development to ensure its survival and maintenance for future generations. It also highlights relevant policy objectives for archaeological cultural heritage and are as follows: AH1: Manage development in a manner that protects and conserves the integrity and character of archaeological cultural heritage of the county which avoids adverse impacts on sites, monuments, settings, features or objects of significant historical or archaeological interest and secure the preservation in-situ or by record of all sites and features of historical and archaeological interest.' The proposed cable route for the windfarm would go directly through the village. Can the developer assure that this cable route will not affect the found and buried remains there within? The visual impact of the will be of high significance and directly impact the ambience and historical setting that Timahoe is known for locally, nationally, and internationally. This proposal will directly affect the unique character of the area with its rolling hills and woodland surrounds.

- f. A large number of archaeological sites will be indirectly and directly impacted by this development including above and buried archaeological significant sites, including Fossey Church, raths and moats which are abundant in the area, many of which have been failed to be numbered on the map provided in the heritage section of the report. It is noted that data was accessed in one day by the developer, given the significance of the historical, archaeological, and architectural value of the area a more thorough review and inspection would be anticipated. The significant site of an enclosure (LAO25-031) within the proposed development in Aghadreen hasn't been identified in the proposal or numbered on the map provided in the application.

The enclosure although buried should also be given consideration and according to EU legislation European Convention on the Protection of the Archaeological Heritage (Revised)
* Valetta, 16.I.1992 Identification of the heritage and measures for protection Article 2

Each Party undertakes to institute, by means appropriate to the State in question, a legal system for the protection of the archaeological heritage, making provision for:

- i. the maintenance of an inventory of its archaeological heritage and the designation of protected monuments and areas;
- ii. the creation of archaeological reserves, even where there are no visible remains on the ground or under water, for the preservation of material evidence to be studied by later generations; and Integrated conservation of the archaeological heritage Article 5b the allocation of sufficient time and resources for an appropriate scientific study to be made of the site and for its findings to be published;
- iii. to ensure that environmental impact assessments and the resulting decisions involve full consideration of archaeological sites and their settings;.

- g. It is also noted that Ireland is party to the UNESCO (United Nations Educational Scientific and Cultural Organisation) Convention Concerning the Protection of the World Cultural and Natural Heritage (the 'World Heritage Convention'). For the purposes of the World Heritage Convention 'cultural heritage' includes Elements and structures of an archaeological nature and archaeological sites, which are of outstanding universal value. States Party to the Convention are required to endeavour (in so far as is possible and as appropriate for each country) to, inter alia, adopt a general policy which aims to give the cultural heritage a function in the life of the community and to integrate the protection of that heritage into comprehensive planning programmes.
- h. Also noteworthy in Chapter 5 Of application that LCC stated there was" no detail of protected structures as per Appendix 1 of LCC development plan 2021-2027" in the scoping report. Could this be why the report I is so rushed and lacking in detail?
- i. The Heritage Council of Ireland in correspondence with a member of the community noted that they expect the application will be examined by The National Monument Service. However, when contacted The National Monument Service said it noted that the application had be logged to An Bord Pleanála and stated "However, the National Monuments Service of the Department of Housing, Heritage and Local Government is one of the prescribed bodies that An Bord Pleanála should refer this planning application to for review."

11. Set-back Distance

- a. The 500m set back distance from wind turbines to residential properties detailed in the Wind energy Guidelines 2006, were applicable for wind turbines of typically 80m in height at that time. The turbines described in the proposed development are industrial sized 180m tall turbines, **more than double** the typical turbine height from 2006. Therefore, the setback distance of 500m to residential properties in the 2006 guidelines is inadequate for the proposed 180m turbines. The 2006 guidelines are so outdated in relation to the current turbine proposals that it would be contrary to proper planning and sustainable development to apply them to this proposal.
- b. At 180m the turbines will be some of the biggest in the country and will have an exponentially greater impact due to greater air displacement, noise, and shadow flicker. They would be completely out of place and totally dominate the landscape which will hugely affect the visual amenity in the area. The residents and communities' concerns need to be taken into consideration.
- c. The application states that the nearest "residential receptors" are located 722m from the nearest turbine. Other sections in the application state that this distance is 720m, another 719m, another 702m and another not more than 700m. Which is it? In fact, **all these figures are incorrect** as there are residential receptors as close as 676m to T11 turbine blades. This is **conflicting and incorrect information** from the developer. The draft Wind Energy Guidelines 2019 states the nearest residential receptor must be at least 4 times the turbine tip height which would be 720m in this case for a 180m turbine. This is insufficient for industrial sized turbines of this magnitude and this requirement of 720m to all residential receptors is not met in this proposal.
- c. The application planning report section 2.1 states: *"There are 56 residential properties located within 1 kilometre of the Proposed Development. There are 105 residences within 500m of the cable routes"*. Yet Appendix 5.1 'Residential Receptors within 1km of the Proposed Development' has 85 listed.
- d. In addition, there are at least 2 properties within 1km from the proposed development, **NOT** included in the developer's list in Appendix 5.1 'Residential Receptors within 1km of the Proposed Development 700m from T11. Another local resident's home, adjacent to residential receptor number 38 in Appendix 5.1, is currently under construction and not on this list of residential receptors.

