Garrouse, Bruree, Co. Limerick. V35 Y927 October 29th 2025

An Coimisiún Pleanála, 64 Marlborough Street, Dublin 1. D01 V902.

Re: Observation to Strategic Infrastructure Development 323635 Garrane Green Energy Windfarm, located in the townlands of Garrane, Ballynagoul, Creggane and Charleville, Co. Limerick.

Dear Sir/Madam,

We wish to make the following observations on the above Strategic Infrastructure Development planning application.

Site Suitability

A screening process was used by the developer to identify sites suitable for location of this wind farm. As part of the process a minimum setback of 680m was applied to residential properties in the surrounding area and developer sought to identify an area with a low population density. The population density of the study-area was reported as 18 persons per square kilometre which was stated to be significantly below the national average of 73 persons per square kilometre (Paragraph 3.5.4.5 of EIAR). Many, if not most rural areas will have population densities significantly less than the national average so population density does not confer any unique qualities on this site over many other rural locations.

The low population density argument appears to be contradicted in another section of the EIAR (Paragraph 14.2.4) where it is stated that the proposed site is located in a densely populated rural area, typically ribbon development with sporadic cul-de-sacs.

In fact there are 166 sensitive receptors identified within a 2 kilometre radius of the site comprising 3 commercial premises, 6 derelict properties and 157 houses. Assuming 2.2 inhabitants per inhabited house this indicates that there is a total of 345 persons within a 2 kilometre radius which equates to an even higher population density of 27.5 persons per square kilometre.

These houses are located to the east and west of the proposed wind farm primarily along the N20 and L1537 roadways. While a minimum setback distance of 680m from the nearest properties is maintained, the wind turbines are located in the middle of a ribbon like cluster of houses to east and west which has the potential for future conflicts and renders the site

totally unsuitable for wind turbine location. (See relative locations of houses and wind turbines in Fig 1 below)

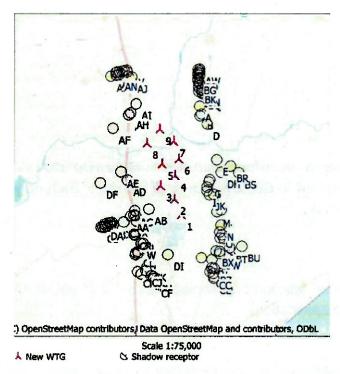


Figure 1 Location of Houses relative to wind turbines (From Appendix 14.4 of EIAR)

Flooding

As stated in Chapter 10 of the EIAR parts of the site are subject to flooding. The River Loobagh which flows into the River Maigue at the NW corner of the site is also prone to flooding on occasions. Figures 2 and 3 below illustrate the flooding around Garrouse Bridge in February 2014.



Figure 2 - River Loobagh at Garroose Bridge (February 2014)



Figure 3 - River Loobagh downstream of Garroose Bridge (February 2014)

Noise from Turbines

Noise from operating wind turbines appears to be one of the most common issues reported by people living in close proximity to wind farms. In paragraph 11.10 of the EIAR it is stated that "the operational noise levels predicted at the nearest noise sensitive receptors are orders of magnitude below the level at which hearing damage or indeed negative health effects are possible."

While nobody is suggesting that hearing loss or severe health effects are attributable to the operation of wind farms, it is the low level subtle effects on sensitive receptors that concerns us e.g. sleep deprivation and general annoyance caused by low level noise in sensitive individuals. These subtle effects on sensitive individuals appear to be the most common complaints from people residing in close proximity to wind farms.

In paragraph 11.2.8 of the EIAR it is stated that "there are different views about the biological effects of low frequency noise or infrasound on human healththe balance of the evidence is there are no serious consequences to health from exposure to infrasound.

Furthermore it is stated that "this view is endorsed by the IOA which advises members that there is no need to assess either low frequency noise or infrasound as the absolute levels are well below the levels reported to trigger health effects".

The statements in the paragraphs above give us no confidence that any issues relating to low frequency noise from turbines and possible effects on sensitive individuals during the operational phase of the wind farm will be adequately investigated and for that reason we submit that the development should not be allowed to proceed. Any complaints relating to

low frequency noise need to be treated seriously and the complainants should not be written off as "cranks".

