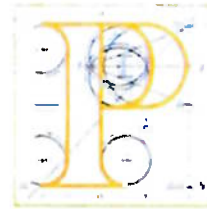


**Our Case Number:** ABP-318816-24



**An  
Bord  
Pleanála**

Agnes Doolan  
13 Cluain Raighne  
Banagher  
Offaly  
Co. Offaly  
R42 FR50

**Date:** 04 March 2024

**Re:** 10 year planning permission for wind energy development consisting of 8 no. wind turbines and all associated works  
located at Cush, Galros West, Boolinarig Big, Eglish, and Ballindown, Co. Offaly.  
([www.cushwindfarmplanning.ie](http://www.cushwindfarmplanning.ie))

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](http://www.pleanala.ie).

If you have any queries in the meantime please contact the undersigned officer of the Board. Please quote the above mentioned An Bord Pleanála reference number in any correspondence or telephone contact with the Board.

Yours faithfully,

Ellen Moss  
Executive Officer  
Direct Line: 01-8737285

PA04

Tel	Tel	(01) 858 8100
Glao Áitiúil	LoCall	1800 275 175
Facs	Fax	(01) 872 2684
Láithreán Gréasáin	Website	<a href="http://www.pleanala.ie">www.pleanala.ie</a>
Ríomhphost	Email	<a href="mailto:bord@pleanala.ie">bord@pleanala.ie</a>

64 Sráid Maoilbhríde	64 Marlborough Street
Baile Átha Cliath 1	Dublin 1
D01 V902	D01 V902



**Cush Wind Farm**

Further community engagement for the proposed  
Cush Wind Farm Face to face clinic sessions by  
appointment available.

Venue, Dates and Times for consultation clinics  
as follows:

**Birr Golf Club**

Wednesday 25<sup>th</sup> January 2023 – 2pm and 8 pm

**County Arms Hotel**

Thursday 26<sup>th</sup> January 2023 – 12 noon - 8pm

Book your appointment by ringing our  
freephone number 1800 140 247

**Contact Us**

☎ Freephone 1800 140 247

o@[cushwindfarm.ie](mailto:cushwindfarm.ie) ☎ [www.cushwindfarm.ie](http://www.cushwindfarm.ie)

e Cush wind farm team will adhere with all protocols imposed  
as per most recent Government regulations

I3 Cluain Raighne

Banagher

Offaly R42 FR50

27-02-24

Cush wind farm objection Ref 318816

<b>AN BORD PLEANÁLA</b>	
LDG-	070310-24
ABP-	
<b>27 FEB 2024</b>	
Fee: €	50.00 Type: <u>che</u>
Time:	9:50 By: <u>post</u>

A Chara

I wish to object to the above development for many reasons some of which are;

- 1 I can find no Site Notice anywhere. Update. Found one 18<sup>th</sup>/02
- 2 There are sand martens at the 5<sup>th</sup> hole on the Glens, Birr Golf Course which lies beside Boolinarig Lane the L30033. I was a member of Birr Golf Club for 34 yrs. When we undertook development on the course circa 2006 were obliged to protect the sand bank to the right of the 5<sup>th</sup> hole because of the sand martens, an Annex 1 species. I have referred this matter to Mr. Ricky Whelan, Chief Biodiversity Officer with Offaly County Council as I believe the construction works and Turbines 4 and 5 in particular will have a negative impact on the habitat of the sand martens. The EIAR tells us that no Passerine surveys were carried out.
- 3 Impact on roads in the area. I drive to Birr almost daily. This road the R439 is extremely busy and dangerous at the best of times. It's a heavily trafficked route. There are several bad bends and dips in the road. The entrance to the L30033 comes after a bad bend at Rapemills. The other end of the L30033 exits on to the extremely busy N92. Since the Meenwaun wind farm was built circa 20116 the R439 has been dug up to install cables to connect the wind farm to Dallow sub-station. Even after that the R439 was dug up at least twice because of faults in the cable. With the Construction of the Derrinlough wind farm, now ongoing, the N62 was closed for a few months so the traffic was diverted onto the R439. Driving this route one is definitely taking one's life in one's hands. We're weary of the constant procession of lorries carrying sand, gravel, concrete to these wind farms.
- 4 The Public Consultation for Cush left a lot to be desired. One had to make a telephone appointment for a one-to-one meeting with no doubt a smartly dressed young male or female representing the wind company. A bit reminiscent of Catholic Confession. We knew so few details about the development at that point. The whole thing was shrouded in secrecy so naturally I didn't waste my time going along. Been through this too many times.
- 5 Some of the planned development is outside Area 7 as designated by Offaly Co Co's Wind Energy Strategy. With regret I have noticed that the Board previously granted Bord na Mona permission for 5 turbines in the Derrinlough wind farm, all 5 being outside Area 7 also. With respect may I ask the Board if you have any respect for County Development Plans? Surely if a County Council designates an area as suitable

for wind energy development then permission for turbines outside that area should not be granted ?

- 6 The impact of this development on the I-LOFAR telescope at Birr Castle which our County Development Plan protects but I presume the Castle will lodge a submission about this.
- 7 My main reason for objecting to this development is the height and spatial extent of these turbines and subsequent to that the noise, shadow flicker and infrasound which these enormous turbines will generate. To ask for 8 turbines of tip height 200m, rotor diameter 172 metres and power output 7.2 MW shows the contempt which this company,, Galetch Energy Servies of Cavan being the parent company , holds for the people of Wet Offaly. We know a lot about Galetch in these parts.

When Galetch first applied for 10 turbines of height 170 metres in Cloghan in December 2012 Offaly County Council granted planning permission but the local community including myself appealed to An Bord Pleanala and the Board turned down the application for the following reason;

" Having regard to the nature of the receiving environment and the open nature of the immediately adjoining lands and the size and scale of the proposed turbines, it is considered that a wind farm development of the scale proposed would create a significant visual intrusion in the landscape by reason of the height and spatial extent of the proposed turbines which would be excessively dominant and visually intrusive when viewed from the surrounding countryside and villages. The proposed wind energy development would, therefore, seriously injure the visual amenities of the area, would be contrary to the provisions of the Wind Energy Guidelines for Planning Authorities issued by the Department of Environment , Heritage and Local Government in June 2006 and would be contrary to the proper planning and sustainable development of the area." PL 19 .242354.

Galetch did not give up. They came back in 2014 and applied for 9 turbines of height 150 metres. This time the Inspector Ms.Brid Maxwell recommended refusal for the very same reason as above among others- but the Board over-ruled her and planning permission was granted. PI 19. 244053.

Later Galetch came back to Offaly County Council and asked if they could go back up to the original height of 170 metres, a favourite stunt of wind companies. This request was granted. So now in Cloghan we have 9 turbines of height 170 metres. They're a Vestas 4.2MW and locals are suffering badly from sleep loss and damage to their health . See enclosed attachment from the Midland Tribune; "Cloghan Residents say local Wind Farm is affecting their health." And so it will affect their health and I have no doubt that in the not too distant future some of these families will walk away from their homes without any financial compensation for the simple reason that they will not be able to live in their homes.

The we come to Meenwaun wind farm near Banagher. It's officially a UD, an Unauthorised Development as independent noise testing has shown but who cares? Offaly County Council plead that they do not have an Enforcement Officer to deal with these matters.

Meenwaun consists of 4 GE-120 turbines, 2.75 MW, rotor diameter 120 metres, tip height 169m (Cush is proposing rotor diameter 172 metres. Unreal.) From the start there were complaints about noise at Meenwaun. Even people in the town of Banagher who would be at least 4 km from T1, the nearest turbine were into Offaly Co Co complaining about the noise. During Storm Jocelyn in January of this year I could clearly hear the Meenwaun turbines and I reckon I'm the best part of 5km from T1. Because of all the complaints Offaly Co Co agreed to get independent noise testing done at Meenwaun. They hired ARUP Acoustics to do so, at tax-payers expense of course. Using an FOI request I obtained a copy of the Arup Report and I enclose it for your perusal. It clearly shows that Meenwaun is in breach of Condition 9 of its PP i.e. "Wind turbine noise from the proposed development shall not exceed the greater of:

- (a) 5dB(A) above background noise levels or
- (b) 43 dB(A) when measured externally at dwellings or other sensitive receptors".

Meenwaun Report PI 19 .244053.

Three times in 2022 Offaly County Council wrote to the developers of Meenwaun, sent them Warning Letters but nothing has been done about Meenwaun being non-compliant with its planning conditions.

#### Re Possible Noise from 7.2MW wind turbines.

I confess to being astonished that even the most ruthless wind developers would plan to use 7.2MW turbines onshore. The developers tell us that there are 106 houses within 2km of the Cush wind farm. All of these and many others will suffer from the noise and infrasound created by these turbines. Ireland is still using the 2006 Wind Energy Guidelines even though a recent ruling of the CJEU (C24/19) says that these Guidelines are illegal as No SEA was carried out for these Guidelines. They infringe Article 2(a) and Article 3 (2) A of Directive 2001/42 on the assessment of effects on certain plans and programmes for the environment.