The noise sensitive receptors in the noise impact assessment are also given different identifying numbers by the developer which has only caused confusion in the application.

There are **multiple errors and inconsistencies** in relation to residential receptors near the proposed development. Have all receptors impacted been included in the relevant assessments for example, noise sensitive locations, shadow flicker etc?

This is not good enough for a development of this magnitude and begs the question how much care and attention were given to the actual assessments required and completed by the developer and their consultants? Clarity is required on this matter.

- e. The turbine blades from T13 in Wolfhill are just 60m from working farmland boundaries where livestock are reared. If this turbine fell it would fall into this landowner's property. This is too close and the farmer has not given consent to have the turbines this close to their land.
- f. The turbine blades from T10 in Wolfhill are 88m from a landowner's site and property. This is too close and unacceptable. This site contains old farmstead dwellings which are unoccupied and in a semi-derelict state. If this turbine fell it would fall into this landowner's property. There is no evidence of contractual agreement to show that the landowner has given consent to have turbines this close to their land. The landowner has kept this site for his son to build a home on. It is also noted that this site is not identified in Statkraft's site location plan (plan 14 of 17).
- g. Section 2.1 of the Coolglass Wind Farm Limited Planning Report states "*The site is accessible from both the north and the south via the **R526** Regional Road which is located to the west of the Proposed Development...*". The R526 is not in Laois.

12. Health

- a. In Chapter 10 of the application Noise sensitivity receptors are mentioned:

"NSRs are properties within the study area which are potentially sensitive to noise and, as such, may require protection from nearby noise sources. The 2006 Guidelines lists NSRs as dwellings, hostels, health buildings, places of worship and may also include areas of particular scenic quality or especially recreational amenity importance.

The NSRs identified within this assessment are all residential properties and wind turbine noise emission levels are predicted to a location representative of each outdoor amenity area rather than to individual dwellings. This is in line with the IOA GPG which states (at paragraph 4.3.8) that "calculations should be made at points representative of the relevant outdoor amenity area (as defined in ETSU-R-97) at locations nearest to the proposed wind farm". This is inaccurate as St Mary's Church Wolfhill is located approx. 1km zone of the proposed site.

- b. Schools are also considered as NSRs although this is not stated in the application. Wolfhill National School is also within the 1km zone of the proposed development and is not mentioned in the application.

- c. Children have also been identified as vulnerable to noise exposure (see Appendix 21: UNCED1992). WHO Guidelines for Community Noise 1999.

"The evidence on noise pollution and children's health is strong enough to warrant monitoring programmes at schools and preschools to protect children from the effects of noise".

Follow up programmes to study the main health effect of noise on children, including effects on speech perception and reading acquisition, are also warranted in heavily noise polluted areas" (Cohen et al. 1986; Evans et al. 1995)

12.1 Noise impact in relation to proposed development:

- a. There is serious concern about the constant noise generation from the industrial turbines, not only in the audible sound range but also the infrasound range from blades turning.
- b. The Wind Energy Development Guidelines for Planning Authorities 2006 states that "An appropriate balance must be achieved between power generation and noise impact. Noise impact should be assessed by reference to the nature and character of noise sensitive locations. In the case of wind energy development, a noise sensitive location includes any occupied dwelling house, hostel, health building or place of worship and may include areas of particular scenic quality or special recreational amenity importance. Noise limits should apply only to those areas frequently used for relaxation or activities for which a quiet environment is highly desirable."

