

AN COIMISIUN PLEANÁLA  
LDG- 083784-25  
ACP- \_\_\_\_\_  
30 OCT 2025  
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Time: 9:15 By: NORMA

College road,  
Carrignavar,  
Co. Cork.

Date: 22 October 2025

An Coimisiún Pleanála,

64 Marlborough St, Rotunda, Dublin 1

**Re: ABP case reference : PC91.320745**

**Applicant: Ballinaslee Green Energy limited**

Located within the townlands of Ballincurra, Ballinlee South, Ballingayrou, Ballinbea, Knockuregare, Ballinlee North & Camas South approximately 18km southwest of Limerick City & 4km west of Bruff, Co Limerick

Dear Inspector,

I highly recommend this application be looked at in detail with respect to the turbine to turbine separation distances within this application site boundary. On inspection it shows that the turbine positions are located relative to their minimum distance from households, erring then on the minimum distances suggested in the WEDG 2006 guidelines for turbine to turbine spacing.

I am a Chartered Land Surveyor, in private practice since 1994, becoming a Fellow member of the Society of Chartered Surveyors of Ireland & the RICS in 2006.

Since 2017 I have been working in a professional capacity mapping distances and dimensions of various Windfarms in Cork, Kerry, Waterford, Limerick and Wexford counties on behalf of certain residents who have complaints of noise nuisance created by the operation of wind turbines. I was the surveyor involved in mapping the dimensions of the Ballyduff wind farm on behalf of the Plaintiffs who were impacted by amplitude modulation and turbine noise to such an extent that one of the Plaintiffs had to abandon his home and was found to have suffered psychological injury. The findings in this case were made by the High Court in a Judgment of Ms. Justice Egan delivered on the 8<sup>th</sup> March 2024 (Webster & Anor -v- Meenacloughspar (Wind) Limited and Shorten & Anor-v- Meenacloughspar (Wind) Limited. In that Judgment regard is had to the proximity of the turbines to the homes of the Plaintiffs and to the many factors which may be contributing to turbine noise, including possible wake effects of one turbine on the other turbine (the particular windfarm in that case has just two turbines).

I was also the surveyor involved in mapping the dimensions of the Gibbett wind farm on behalf of the Plaintiffs who were impacted by wind turbine noise and where the developers admitted liability after many years of noise nuisance. Liability was only admitted after the plaintiff's acoustician's evidence to the court, that being after 11 days of High court sitting.

I have recently carried out a study of all of the Windfarms I have worked on (on behalf of injured parties) and one factor that I happened upon is present in all. This is the spacing of certain turbines relative to each other. It is a factor in wake turbulence at particular turbines, creating noise nuisance for nearby residents.

On reading the WEDG 2006 guidelines, referring to “wind take” on page 34, the recommended siting of turbines relative to each other (as distinct from siting relative to dwellings and adjacent windfarms / properties outside of the windfarm control) are given.

**It reads “In general, to ensure optimal performance and to account for turbulence and wake effects, the minimum distances between wind turbines will generally be three times the rotor diameter (=3d) in the crosswind direction and seven times the rotor diameter (=7d) in the prevailing downwind direction.”**

In ABP case reference **320745** to which this observation refers, the applicant has, as one can see in Map 1, (next page) ignored the turbine separation distances from adjacent turbines, that are recommended in the WEDG2006 guidelines.

It should be noted that the prevailing winds, those requiring 7 rotor diameter separation distance between turbines are not only from the southwest direction. Map 1 shows that in reality there are significant winds of significant duration from 150 South-southeast to 350 North-northwest.

Therefore the positioning of all turbines are in prevailing wind direction’s relative to each other. This then says that all turbines should be a distance of 7 rotor diameters apart per the WEDG2006 guidelines and 5 rotor diameters per the Manufacturers guidelines.

Map 1 shows that the spacings between T1 to T4 and T4 to T6 are the only pairings that have the recommended spacings per WEDG2006 guidelines.

All other spacings are sub-standard and will, in my learned opinion, cause noise nuisance similar to the Meenacloughspar (Ballyduff) and Gibbett hill windfarm cases that have been established in the courts.