Yes, I am aware that we have Draft Wind Energy Guidelines 2019 but these have never been signed off. These Draft Guidelines will also impose an upper noise limit of 43 d(B)A. Considering that Meenwaun cannot meet its Planning Conditions re upper noise limit and the complaints now emanating from residents near the Cloghan wind farm I think the Board must give serious consideration to the implications for the residential amenity of many homes which are located even several kms from these enormous turbines. May I remind you of some of the remarks made by the WHO when it updated its Noise Guidelines for Europe in 2018 and included a section on wind turbine noise for the first time. I quote from pp78-84;



- 1 Wind turbines are not a recent phenomenon but their quality, size and type have increased significantly over recent years.
- 2 As they are often built in the middle of otherwise quiet and rural areas , they can adversely affect the integrity of the site..
- 3 Reduction of noise exposure from environmental sources is generally possible through simple measure like insulating windows or building barriers .With wind turbines however , noise reduction measures are more complicated than for other noise sources due to the height of the source and because outdoor disturbance is a particularly large factor.
- 4 Wind turbine noise is characterised by a variety of potential moderators which can be challenging to assess and have not necessarily been addressed in detail in head studies. As a result there are serious issues with noise exposure assessment related to wind turbines.
- 5 The audibility of wind turbines in bedrooms, particularly when windows are closed is unknown. (one couple near the Meenwaun turbines tell me they leave the TV on in their bedroom on windy nights to drown out the noise of the turbines)
- 6 Wind turbines can generate infrasound or lower frequencies of sound than traffic sources. However few studies relating exposure to such noise from wind turbines to health effects are available. (I include a letter from Vestas to the Danish Minister of the Environment in 2011 which shows that the wind industry knows full well about the problem of infrasound from wind turbines. We know now from research in Finland in 2019 that infrasound from turbines does not attenuate until a distance of 15km has been reached. And turbines have got even bigger and more powerful since 2019)
- 7 Standard methods of measuring sound, most commonly A-weighting, may not capture the low frequency sound and amplitude modulation characteristic of wind turbine noise. (Council of Canadian Academies 2015) End of quotes.

I notice the developer conveniently states "There is no reliable evidence that infrasound below the hearing threshold produces physiological or psychological effects." They quote the WHO 2015. Our knowledge base has improved considerable since then We now know that infrasound produces a medical condition called vibroacoustic disease. I include testimonies for Dr. Mariana Alves Pereira, Dr. Rhina Bray and Dr. Herb Coussons.

Since the WHO admits that there are many unknowns about wind turbine noise and infrasound surely the Precautionary Principle should be applied until we know for sure what is happening to people in the vicinity of wind turbines ??

Two final points; During the week the UN produced a major Report on Loss of Species; "One in five migratory species under protect at risk of extinction. UN Report finds" Loss of habitat is blamed for loss of species and energy infrastructure including wind farms got a particular mention as a cause of loss of habitat. I notice that the Cush site as proposed has an area of over 700 acres!! Much of this area will be dug up, filled with concrete and paved over leading to loss of habitat.

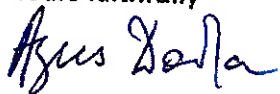


This morning February 17<sup>th</sup> I listened to RTE radio's Countrywide programme presented by Philip Boucher-Hayes. One item up for discussion was the demise of the hen harrier, specifically in the [REDACTED]. Where the number of breeding pairs of the hen harrier has shown a marked decline. Philip spoke to a Mr Lusby of Birdwatch Ireland who attributed the demise of the hen harrier to wind turbines and Sitka Spruce forestry.

Wind farms are destroying our biodiversity.

I ask you to reject this preposterous proposal.

Yours faithfully

A handwritten signature in blue ink, appearing to read 'Agnes Doolan'.

Agnes Doolan. BSc. M Ed.



Offaly County Council

**Meenwaun Wind Farm**

**Assessment of Compliance with  
Noise Conditions**

REP/268927/0001

Rev 1| 20 March 2020

This report takes into account the particular instructions and requirements of our client.

It is not intended for and should not be relied upon by any third party and no responsibility is undertaken to any third party.


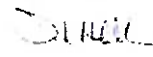
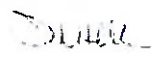

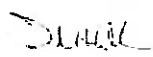
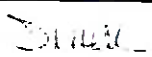
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Manchester M1 3BN  
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**ARUP**

# Document verification

ARUP

<b>Job title</b>		Meenwaun Wind Farm		<b>Job number</b>		268927-00	
<b>Document title</b>		Assessment of Compliance with Noise Conditions				<b>File reference</b>	
<b>Document ref</b>		REP/268927/0001					
<b>Revision</b>	<b>Date</b>	<b>Filename</b>	2020-02-05 Meenwaun Wind Farm Compliance Report Final.docx				
Draft 1	06 Feb 2020	<b>Description</b>	First draft				
			<b>Prepared by</b>	<b>Checked by</b>	<b>Approved by</b>		
		<b>Name</b>	Laura McLeod / Jon Sims	David Hiller	David Hiller		
		<b>Signature</b>					
Rev 1	20 Mar 2020	<b>Filename</b>	2020-03-13 Meenwaun Wind Farm Compliance Report Final Rev1.docx				
		<b>Description</b>	Updated to reflect client comments				
			<b>Prepared by</b>	<b>Checked by</b>	<b>Approved by</b>		
		<b>Name</b>	Jon Sims	David Hiller	David Hiller		
		<b>Signature</b>					
		<b>Filename</b>					
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## Appendices

### Appendix A

#### Survey Equipment Details

## 1 Introduction

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Arup has been appointed by Offaly County Council to carry out an assessment of the noise levels that are generated by the Meenwaun Wind Farm and to provide a comparison of those noise levels with the consented operational noise limits for the development.

This report summarises the site surveys that have been carried out in the vicinity of the wind farm, the data analysis that has been carried out and the findings of the assessment in the context of the planning consent.

## 2 Site Description and Background

---

The Meenwaun Wind Farm is a development in County Offaly, Ireland. The development currently consists of 4 commercial-scale turbines, each of 2.75 MW generating capacity, a rotor diameter of 120 m and a maximum tip height of 169 m. Planning consent for the development was granted at appeal in 2015, with construction taking place through 2017 and 2018 and commissioning completed in March 2018. Consent was granted for five turbines and it is understood that there are plans to install the fifth and final turbine (Turbine 3) at the end of 2020. The current site layout is indicated in the figure below.



Figure 1: Meenwaun Site Layout (taken from Figure 3.1 of the Fehily, Timoney and Company Operational Noise Survey Report for Meenwaun Wind Farm, July 2018).

There have been several noise complaints associated with the operation of the wind farm since it began operating. An operational noise assessment was carried out by Fehily, Timoney and Company between February and May 2018 (reported in the Operational Noise Survey Report for Meenwaun Wind Farm, dated July 2018) as part of the planning consent requirements. This assessment concluded that the Meenwaun Wind Farm complied with the consented noise limits, however there are some concerns regarding this conclusion due to some aspects of the assumptions and methodology used in this assessment.

Due to concerns regarding the methodology applied and conclusion of the operational noise report prepared by Fehily, Timoney and Company, Offaly County Council instructed Arup to carry out an independent assessment of the operational noise from the wind farm. The findings of the new assessment are summarised in this report.

### 3 Standards and Guidance

In the production of this assessment, reference has been made to the following standards and guidance documents:

### 3.1 Wind Energy Development Guidelines

The Wind Energy Development Guidelines<sup>1</sup>, produced by the Department of Housing, Planning and Local Government, set out general guidance for the siting and assessment of noise from proposed new wind farms entering the planning system. Whilst specific details of the assessment of operational noise from wind farms is not included in this document, reference is made to The Assessment and Rating of Noise from Wind Farms<sup>2</sup> (ETSU-R-97), produced for the then Department of Trade and Industry.

### 3.2 Assessment and Rating of Noise from Wind Turbines (ETSU-R-97)

ETSU-R-97 sets out detailed guidance for assessing and rating noise from wind farms, covering aspects such as how to carry out noise surveys, assessment locations that should be considered, setting noise limits, assessing tones etc. Whilst the ETSU-R-97 report is now over 20 years old, it remains the only recognised guidance for assessing noise from wind turbines. There are, however, some aspects of the ETSU-R-97 report that do not fully address some aspects of modern turbines, particularly turbines with large hub heights. Consequently, the Institute of Acoustics produced a guidance document in 2013 to clarify and expand some aspects of the application of ETSU-R-97 which had the potential to lead to misleading assessment conclusions.

### 3.3 Institute of Acoustics Good Practice Guide

The Institute of Acoustics Good Practice Guide to the Application of ETSU-R-97 for the Assessment and Rating of Wind Turbine Noise<sup>3</sup> (IoA GPG) was published in 2013 and sets out good practice in the application of the ETSU-R-97 assessment methodology when assessing noise from commercial-scale wind turbines. The majority of the guidance relates to carrying out noise assessments for planning purposes. The document is, however, supported by several Supplementary Guidance Notes, one of which (Supplementary Guidance Note 5 – SGN5) relates to post completion measurements of noise from wind farms<sup>4</sup>.

SGN5 provides specific guidance on interpreting planning condition noise limits; carrying out meteorological and noise measurements; and data processing, all in the context of carrying out post-completion measurements.

---

<sup>1</sup> Wind Energy Development Guidelines, Department of Housing, Planning and Local Government, 2006

<sup>2</sup> The Assessment and Rating of Noise from Wind Farms (ETSU-R-97), Energy Technology Support Unit for the Department of Trade and Industry, September 1996

<sup>3</sup> A Good Practice Guide to the Application of ETSU-R-97 for the Assessment and Rating of Wind Turbine Noise, Institute of Acoustics, May 2013

<sup>4</sup> Supplementary Guidance Note 5: Post Completion Measurements, Institute of Acoustics, July 2014



## 4 Planning Condition

The Meenwaun Wind Farm was consented at appeal in 2015. The only condition specifically relating to noise was Condition 9, as follows:

*'Wind turbine noise from the proposed development shall not exceed the greater of:*

- a) 5 dB(A) above background noise levels or*
- b) 43 dB(A)*

*when measured externally at dwellings or other sensitive receptors. Prior to commencement of development, the developer shall submit to, and agree in writing with, the planning authority a noise compliance monitoring programme for the subject development. All noise measurements shall be carried out in accordance with ISO Recommendation R 1996 "Assessment of Noise with Respect to Community Response", as amended by ISO Recommendations R 1996-1. The results of the initial noise compliance monitoring shall be submitted to, and agreed in writing with, the planning authority within six months of commissioning of the wind farm."*<sup>5</sup>

The condition does not specify wind speeds, wind speed reference (i.e. standardised 10 m wind speed derived from multiple measurements, or directly measured 10 m wind speed), wind directions under which noise should be assessed, time of day, receptor locations etc. The conditions do state, however, that in coming to the decision to grant the planning consent for the development, the Board had regard to, amongst other things, submissions made in connection with the planning application and the appeal. For the purposes of assessing noise against the requirements of Condition 9 above, it is therefore reasonable to assume that the noise condition is based upon the noise survey results and associated assessment that were presented in the Environmental Impact Statement (EIS) associated with the project (Environmental Impact Statement for the Proposed Meenwaun Wind Farm, County Offaly, Volume 2, Chapter 10 – Noise and Vibration, Fehily, Timoney and Company, February 2015).