The DRAFT Wind Energy Development Guidelines for planning Authorities 2019 states that:

"A noise sensitive location is defined, in the case of wind energy development, as any location in which the inhabitants may be disturbed by noise from the wind energy development. This incorporates a dwelling, house, hotel or hostel, health building (providing patient services), nursing/retirement home, educational establishment, place of worship or entertainment, or other facility which may justifiably require for its proper use the absence of noise at levels likely to cause significant effects. This definition may include protected wildlife areas, areas of particular scenic quality or special recreational amenity importance".

- c. Noise monitoring locations chosen by the developer are insufficient and not worst-case locations.
- d. The closest residential property at Grennan is 676m to T11. Noise monitoring location 6 (NML6), which is almost 1Km from T11, is not representative of residents closer to the turbines at Grennan.
- e. No noise monitoring was completed to the west of the southern cluster around NSR15 and NSR17 and other homes in that area.
- f. No noise monitoring was completed to the east of the northern cluster around or at NSR02.
- g. Wolfhill Primary School and Wolfhill Church and graveyard, are just over 1km to the east of the southern cluster and were not identified as noise sensitive locations. No noise monitoring was completed at these locations.
- h. No noise monitoring was completed in the southern cluster where the Swan Loop Walk passes adjacent to T10, T12, T13 and T8. This walk is of particular scenic quality and special recreational amenity importance to the people in the area.
- i. Technical appendix 10.5 to this planning application, Assessment against draft 2019 Wind Energy Guidelines states:

"Table 10.5-7 and Table 10.5-8 confirm that the predicted wind farm noise emission levels do not exceed the daytime, evening or night-time noise limits derived in accordance with the 2019 Draft Guidelines under all wind speeds and at all locations."

This assessment tables only includes a column for 10+m/s and does not include noise levels for windspeeds at 11m/s and 12m/s per the 2019 guidelines. In a lot of instances at different noise sensitive locations the turbine noise emission level is right on the limit per the 2019 guidelines.

- j. It is noted that the developer states in their application:

"The installed wind turbine may not be either of the two candidate turbines but will be within the range of minimum and maximum parameters set out in Table 2-1".

Table 2-1 Candidate Turbine Parameters to be Assessed

Turbine Type	Tip Height (m)	Hub Height (m)	Rotor Diameter (m)	Foundation Size	Hardstand dimensions
Siemens Gamesa SG155	180	102.5	155	25m diameter	50m x 20m
Vestas V162	180	99	162	25m diameter	80m x 30m

Figure 7: Table 2-1 Candidate Turbine Parameters to be Assessed

However, can it be confirmed that the noise levels from other Turbine types not assessed in this application will fall within the required noise limits?

12.2 Health Research:

- a. A number of peer reviewed and critically appraised articles on the impact of wind farms on human health exist. Including a number that quote negative health effects, including but not limited to electromagnetic field disturbance, shadow flicker, noise, low frequency noise and infrasound. Further articles greatly underestimate the stress, anxiety and psychological trauma to many people who live in areas where industrial wind turbine farms have been built. Many of these articles exist in the argument both for and against the safety of wind turbines and the potential for negative health impact. A substantial number of articles exist where the author and contributors declare a significant conflict of interest in relation to the topic, many of whom have worked as consultants with wind and renewable energy firms. Furthermore, there has been a well-publicised and documented concern regarding the readily available independent information regarding the health detriments of wind farm developments on local residents.
- b. A number of peer reviewed articles make reference to the ever-growing need for further study and better standard of study into the health effects associated with living in proximity to wind farms. The highest standard and most rigorous form of research and evidence base to make these decisions, namely meta-analyses, randomised control trials and longitudinal studies, are grossly lacking in support of the assumed non-causal link between industrial wind turbines. These studies include but are not limited to
 - Knopper & Ollson (2011- <https://pubmed.ncbi.nlm.nih.gov/21914211/>), Jeffrey et al.
 - (2014 - <https://pubmed.ncbi.nlm.nih.gov/24398354/1>, Jeffrey
 - (2013<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3653647/>) and McCunney et al.
 - (2014 - <https://pubmed.ncbi.nlm.nih.gov/25376420/>). Further study into this particular area of concern is warranted as to the potential impact on the physical, mental, social and emotional health of those living within the affected is properly addressed before irreversible harm is caused.
- c. Effects on humans living near turbines is variable, it can affect some people more or less than others and is still not clearly understood.