SEAI have published in 2024 a series of documents on how to design and plan a windfarm layout, see the following link: <https://www.seai.ie/sites/default/files/publications/Community-Toolkit-Planning->

### Noise Levels

Noise generation is perceived to be an adverse impact of wind turbine operations, although noise levels of modern wind energy are generally very low. Improvements in technologies have reduced mechanical noise impacts significantly. However, it is important that turbines are located an appropriate distance from noise sensitive developments to minimise any adverse impacts upon local amenity.

Wind turbines also create noise, which can impact on the amenity of the occupants of any nearby dwellings. As such, it is recommended that a separation distance of at least 300 metres or four times T<sub>g</sub> height is incorporated between the turbine and any other dwelling.

### Appropriate Distance

You will need to consider appropriate distance between all wind turbines and power lines when planning for grid connections. The minimum clearance for all turbines and overhead transmission lines must be falling distance (measured from the edge of the foundation) plus an additional flashover distance for the relevant voltage. EirGrid advises that the distance between an overhead transmission line (110kV, 22kV or 400kV) and a commercial wind turbine should not be less than three and a half rotor diameters, unless EirGrid has agreed a reduction based on a risk assessment. ESB Networks should be consulted on applications, and evidence of any pre-application discussions should be submitted as part of the planning application.

It is advisable to achieve a safety setback from national and regional roads and railways of a distance equal to the height of the turbine to the tip of the blade plus 10%.

In general, to ensure optimal performance and to account for turbulence and wake effects, the minimum distances between wind turbines will generally be three times the rotor diameter in the crosswind direction and seven times the rotor diameter in the prevailing downwind direction. Bearing in mind the requirements for optimal performance, a distance of not less than two rotor blades from adjoining property boundaries will generally be acceptable, unless by written agreement of adjoining landowners to a lesser distance.

### → Decommissioning and Site Restoration

Solar farms and wind turbines have a finite life and, should planning permission be granted, it is likely to be subject to a condition requiring the turbine to be decommissioned and removed when no longer in use. A condition may also be added requiring certain colours and finishes of the mast, blades and hub, but this will be specific to the turbine's location.

## 3.2 Identify Site Constraints

- Refer to the Wind Energy Maps or Renewable Energy Strategy in the County Development Plan to check wind energy designations. Refer to the Council's Landscape Assessment (if any) to see where the site lies in relation to landscape sensitivity.



The above

SEAI recommendation is in line with the WEDG guidelines

This windfarm designer must be referring to the 2012 Irish Wind Energy Association "Best practice guidelines for the Irish Wind Energy Industry" (link below) instead of the WEDG2006 guidelines when preparing their applications. These IWEA 2012 guidelines are in conflict with the WEDG 2006 and SEAI guidelines in many areas and should not be used in Windfarm design.

<https://windenergyireland.com/images/files/9660bdfb5a4f1d276f41ae9ab54e991bb600b7.pdf>

### **Recommendation**

On the basis of what I have outlined and experienced, I highly recommend the following information be sought from the developers to enable ABP and other parties carry out an in-depth analysis of the proposal, and in fact, the entire validity of the proposal in relation to the Wind Energy Development Guidelines 2006.

1: The manufacturer's specifications for the particular model of turbines used in their design (Vestas V136 ?? MW) with specific reference to the minimum separation distances from turbine to turbine within the windfarm (not windfarm to windfarm).

(Turbine manufacturers recommend separation distances to avoid excess turbulence, wind shear, noise and other impacts on the integrity of the turbines).

This is to enable them provide a warranty for the turbine being used.

It is my opinion that the developers will not get a valid warranty for the eventual turbine, after their tender process, for a spacing less than 5 rotor diameters in the prevailing wind direction and 3 rotor diameters in other directions. The layout on Map 1 shows a significant lack of spacing, using the manufacturer's recommendations and a serious lack of spacing relative to the WEDG2006 guidelines.

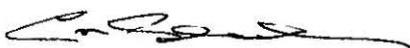
Regarding the Gibbett Hill windfarm, the turbines were all over 1049 m from the dwelling where the nuisance is confirmed and mitigation was not possible to halt this nuisance.

The 3 turbines that were ordered to be taken down, were, as in this application, less than the recommended WEDG 2006 guidelines apart.

I am available for consultation or other forum if needed.

I enclose a cheque for 50 Euro made out to An Coimisiún Pleanála.

Yours sincerely,



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Land surveyor /Fellow, "Society of Chartered Surveyors Ireland"

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