The noise chapter of the EIS defines the study area as all residential properties within 1.31km of a turbine and experiencing turbine noise levels of above 35 dBL<sub>A90</sub>. As such, it can be assumed that Condition 9 applies to all residential properties that legally existed at the time of the consent that meet the above criteria. It would be the closest residential properties to the wind farm that would be expected to determine whether or not the requirements of Condition 9 are met.

The noise chapter of the EIS also states that the noise survey and analysis that was carried out as part of the EIS was based on wind speed and direction measurements taken using a temporary 10 m mast. The planning conditions can therefore be assumed to be referenced to directly measured 10 m wind speeds, rather than standardised 10 m wind speeds.

<sup>5</sup> Whilst the condition refers to ISO Recommendation R 1996, this has been superseded by ISO 1996, Acoustics – Description, measurement and assessment of environmental noise, Part 1: Basic quantities and assessment procedures, 2016 and Part 2: Determination of sound pressure levels, 2017. The assessment presented in this report is consistent with these standards.

Since no time of day is referenced in the condition, it can be assumed that the stated requirements apply at all times (day and night). Similarly, no noise descriptor is mentioned in Condition 9. Since all of the available wind farm noise assessment standards and guidance (i.e. ETSU-R-97 and the IoA GPG) refer to assessing noise from wind turbines using the  $L_{A90, 10 \text{ min}}$  descriptor, it is reasonable to assume that the requirements of Condition 9 are intended to refer to  $L_{A90, 10 \text{ min}}$  levels.

Since Condition 9 is not specific about wind directions under which the requirements apply, it can be assumed that the same requirements apply under all wind speeds and wind directions. Since noise levels would be expected to be 10 to 15 dB lower under upwind conditions as compared to downwind conditions, all else being equal, it will be under downwind conditions that the requirements of Condition 9 are most likely to be exceeded. "Downwind" is often considered to be wind directions within  $\pm 45^\circ$  of the lines connecting the receptor to the extremities of the wind farm and this is consistent with the guidance in the SGN5 of the IoA GPG. Which wind directions are considered downwind and the size of the downwind sector will therefore vary depending on the receptor considered.

Finally, since Condition 9 makes no mention of wind speed ranges, it can be assumed that the requirements of the condition cover the full wind speed range. ETSU-R-97 and IoA GPG both state that wind speeds up to 12 m/s should be considered as part of a wind farm noise assessment.

In summary, from the information presented in the original EIS it can be assumed that the requirements of Condition 9 of the planning consent apply under the following range of conditions:

- at all residential receptors within 1.31 km of a turbine and which experience turbine noise levels above 35 dB(A);
- at all times (day and night)
- at all wind speeds up to 12 m/s, with wind speeds measured at 10 m above ground (i.e. not standardised)
- under all wind directions, with downwind ( $\pm 45^\circ$  of the extents of the wind farm) being the worst case.

Condition 9 sets no requirements in relation to either tonal noise or amplitude modulation from the turbines.

## 5 Survey Details

To assess compliance with the consented noise limits, simultaneous noise and meteorological measurements were taken at one residential property. This residential property was chosen in discussion with Offaly County Council and reflects the area from which they have received noise complaints associated with the wind farm. The measurement location is shown in the figure below.

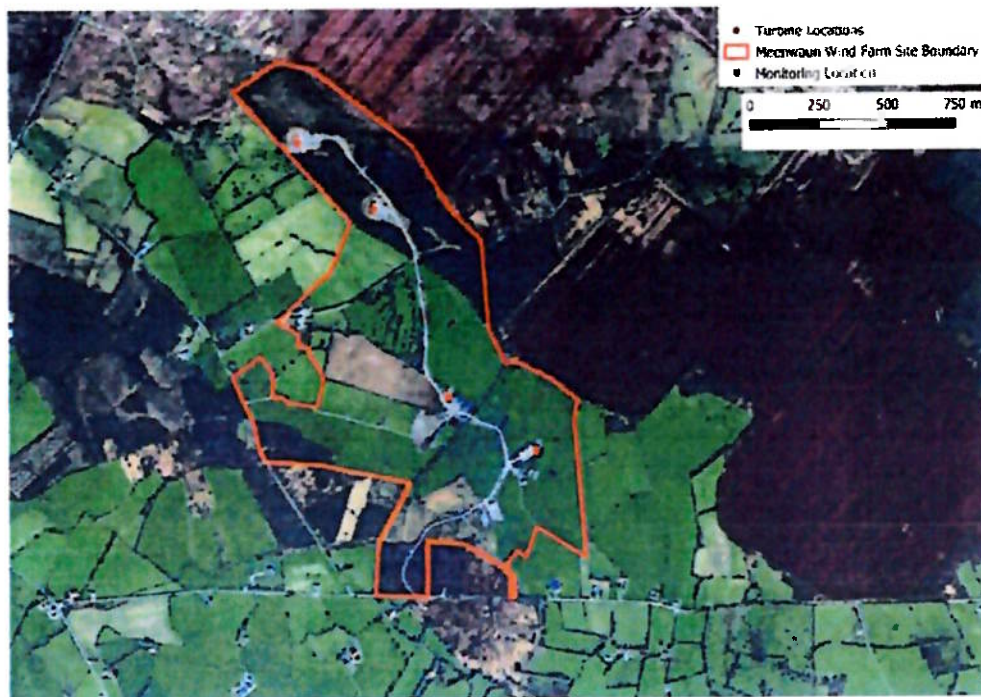


Figure 2: Meenwaun Wind Farm site location and monitoring location

Measurements were taken between Tuesday 22<sup>nd</sup> October and Thursday 21<sup>st</sup> November (a total measurement period of 30 days). Measurements were taken of both ambient noise levels and weather conditions. Noise levels were measured using a Type 1 measurement system with a wind shield provided by the equipment manufacturer for use in high wind speed conditions whilst maintaining the Type 1 performance of the measurement system. The measurement equipment used had a valid laboratory calibration at the time of the survey. The sensitivity of the measurement system was checked on site, using a hand-held acoustic calibrator, at the beginning and end of the survey. No significant (>0.5 dB) drift in calibration was observed. Noise measurements were collected in 10-minute aggregates which included the  $L_{Aeq}$ ,  $L_{Amax}$  and  $L_{A90}$  descriptors (amongst others). In addition, the noise monitoring equipment recorded 2 minutes of audio every 10 minutes to aid in noise source identification, as well as fine time resolution (100 ms) measurements in 1/3 octave bands. The full details of the measurement equipment and the monitoring position are included in Appendix A of this report.

Meteorological measurements were taken using a calibrated weather station. The sensor of the meteorological station was positioned at a height of 10 m above local ground level by use of a telescopic pneumatic mast. The meteorological mast measured wind speed, wind direction and rainfall (amongst other measures) in 10-minute aggregates that were synchronised with the noise logger. Full details of the meteorological measurement equipment and monitoring position can be found in Appendix A of this report. The use of a 10 m mast is, in this case, in line with the recommendations of the IoA Good Practice Guide, as the original measurements on which the planning condition is based were measured at 10 m above local ground level.



In addition to the long term unattended measurements, spot measurements of noise levels at further receptors were carried out on 29<sup>th</sup> November 2019. These measurements were taken using a hand-held sound level meter mounted on a tripod at a height of approximately 1.5 m above local ground level. The measurement system used was again a Type 1 system and was fitted with a wind shield supplied by the manufacturer that maintains the Type 1 performance of the measurement system when fitted. The measurement equipment used for the attended measurements also had a valid laboratory calibration at the time of the survey. The sensitivity of the measurement system was checked on site, using a hand-held acoustic calibrator, at the beginning and end of the survey. No significant ( $>0.5$  dB) drift in calibration was observed. Noise measurements were collected in single 10-minute aggregates which included the  $L_{Aeq}$ ,  $L_{Amax}$  and  $L_{A90}$  descriptors (amongst others) at each measurement location. No audio or short time interval measurements were made as part of the attended survey. The measurement locations considered as part of the attended survey are indicated below.