National Research Council. 2007. Environmental Impacts of Wind-Energy Projects. i.e., National Academies Press, Washington, DC. 185 pp, p. 109 (Prepublication Copy). "Low-frequency vibration and its effects on humans are not well understood. Sensitivity to such

vibration resulting from wind-turbine noise is highly variable among humans. Although there are opposing views on the subject, it has recently been stated (Pierpont 2006) that 'some people feel disturbing amounts of vibration or pulsation from wind turbines, and can count in their bodies, especially their chests, the beats of the blades passing the towers, even when they can't hear or see them.' More needs to be understood regarding the effects of low-frequency noise on humans" (pp. 108–9).

- d. Cases have been settled in court where windfarm companies have paid compensation for people suffering issues who live near turbines. Most notably a case in Cork where siblings from the same family home were awarded a settlement by a windfarm company. In 2020 the case of Laura David and Jack Kelleher vs Green energy supply Ltd. heard claims that the windfarm located just 700m from the siblings resulted in serious illnesses including nosebleeds, earache, skin rashes, swollen and painful hands, loss of power in their limbs headaches and sleep disturbances and headaches. The siblings were rewarded settlements, Laura (15) received €125,000 because her ailments were more severe than her brothers Jack (17) and David (10) who received €50,000 each. Health concerns and issues have been recorded by residents across the nation and beyond.
- e. Health effects on people especially children with sensory issues and autism. Autistic individuals with sensory issues hear sound and frequencies that are inaudible to most neurotypical people. Neurotypical refers to non-autistic people's normality and implies their tendency to impose their understanding of normality on everyone else as correct and natural. Aural diversity is a relevant topic. "Core to the discipline (or perhaps interdiscipline) of acoustics, be that the business of sound propagation or mitigation, is the interface between sound stimuli (i.e. external physical world) and human (or animal, an area of greater prominence with the development of bioacoustics but not discussed in this paper) sensation of sound (i.e. the sequence of mechanisms and processes that constitute our auditory system). The efficacy therefore of pretty much the entirety of this practice is based on our understanding and working knowledge of the physics of sound and related materials, our perception and response to sound, and crucially the interrelation of the two. Just as acoustical engineering is reliant on scientific exactitude predicated on universal formulae, precise calibrated measurements, etc. there is an underlying expectation that our understanding of hearing as expressed in the requisite standards can offer equal rigor. It is due to this mismatch between industrial measurements and human response metrics that acoustics is often regarded as out of kilter with other engineering disciplines" (Aural diversity in Acoustic regulations and practice :The hand dryer noise story" by John Denver, Goldsmiths, University of London, Department of Music, London pg1) Standards exist for the average neurotypical person however it is well-documented that children's and animals hearing is much more acute than adults and they hear at different frequency for example when we hear about Anti-loitering Devices that are audible to children and teenagers to deter them from loitering in certain areas and rodent prevention devices. "Apart from cognitive abilities, there are some basic physiological differences such as the size of the auditory canal, which, for infants and children, resonate at much high frequencies than for adults. The high-speed dryer also generates a lot of high-frequency sound due to massive air turbulence; thus the problem for kids is compounded." (Aural diversity in Acoustic regulations and practice :The hand dryer noise story" by John Denver, Goldsmiths, University of London, Department of Music, London pg4.

13. Property Devaluation

- a. The application states there is no evidence that wind farms have any influence on property values. However, a peer reviewed paper from the London School of Economics, '*Gone with the Wind*,' by Stephen Gibbons (2014) has clearly shown the negative impact (reduce prices by 12% within 2km), on property values in England and Wales over a 12-year period (2000 – 2012). It is important to note that the average turbine in their extensive sample area was 2.5Mw x 90m high to tip, whereas under the current proposal the turbines are 7.2Mw x 180m tip height and rotor diameter of 162m. Therefore, it is reasonable to assume that the impact on property values will be even worse.
- b. Evidence has shown and is confirmed by local Auctioneer, Michael Boyd, Kilkenny, that properties near a wind farm like the proposed development (particularly within 2km) will be devalued by between 30% - 50% depending on location. This will have a serious impact on homeowners, specifically mortgage repayments, obtaining or switching mortgages and ability to sell.
- c. In relation to property devaluation, An Bord Pleanála will be aware that under the Fourth Schedule of the PDA, 2000, Reasons for the refusal of permission which exclude compensation, no.10 (c) states: 10. *In the case of development including any structure or any addition to or extension of a structure, the structure, addition, or extension would – (c) seriously injure the amenities, or depreciate the value, of property in the vicinity,*

Therefore, a development which results in the depreciation of the value of a property is a standalone ground for refusal of an application.