Prediction of Noise Levels from Turbines

In the EIAR predicted operational noise levels were estimated for the nearest noise sensitive receptors to the project following a desk study. A "candidate turbine" (the Vestas V150-6MW) was chosen for the study with turbine noise specifications being supplied by the manufacturer (Appendix 11.6). Two questions arise as to the validity of the noise prediction data:

- The Vestas V150 is described as a candidate turbine but it is also stated that another turbine type may be chosen following a competitive tendering process. Will the predictive modelling be repeated should another turbine with different noise specifications be chosen for installation?
- Have the noise specifications supplied by the manufacturer(s) for the candidate turbine or the finally chosen turbine been independently verified?

If the answers to these questions are negative then the validity of the predicted operational noise levels would be questionable.

Shadow Flicker

There is potential for 73 sensitive receptors out of 113 to experience some degree of shadow flicker (Table 14.4). In order to calculate realistic occurrences of shadow flicker for the sensitive receptors meteorological data from the Met Eireann Weather Station at Cork Airport was used as it was deemed closest to the wind farm site.

Shannon Airport Weather Station is closer to the site and meteorological data from there may give a more realistic guide to weather conditions at the wind farm site as they both lie directly in the path of the prevailing westerly air currents.

Shadow flicker cumulative effects for adjacent wind farms (there are none) has been addressed. However the possibility of cumulative effects on a receptor from two or more turbines within the same wind farm development has not been considered.

Traffic

It is proposed that most of the traffic involved in the construction of the wind farm will access site entrance No. 2 via local road (L1537). This road extends from the R515 junction to the east of Charleville to the junction with R518 in Bruree village. Despite the impression of a relatively straight road given by Plate 17.2 (Chapter 17 of the EIAR) this is a winding country road with many acute and "blind" bends.

It has no grass margin in parts particularly at acute bends and is bounded by open drains in some sections. The road also narrows significantly when crossing the River Loobagh at Garroose Bridge.

The road surface is also in poor condition and shows signs of subsidence in places. Currently cars meeting HGVs or agricultural machinery on this road cannot easily pass and usually one or the other has to "back up" to a gateway or other roadside opening to ensure safe passage.

Notwithstanding the fact that a traffic management plan has been outlined in the EIAR we consider this road to be totally unsuitable for the very significant increase in the volume of traffic predicted during the construction phase of the project. This increase in traffic volume will pose serious health and safety issues for all road users.

Landscape

The construction of a 9 turbine wind farm will forever change the nature of the local landscape, being visually intrusive by day and also at night as a result of the necessity for aviation warning lights on each turbine.

There is a statement in Section 12.4.2.1 of the EIAR that "the site in question and its immediate surroundings represents a typical rural landscape principally valued more for productive and subsistence reasons rather than susceptible scenic values". This seems to imply that locals will accept any local development that confers economic advantages on them and will be indifferent to the effects of such development on "susceptible scenic values".

Many locals have lived in the area for generations and the fact that the local landscape has remained largely unchanged over this period is a testament to the value that locals place on this resource. This is not surprising as the local landscape is something that they visually interact with on a daily basis.

The imposition of a 9 turbine wind farm on this landscape would be highly inappropriate and would represent the biggest change ever in the character of this rural landscape.

Overall Management/Supervision of the Project

There are multiple agencies involved in the development of the project (developer, contractor, sub-contractors, local authority etc.). Should planning permission be granted it should be clear from the outset which agency has overall responsibility for ensuring that the project is completed in full compliance with the relevant planning permission and any conditions attached to such a permission. Ideally there should also be provision for an independent audit of compliance.

A robust plan for dealing with any issues which may arise during the construction and operational phases of the project should be in place. It is also vital that the public, particularly those living in close proximity to the project, have contact details for relevant personnel so that issues arising may be addressed promptly.

However based on the issues we raise in our submission we request that An Coimisiún Pleanála refuse permission for the development of this project for the following reasons:

- Close proximity to many dwellings
- Inadequate local road network and vastly increased traffic volumes
- Visual intrusion on a predominantly rural landscape
- Inadequate provision for dealing with issues relating to low frequency noise.