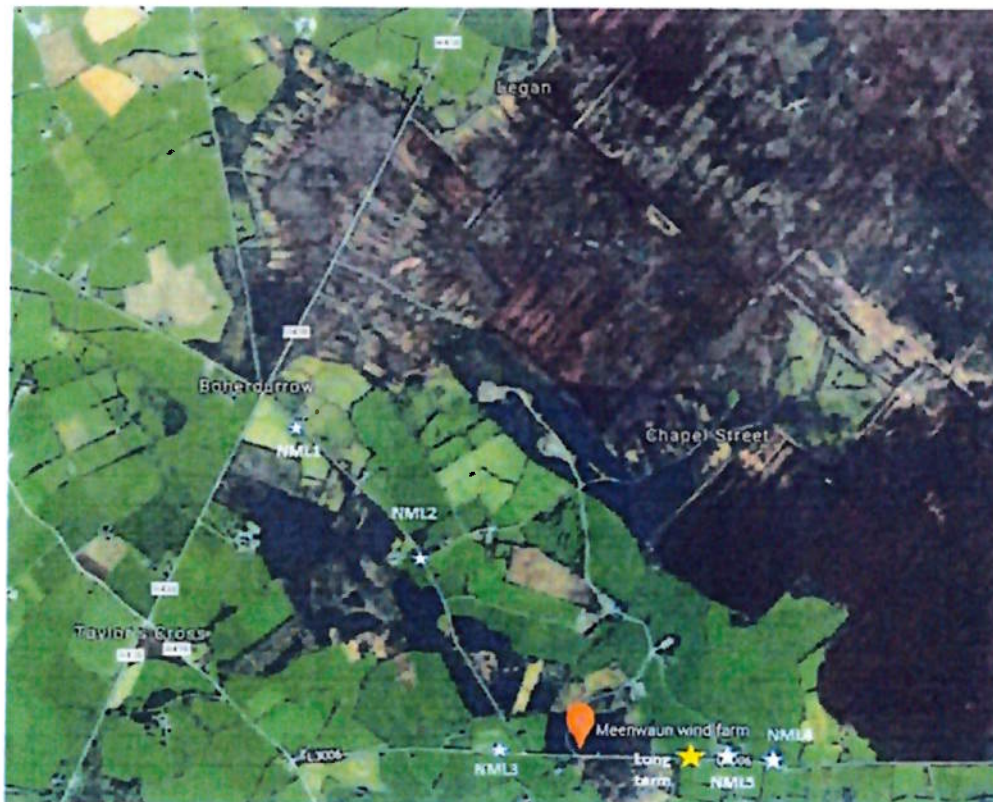


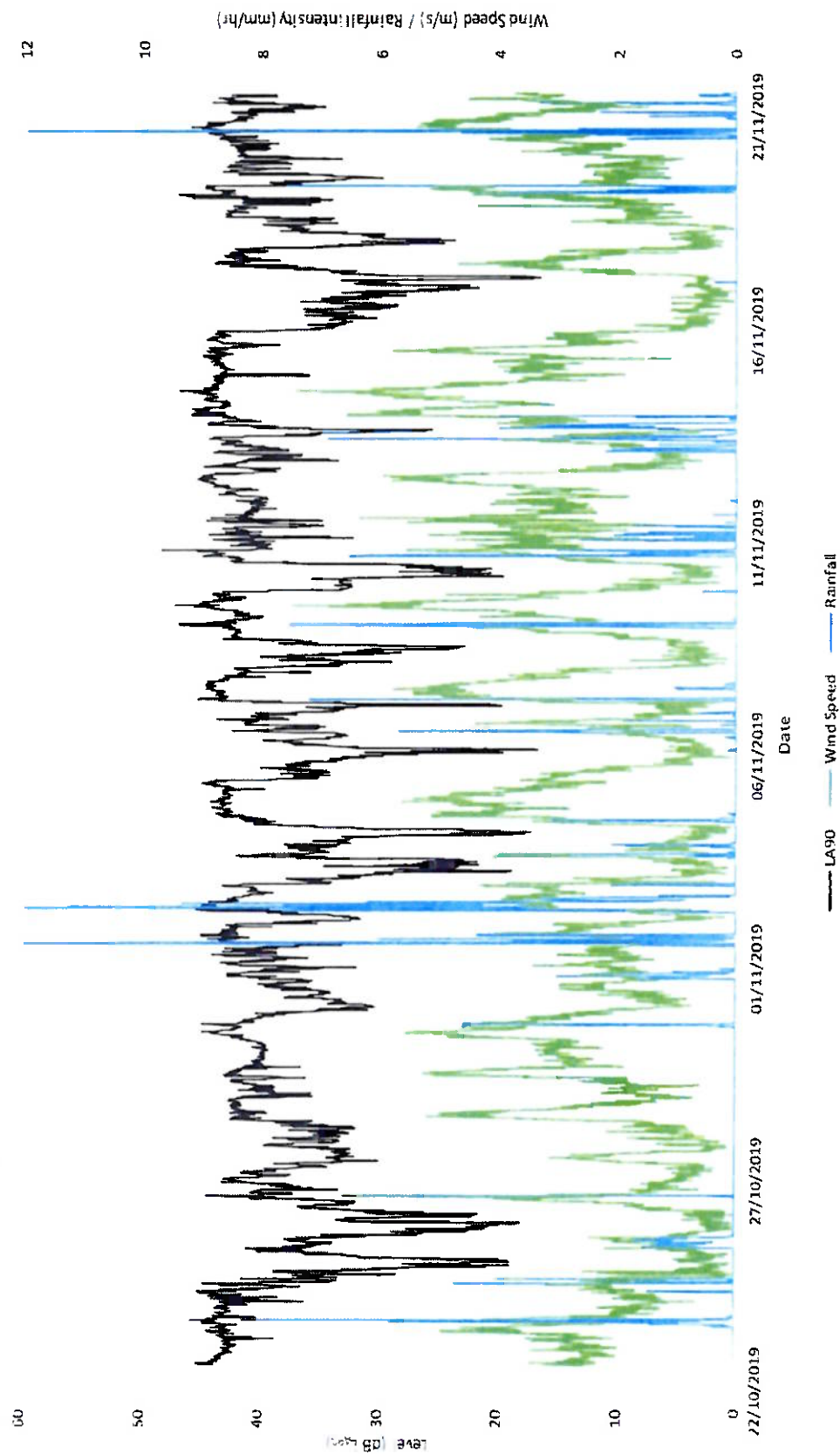
Figure 3: Attended monitoring locations

## 6 Survey Results and Analysis

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### 6.1 Unattended Survey

A time history of the unattended survey data recorded over the full survey period is shown in Figure 4 below.





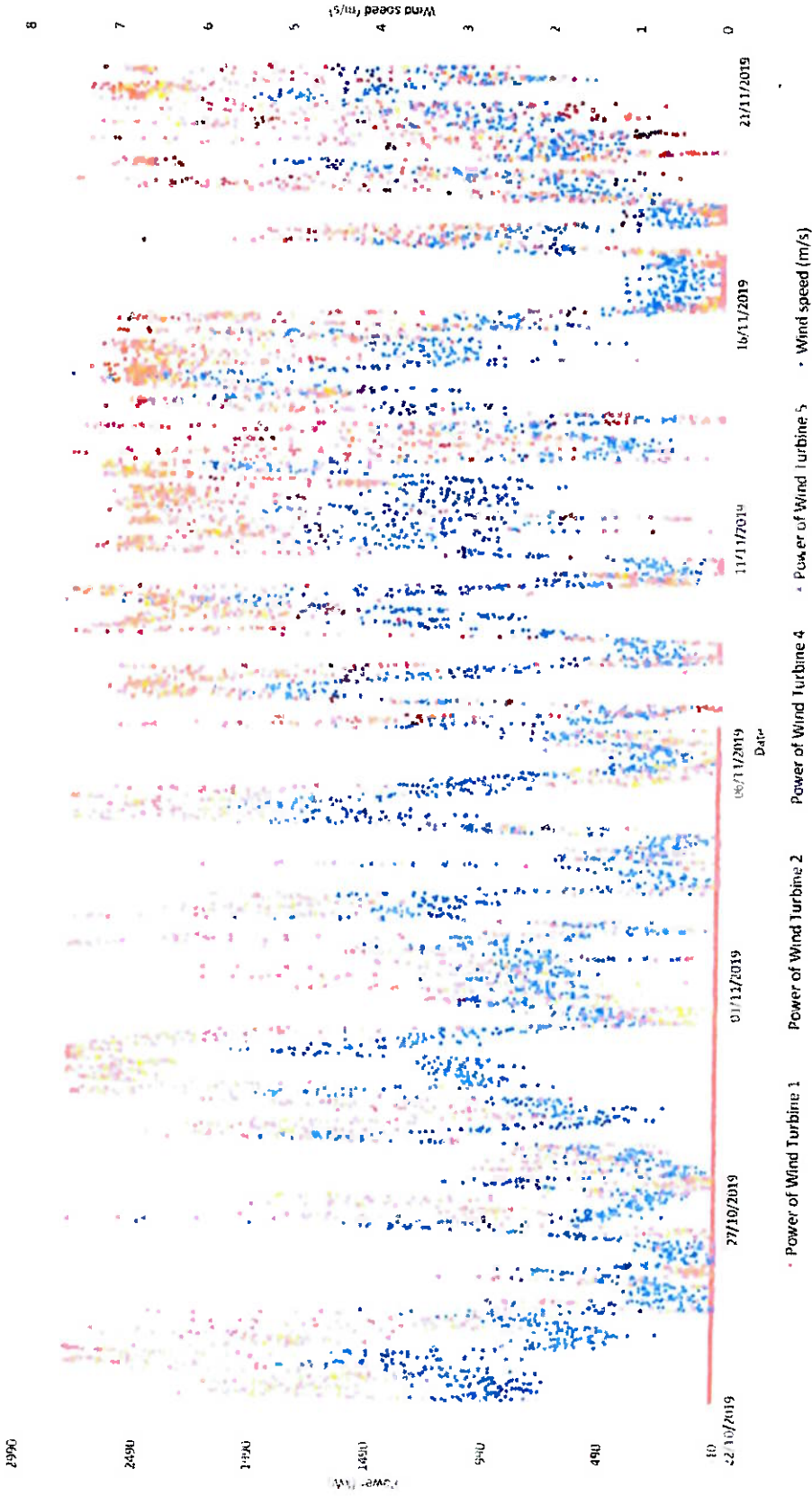


Figure 5: Power generation and wind speed of the wind turbines.

In analysing the survey data, the guidance contained in SGN5 of the IoA GPG has been followed as far as possible. Considering the operational data provided by the site operator, it is clear from Figure 5 that Turbine 1 was turned off for approximately 2 weeks from the beginning of the survey to around 6 November 2019. The other turbines were still operating during this time, during which low operational power corresponds to low wind speed. To comply strictly with the IoA GPG guidance, periods should be excluded from the assessment when not all turbines are operating. Since Turbine 1 was off for the first half of the survey, this would exclude a large amount of data from the assessment. Turbine 1 is, however, the furthest turbine from the measurement position, with the following approximate distances between the noise logger location and each of the four currently existing turbines.