Stradane
Co. Cavan
Ireland

Planning Department,
Laois County Council,
Ard an Chiontae,
J.R. Avenue,
Portlaoise,
Co. Laois.

Your Ref: [REDACTED]
Our Ref: [REDACTED]



10th August 2017

Location: [REDACTED]

Re: Laois County Council Planning Register Reference [REDACTED]

Dear Sir/Madam,

On behalf of our client, Pinewood Wind Limited, we wish to advise the Planning Authority that the dwelling proposed under the abovementioned planning reference number is located within 500m of a wind turbine proposed as part of the Pinewoods Wind Farm (Reg. Ref. 16/240 & An Bord Pleanála Reference PL11.248518).

Accordingly, if permitted and constructed, there could potentially be amenity noise and shadow flicker impacts in excess of the guideline thresholds included in the Wind Energy Development Guidelines for Planning Authorities, 2006.

Please find enclosed the requisite fee of €20.

Yours sincerely,

Simon Cateforon

Simon Cateforon

Project Manager

for and on behalf of

Galattech Energy Services Ltd.

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Limited
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Note: This objection letter states that any such development would be affected by noise and light flicker. How then can a developer turn around and try and persuade the public that this is not the case when their own representatives admit that this is indeed the case?

14. Photomontages

There is an absence of photomontages showing the appearance of the proposed turbines in the surrounding forest area felled or cleared. The submitted viewshed reference points are inadequate to fully assess the visual impact on this area. Photomontages showing the greatest amount of impact on the largest number of receptors are omitted in the developer's proposal. The photomontages fail to clearly show the impact on the nearest receptors/homes.

15. Landscape/ Visual impact

There is insufficient evidence that the project will not be visually injurious for the following reasons:

- a. If the 13 x 180m proposed industrial turbines go ahead the local and surrounding landscape will be totally dominated and the windfarm will completely detract from the beautiful serene rural landscape.
- b. The ratio of rotor diameter (162m) to hub height (102.5m) is much greater than the 1:1 ratio of a typical in proportion wind turbine. This will lead to the turbines dominating views. The visual clutter and cumulative effect of this development on top of potential other proposed developments must be carefully considered.
- c. The required lighting on top of the turbines, which will essentially flash with the spinning turbine blades, will cause distraction and disturbance to people at night.
- d. **It is also noted that in Chapter 7 section 7.4.2, figures 7-1 and 7-2 have the incorrect site layout superimposed on the maps showing Landscape Character Assessment and Views and Prospects. There is concern that the correct assessments for these areas have not been completed for the proposed development.**

16. Proximity to schools/ Impact to children

- a. Wolfhill NS, The Swan NS and Timahoe NS are in very close proximity to the proposed development. Wolfhill NS is approx. 1km from the proposed development and will be looking directly out at the both clusters with potential to impact several children including those with learning difficulties or additional needs.

- b. The developer states in Chapter 5 of the EIAR:

"Following a review of literature regarding the potential impact of operational wind farms on human health, it is concluded that there is no scientific consensus to support an association between negative health impacts and responsible wind turbine development."

However, reference "Green Energy Supply" high court case, who in Feb 2020 settled an action for €225,000 over the alleged health effects of living just over 700m from a wind turbine. It is strange that such a settlement should be made in the face of "no scientific consensus."

We are not satisfied that the proposed development will not seriously injure the environmental amenities of the area and impact severely on residential properties and detract from the visual amenities. It would therefore be contrary to the proper planning and sustainable development.

Having regard to our observations as outlined above, we urge the Bord in the strongest possible manner to ensure that an open public Oral Hearing is conducted as part of the overall decision-making process.

Yours sincerely,

Kieran Brophy and Peter Sweetman

Spink

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Co. Laois