Table 1: Distances from turbines to the noise measurement position

Turbine No	Distance to Noise Measurement Position (m)
1	1865
2	1515
4	785
5	490

Given the above, it is estimated that Turbine 1 will contribute less than 0.5 dB to total noise levels at the measurement location, so periods during which turbines 2, 4 and 5 were operating have been included in the analysis. Periods when turbines 2, 4 and 5 were operating were considered to be those periods during which the turbine operational data provided by the site operator indicated a power generation above 0 kW for turbines 2, 4 and 5 (turbines were considered to be “off” when the power generation was below 0 kW – i.e. when the turbines were not generating power but the turbine control systems were drawing power from the grid). If the assessment was repeated during periods when all the turbines were operating, it is possible that a slightly higher noise level may be recorded than reported here.

As per the guidance of the IoA GPG, measurements during which rain was recorded have also been excluded from the assessment. In addition, measurement periods when the measurement position was not downwind of the turbines have also been excluded. For the purposes of this assessment, the sector of wind directions from 274° to 012° has been used as the “downwind” sector, in accordance with IoA GPG.

As the site is in a rural area, with very low background noise levels (see Table 3), the assessment has been based on data from all times of day and night, not just night-time hours.

The following figures show the wind speed and directions that were measured during the survey and the noise levels measured at varying wind speeds, with both charts indicating the data that is included and excluded from the assessment.

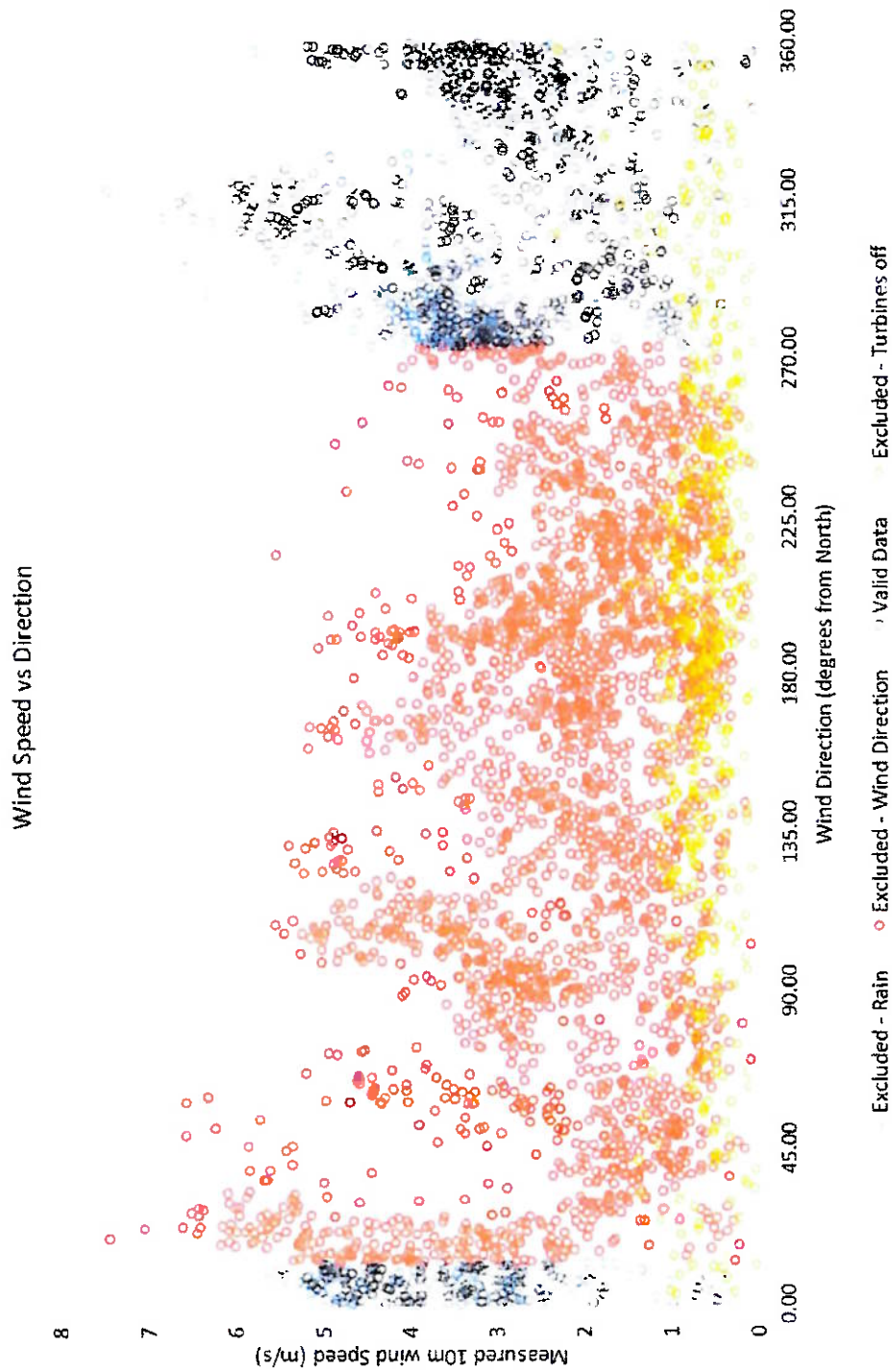


Figure 6: Wind speeds and directions measured during the survey

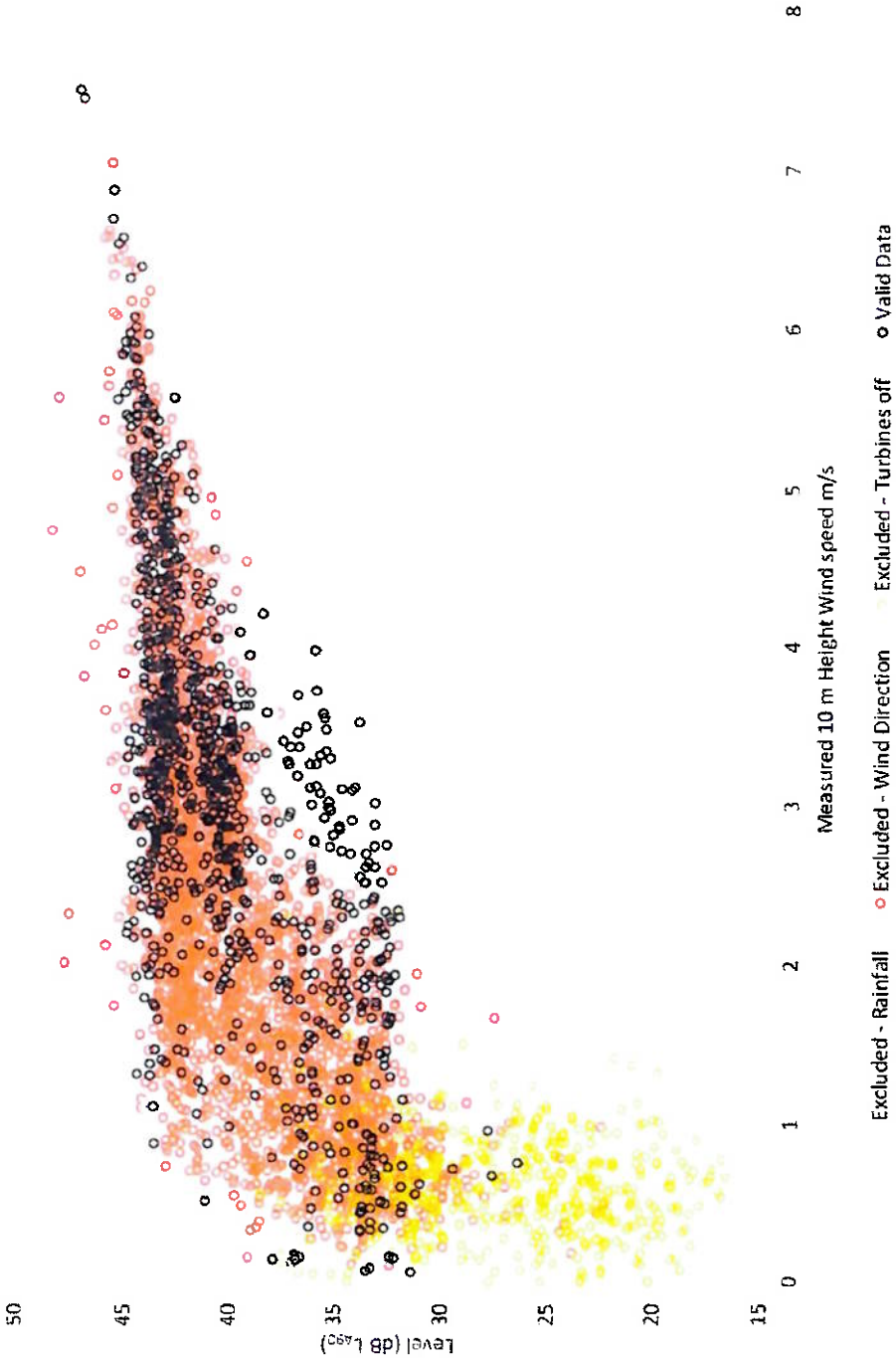


Figure 7: Variation of measured LA90 noise levels with measured 10 m wind speed

## 6.2 Attended survey

Attended measurements were carried out on 21<sup>st</sup> November 2019, to supplement the unattended survey. Attended measurements consisted of single 10-minute measurements at each measurement location. As they are sample measurements, they cannot be used for recognised assessment methodologies (such as the ETSU-R-97 / IoA methodologies). The attended measurements do, however, provide a snapshot of measured noise levels at more locations than during the unattended monitoring.

A summary of the measured attended noise levels is provided in the following table.



Table 2: Summary of attended measurements

Location	Start Time	Elapsed Time	L <sub>Aeq</sub>	L <sub>A90</sub>	Notes	Weather
NML1	10:13	00:10:01	43.0	41.0	Windfarm was the main noise source. Distant traffic from the west (R438) was audible. Meter paused when traffic was audible over windfarm. Other intermittent noise sources included birdsong, trees rustling, impulsive noise from animals on an adjacent farm, water flowing through a drainage network.	Overcast, very light rain. Easterly winds averaging 2-3 m/s. Greatest gust 4 m/s.
NML2	11:26	00:10:03	42.7	40.5	Windfarm was the dominant noise source. Meter paused when distant traffic was audible over the windfarm. Other intermittent noise sources included, birdsong and rustling of trees.	Light rain Easterly winds averaging 2-3 m/s. Greatest gust 4 m/s.
NML3	10:41	00:10:02	42.8	39.5	Windfarm was dominant noise source. Meter was paused for traffic passing. Other intermittent noise sources included birdsong, trees rustling and some infrequent industrial (motor) noise perceived to be from a farm 250 m south.	Overcast Easterly winds averaging 2-3 m/s. Greatest gust 4 m/s.
NML4	11:03	00:10:02	43.6	40.0	Windfarm was the main noise source. Meter paused for traffic passing. Other noise sources included trees rustling, birdsong. Other intermittent noise came from and animal noise from nearby fields.	Overcast. Light rain for last 90s. Easterly winds averaging 2-3 m/s. Greatest gust 4 m/s.
NML5	11:50	00:10:02	42.7	40.1	Windfarm was the dominant noise source. Meter paused when distant traffic was audible over the windfarm noise. Other sources included constant birdsong and intermittent noise from some tree rustling and a dog barking approximately 300m to the east intermittently from 2nd to 4th minute	Light rainfall Easterly winds Averaging 2-3 m/s. Greatest gust 4 m/s.

As can be seen from the above, the attended measurements were all noted as being dominated by noise from the wind turbines and the measured noise levels were all consistently around 40 to 41 dB  $L_{A90}$ .

## 7 Discussion of Results

As can be seen from Figure 6 and Figure 7 above, there were few periods during which the 10 m height wind speeds above 7 m/s were measured during the course of the survey. Consequently, no comment can be made with regard to likely compliance with the consented noise limits for measured 10 m wind speeds above 7 m/s.

In order to establish whether the measured ambient  $L_{A90}$  noise levels (i.e. the  $L_{A90}$  noise levels including noise from all sources, including background and turbine noise) are below the consented limits, reference has been made to Condition 9 of the planning consent (see Section 4). Since Condition 9 makes reference to background noise levels (i.e.  $L_{A90}$  noise level without any contribution from turbine noise), it is not possible to determine the noise limits from the measurements taken as part of the current survey.

Whilst requests were made to the operator to shut the turbines down to gather “turbine off” measurements, no shut down periods occurred during the measurement period. As such, reference has been made to the original EIS to determine background noise levels in the absence of noise from the turbines.

As part of the original EIS, baseline noise measurements were taken at a property referred to as NML 4, prior to the installation of any turbines. This property is next door to the property at which measurements were taken as part of the current assessment, approximately 150 m away, as shown in Figure 8 below.

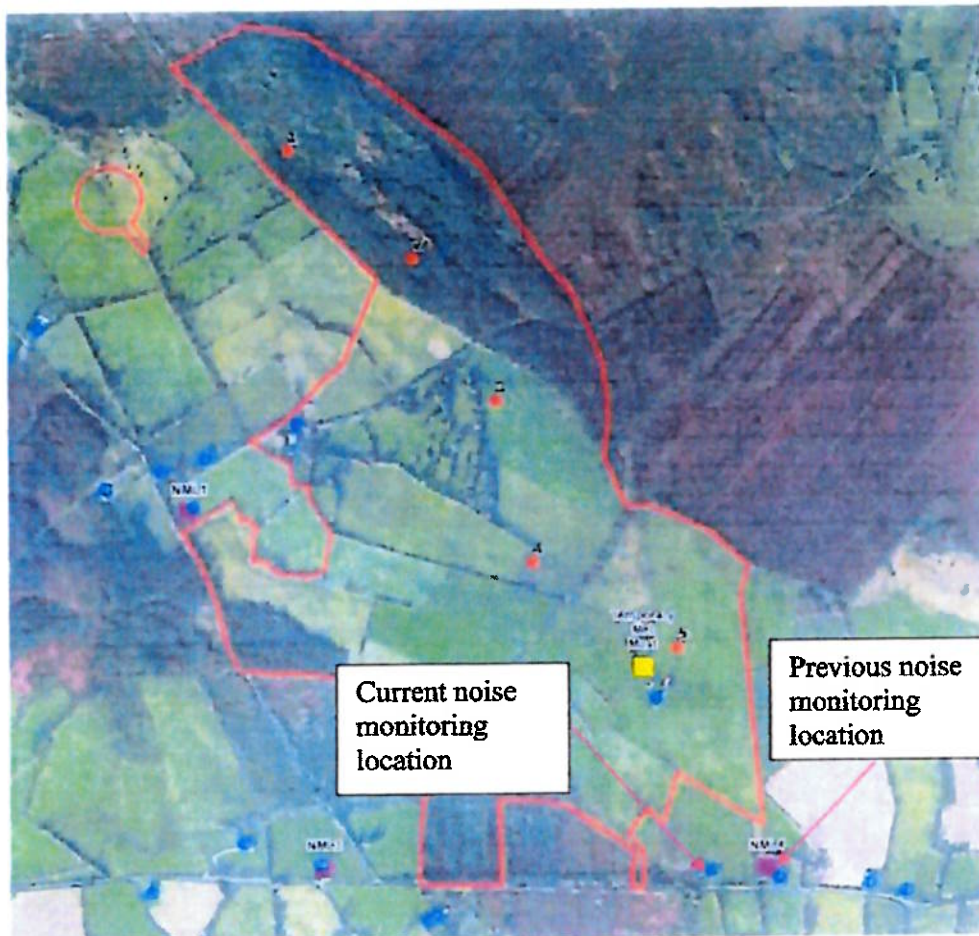


Figure 8: Previous baseline monitoring location used during EIS assessment.

The baseline monitoring results that were reported in the EIS at NML4 are reproduced below.

Table 3: Background noise levels (dB  $L_{A90}$ ) at NML4, as reported in the EIS

Location	Measured Wind Speed at 10 m Height (m/s)								
	1	2	3	4	5	6	7	8	9
NML4 (Day)	28.5	28.7	29.4	30.5	31.8	33.3	34.9	36.6	38.1
NML4 (Night)	23.4	23.2	24.0	25.8	28.2	31.0	33.9	36.8	-

Condition 9 of the consent sets a limit of 43 dB  $L_{A90}$  or 5 dB above background, whichever is the greater. Reference to the background noise levels in Table 3 shows that, at NML4, the background noise levels measured for the EIS did not exceed 38 dB  $L_{A90}$  apart from during daytime and at a wind speed of 9 m/s. Since the measured wind speeds during the current survey did not typically exceed 7 m/s, the appropriate noise limit at the assessment location would be 43 dB  $L_{A90}$  during both daytime and night-time at the range of wind speeds that were observed during the survey.

Based on the above, the ambient  $L_{A90}$  noise levels derived from the filtered survey data (i.e. with periods of rain, periods when the turbines were not operating and periods where the monitoring position was not downwind of the turbines removed, as described above) are shown in the figure and table below. The variation in ambient  $L_{A90}$  noise levels (i.e.  $L_{A90}$  levels including contributions from all noise sources, including noise from the wind turbines) have been derived in two ways:

- by fitting a best fit curve through the data points (using a third order polynomial fit); and
- by assigning the data to 1 m/s bins and plotting the mean and one standard deviation error bars for each of these bins.

As can be seen, the two methods result in very similar typical ambient noise levels for wind speeds of 1 m/s and above.

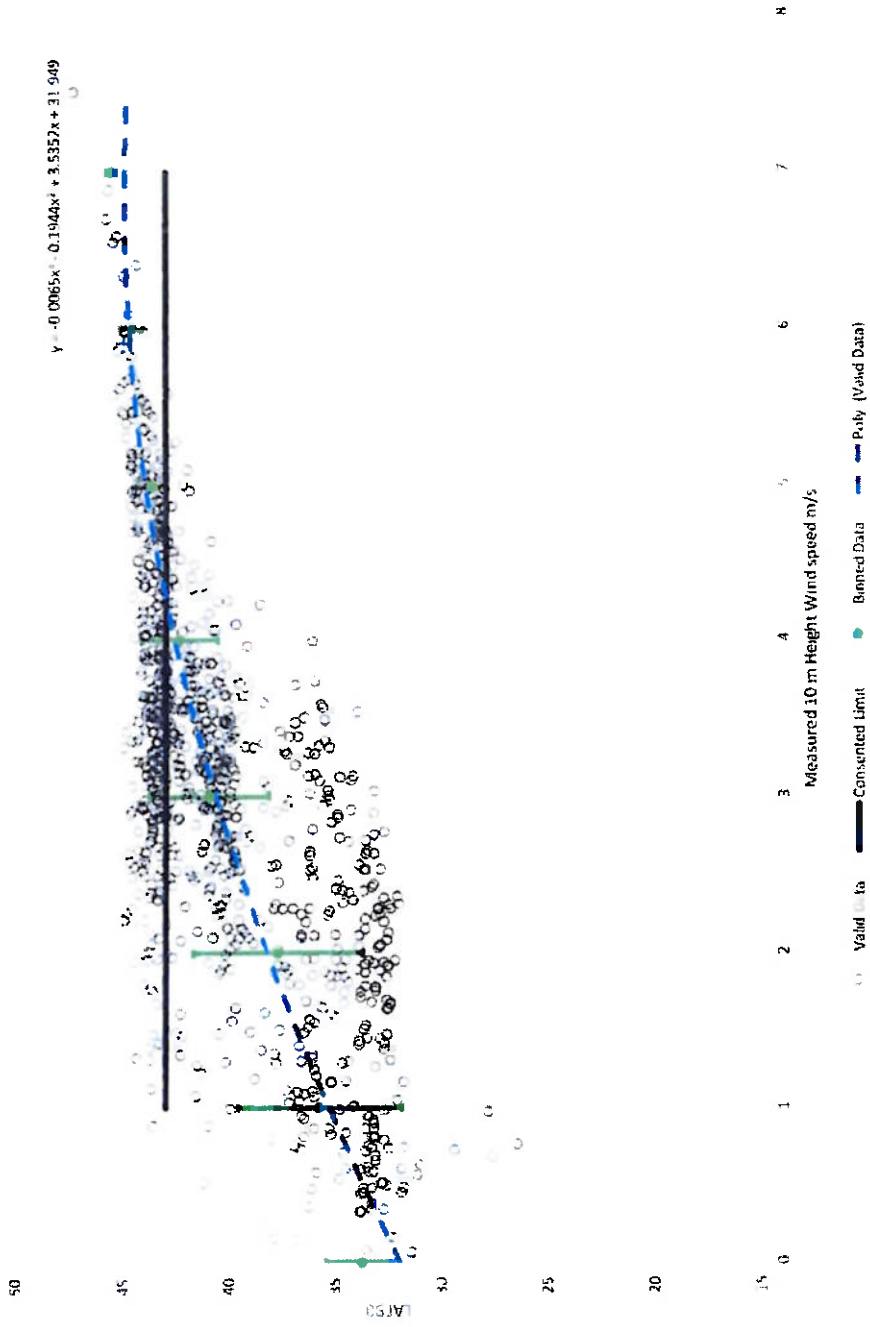


Figure 9: Comparison of ambient noise levels with consented noise limit

Table 4: Derived ambient  $L_{A90}$  noise levels (dB)

Source	Wind Speed Measured at 10 m Height (m/s)					
	1	2	3	4	5	6
Best-fit curve	35.3	38.2	40.6	42.6	44.0	44.8
Average $L_{A90}$	35.8	37.7	41.0	42.3	43.7	44.6

Figure 9 shows that the typical ambient noise levels exceed the conditioned noise limits at wind speeds of 5 and 6 m/s. Therefore, following IoA GPG SGN 5 to determine whether or not the turbine noise levels exceed the limits, the measured ambient  $L_{A90}$  noise levels should be corrected for the influence of other, non-wind farm related noise sources. It is not possible to carry out this correction based on the survey data gathered as part of this assessment since, as mentioned above, there were no periods during the survey when all turbines were turned off. This can be seen from Figure 5.

The daytime background noise levels quoted in the EIS at NML4 (see Table 3) are 31.8 dB  $L_{A90}$  at 5 m/s and 33.3 dB at 6 m/s. These are all at least 10 dB below the typical ambient  $L_{A90}$  noise levels derived in this assessment. If it is assumed that background noise levels in the absence of noise from the wind farm have not changed significantly since the EIS and that background noise levels measured at NML4 are representative of the assessment location considered in this report, then correcting for background noise levels in the absence of noise from the wind farm would not change the conclusions of this assessment.

As such, whilst the assessment presented here does not constitute a complete assessment under the guidance of the IoA GPG SGN5, due to the lack of turbine shutdown periods during the survey, it does indicate that noise levels from the Meenwaun Wind Farm are exceeding the consented noise limits at the assessment location considered in this report.



## 8 Feature Corrections

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Condition 9 does not refer to penalties or corrections for features of the wind turbine noise (e.g. tones, impulses, amplitude modulation etc.) so analysis of these features is not required for this assessment. It is possible, however, that the complaints received are due to acoustic features of the turbine noise. It may therefore be beneficial to carry out further analysis of the measured data to establish whether features of the turbine noise are a potential cause for complaint.

## 9 Conclusions

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Arup Acoustics have been instructed by Offaly County Council to carry out an assessment of operational noise levels generated by the Meenwaun Wind Farm wind turbines and affecting nearby residential properties. In order to assess operational noise levels and how these vary with weather conditions (and in particular prevailing wind conditions), measurements have been carried out at a residential property to the south of the Meenwaun Wind Farm. This measurement location was identified in discussion with Offaly County Council and is understood to be representative of properties from which the majority of noise complaints associated with the wind farm have been received.

Noise and meteorological measurements were taken from 22<sup>nd</sup> Oct to the 21<sup>st</sup> November 2019.

The data has been analysed in accordance with the Institute of Acoustics Good Practice Guide (IoA GPG) where possible.

The analysis of the data has shown that ambient noise levels are above the consented noise limits at wind speeds of 5 and 6 m/s. The methodology set out in Supplementary Guidance Note 5 of the IoA GPG would indicate that in this circumstance, the measured ambient noise levels should be corrected to account for the background noise level not associated with the wind turbines in order to establish the levels of noise from the wind farm only. It has not been possible to do this, as there were insufficient periods in the course of the survey during which all of the turbines were shut down. Given that background noise levels measured before the wind farm was built and therefore not containing any noise from the Meenwaun development were more than 10 dB below the ambient measured noise levels at the wind speeds of relevance to this assessment, they would not contribute significantly to the overall measured noise levels. Consequently, it is likely that the levels of noise from the Meenwaun Wind Farm are above the consented limits at the measurement location considered in this assessment.

Since the noise condition relating to the control of noise from the Meenwaun Wind Farm site does not mention the assessment of the potential effects of noise characteristics of the wind farm (e.g. tonal noise, amplitude modulation etc.), they have not been considered as part of this assessment. Since these noise

characteristics could lead to increased likelihood of noise complaints, it may be beneficial to consider these aspects in the future.

## **Appendix A**

### **Survey Equipment Details**

## A1 Unattended Noise Monitoring Equipment

Table 5: Unattended Noise Monitoring Equipment

Item	Make	Model	S/N	Calibration Valid Until
Sound Level Meter	Rion	NL-52	00264534	04/12/2019
Microphone	Rion	UC-59	09682	
Pre-amplifier	Rion	NH-25	64659	
Latitude		N 53° 9' 30.60481''		
Longitude		W 7° 54' 58.93714''		
Start Time		22/10/2019 15:40		
Notes				
Monitoring location in rear garden of property. No mature trees in the vicinity, some small bushes / hedgerows around perimeter of property. Some road noise audible from nearby road, turbine noise also audible.				



## A2 Attended Noise Monitoring Equipment

Table 6: Attended Noise Monitoring Equipment

Item	Make	Model	S/N	Calibration Valid Until
Sound Level Meter	Bruel and Kjaer	2250	3028791	28/10/2020
Microphone	Bruel and Kjaer	4189	3195848	
Pre-amplifier	Bruel and Kjaer	ZC-0032	29128	

## A3 Meteorological Monitoring Equipment

Table 7: Meteorological Monitoring Equipment

Item	Make	Model	S/N	Calibration Valid Until
Data logger	Campbell Scientific	CR6	836	08/04/2020
Weather Sensor	Lufft	WS-600	013.0615.0701.045	
Latitude			N 53° 9' 30.74222''	
Longitude			W 7° 54' 59.15527''	
Start Time			22/10/2019 15:40	







Comhairle Chontae Uíbh Fhailí  
Offaly County Council

Áras an Chontae, Bóthar Charleville,  
An Tulach Mhór, Contae Uíbh Fhailí, R35 F893

Áras an Chontae, Charleville Road,  
Tullamore, Co. Offaly, R35 F893

T. 057 934 6800 | F. 057 934 6868  
E. customerservices@offalycoco.ie

offaly.ie Ref: UD20/037

### REGISTERED MAIL

Michelle Funes,  
Bjerkelundsveien 83A,  
Bekkestua,  
Norway,  
1357

Date: 15<sup>th</sup> February 2022

Re: Section 152 of the Planning and Development Act 2000.

Re: Unauthorised Development at Meenwaun Wind Farm, Banagher, Co. Offaly.

Consisting of: Unauthorised development - it is alleged on foot of a complaint to the Planning Authority, that noise levels resulting from the operation of the Meenwaun Wind Farm are in excess of the noise levels permitted, and therefore the development is non-compliant with Planning Condition 9 of the planning permission granted by An Bord Pleanála under Planning Reference; PL 19.244903 (OCC Planning Reference; PL2 15/44).

### WARNING LETTER

Take notice that it has come to the attention of the Planning Authority that unauthorised development is being carried out consisting of:

- Unauthorised development - it is alleged on foot of a complaint to the Planning Authority, that noise levels resulting from the operation of the Meenwaun Wind Farm are in excess of the noise levels permitted, and therefore the development is non-compliant with Planning Condition 9 of the planning permission granted by An Bord Pleanála under Planning Reference; PL 19.244903 (OCC Planning Reference; PL2 15/44).

At Meenwaun Wind Farm, Banagher, Co. Offaly

Any person served with a letter may make submissions or observations, in writing, to the Planning Authority regarding the purported offence not later than four weeks from the date of the service of this Warning Letter.

When the Planning Authority considers that unauthorised development may have been, is being or may be carried out, an Enforcement Notice may be issued.

Contd/...



Ceantar Bardasach Thulach Mhór  
Municipal District of Tullamore  
T. 057 935 2470

Ceantar Bardasach Bhiarra  
Municipal District of Birr  
T. 057 912 4900

Ceantar Bardasach Éadan Doire  
Municipal District of Edenderry  
T. 046 973 1256



Comhairle Chontae Uíbh Fhailí  
Offaly County Council

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An Tulach Mhór, Contae Uíbh Fhailí, R35 F893

Áras an Chontae, Charleville Road,  
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E. customerservices@offalycoco.ie

offaly.ie

Contd/...

Officials of the Planning Authority may at all reasonable times enter on the land for the purposes of inspection.

**A person who is guilty of an offence under section 151, section 154 of the Planning and Development Act 2000 shall be liable:**

- 1) On conviction on indictment to a fine not exceeding €12,697,380 or to imprisonment for a term not exceeding 2 years, or to both.
- 2) On summary conviction, to a fine not exceeding €5,000 or to imprisonment for a term not exceeding 6 months or to both.
- 3) Where a person is convicted of an offence and there is a continuation by him or her of that offence after his or her conviction, he or she shall be guilty of a further offence on every day on which the contravention continues.

Any costs reasonably incurred by the Planning Authority in relation to enforcement proceedings may be recovered from a person on whom an enforcement notice is served or where court action is taken.

The above condition does not purport compliance with other conditions of the planning permission

  
**Administrative Officer**  
**Planning Section**



Ceantar Bardasach Thulach Mhór  
Municipal District of Tullamore  
T. 057 935 2470

Ceantar Bardasach Bhíorra  
Municipal District of Birr  
T. 057 912 4900

Ceantar Bardasach Éadan Doire  
Municipal District of Edenderry  
T. 046 973 1256



## 'Evil' monster found guilty of murder

Continued from page 1

straw.

The verdict was delivered shortly after 2pm last Thursday in a packed Court 13 in the Criminal Courts of Justice.

Members of the Murphy family were seated directly behind a row of more than a dozen journalists and just a couple of metres away from the dock where Ashling's killer sat in silence.

Just two rows further behind, at the rear of the small courtroom in a bench reserved for the accused's family, several close relations, including a woman believed to be Mr Puskas's mother, awaited the verdict.

There were audible sighs of relief from the Murphy family and supporters when the verdict was delivered and Kathleen Murphy held up a photograph of her smiling daughter, mounted in white and framed in cream, displaying it to the jury and then in the direction of the murderer.

Later, in a statement from the Murphy family on the steps of the court building, Ashling's brother Cathal and her boyfriend Ryan (also delivered a powerful message.

"From my one, the outpouring of love and support was felt in abundance from the Irish people, on both a national and international level as they stood in solidarity with our family to both mourn the loss of our beautiful and talented Ashling and to condemn gender-based brutality," said Ryan.

Cathal said: "Judicial process cannot bring our darling Ashling back nor can it heal our wounds. But we are relieved that this verdict delivers justice. It is simply imperative that this vicious monster can never harm another woman again."

See also pages Eight, Nine and Ten

## Roscrea Stands Up returns for public meeting

Continued from page 1

influx of asylum seekers are the main focus of this meeting.

Derek Russell, founder of Roscrea Stands Up, told the Tribune the activist group has returned to address building tension in Roscrea, because local people, with the assistance of the group, are highlighting.

Mr Russell said local people feel Roscrea is once again neglected and that asylum seekers are concentrated in certain areas are spreading and the community is fearful about the future.

The future of Roscrea Garda Station and the number of Garda currently stationed in the town are a serious concern, Mr Russell said, adding that lack of information about the dramatic influx of people seeking international protection who moved to the town in recent weeks is exacerbating the problem.

Repeated delays in Roscrea's long promised Garda CCT system to assist Garda in police the town and area, as well as the future of the local, Maxwell Community Nursing Home are also up for discussion.

Last week, representatives called for a meeting with the Minister for Justice and Minister for Integration and Equality to address the issues in Roscrea. Local Independent Councillor Shane Lee made the appeal to government ministers after his own car was stolen and involved in an accident where two members of the Garda were injured and required medical care after an incident at a checkpoint in Roscrea last month.

Separately, Tipperary TD, Deputy Michael Lowry, raised the current situation in Roscrea in the Dail and told Minister for Integration and Equality, Rodric O'Gorman, that people in Roscrea are afraid and that vital healthcare and policing services in the town are overwhelmed and cannot cope after the sudden increase in people seeking asylum in Ireland now living in Roscrea.

Roscrea Stands Up have invited all members of the public from Roscrea and surrounding areas to attend the meeting and contribute their views. The meeting begins at 7pm in the Mount on Tuesday Hall this coming Friday night.

# Cloghan residents say local Wind Farm is affecting their health

Derek Fanning

A NUMBER of residents living beside the nine turbines of Cloghan Wind Farm have told the Midland Tribune that the enormous turbines are having a negative effect on their mental and physical health.

Several of the residents living on the one road in the townland of Stonestown said they are fed up with the noise and the flicker coming from the turbines, which have a maximum height of 169 metres and are located about 700 metres from their homes.

Chairperson of the group, Ger Buckley, pointed out, during a meeting with this journalist, that the residents objected to the turbines before they were built but their objections were ignored.

"Right from the get-go the wind farm has been a bad experience for us," he said. "During the construction phase our road was in a dreadful state; so bad that sometimes people couldn't leave their homes in the morning and head to work, because of the great gash in the ground."

Other members of the group who talked to the Tribune included Des Crofton, Nora Higgins, Oily Flynn and Dona Kearney.

Des Crofton said Statkraft, the company running the farm on behalf of the owners, hadn't, as far as he was aware, set up the Community Benefit Fund yet, nor its associated Near Neighbour Fund. These Funds will benefit the 16 houses located along the Stonestown road. The Near Neighbour Fund provides an annual electricity contribution and once off support to carry out energy efficiency measures and/or education support to the residents living within one kilometre of a turbine.

"Some nights," commented Dona Kearney, "the noise from the turbines is brutal. It's keeping us awake and we are not getting a proper sleep. Our experience of the farm has been negative from day one. If we had known this would happen then we wouldn't have allowed it to go ahead; we would have blocked the road." Dona showed me a video of the flicker effect in her house. The effect is pulse-like and regular, creating, she said, an irritating effect.

Des Crofton told me that the main problem is a lack of adequate communication on behalf of the company which owns the turbines. "I'm sure if they communicated more with us, in a meaningful way, then things would proceed much more smoothly." He pointed out that his house is shielded by a number of large trees therefore he is unaffected by the flicker problem. He added that he is also fortunate that the prevailing wind doesn't blow in the direction of his house, therefore noise is not an issue for him either. "However I deeply sympathise with the other residents along the lane and their cause."

21 new turbines are due to be erected in Derrinloughy and another ten in Fivelly. The residents hope this won't make the noise pollution worse. "The noise is like a big, thick skipping rope; or a washing machine or dryer," commented Dona.



Some of the Stonestown residents on Friday afternoon with one of the wind turbines in the background. From left, Des Crofton, Dona Kearney, Nora Higgins, Ger Buckley and Oily Flynn.

The residents pointed out that three of the children living on the lane, two girls and one boy, have sensory issues, and they are adversely affected by the flicker from the turbines. Ger said his daughter is experiencing sleeping issues because of the noise.

The residents believe that, in general, the turbines, since they started operating in November 2022, have created a number of mental and physical issues.

"We were living in a very tranquil area," said Dona, "but that has changed now. Even having a cup of tea in your garden is no longer a pleasure because of the flicker and the noise."

Ger pointed out that back in 2014 the residents gathered together 48 signatures in opposition to the then proposed wind farm and submitted the signatures to An Bord Pleanála.

The Board agreed with the residents and denied planning permission to Galetch. The company resubmitted their proposal, lowering the turbine height by ten metres. "We wrote letters of objection the second time round," remarked Ger, "but An Bord Pleanála ignored our objections and granted planning permission to Galetch to proceed with the construction of their turbines." Galetch subsequently sold the wind farm to the current owners, who constructed the turbines and contracted Statkraft, a Cork company, to operate and manage the wind farm on behalf of the owners.

Ger added that the residents have tried to contact Statkraft on a number of occasions, to express their concerns, but haven't received any answers.

Oily Flynn pointed out that the turbines are also interfering with the mobile phone signals and with the internet connection. "Our Wi-Fi connection, our mobile phone connection, have worsened since the turbines started operating a year ago," he commented.

Nora said she believes that being near the turbines will affect the value of their houses.

The Community Benefit Fund is part of the RESS, the Renewable Energy Support Scheme, which is part of the Programme for Government and the Climate Action Plan 2021 and was created with the aim of achieving the target

of at least 80% renewable electricity by 2030.

Deirdre Keegan, Community Liaison, Galetch, told a meeting of Birr 20:20 last month that a key feature of the RESS is that all renewable electricity generation projects must establish a Community Benefit Fund to be used for the wider economic, environmental, social and cultural wellbeing of the local community. The contribution is set at 62 per Megawatt hour of generation of the RESS project. "This means there are real and quantifiable funds being made available annually for the benefit of the local community. The Fund will be aligned to incentivise investment in local renewable energy, energy efficiency measures and climate action initiatives."

Deirdre said the Fund becomes available one year after the commencement of the commercial operation of the wind farm and it lasts for 15 years, therefore it has commenced for the residents of Stonestown as the farm is a year in operation. During the 15 years every household living within one kilometre of the farm is paid €1,000 per year.

Deirdre added that Galetch will make a planning application for another wind farm. This new wind farm will consist of 11 turbines and will be located in Cush, about five kilometres from Birr, on the Birr-Cloghan road, the N62. When Cush is constructed, she pointed out, the Community Benefit Fund will be €466,000 per year and this will be given out to the community each year for 15 years. Local clubs and societies located within a ten kilometre radius will be able to apply.

Eventually, there will be four

wind farms in the Birr-Cloghan area and the Benefit Fund from these will amount to millions of Euro for benefit of locals.

Ger pointed out that not all of the 16 houses along Stonestown road lived in. "It's more likely that it would be lived in if the turbines weren't nearby," he said.

Speaking to The Midland Tribune this week, Claire Dineen, Community Liaison for Statkraft said both the Community Benefit Fund and the Near Neighbour Funds have been established. Details of both funds can be found at: Cloghan Wind Farm Community Fund (changex.co) and Cloghan Wind Farm Near Neighbour Payments (changex.co). The Community Benefit Fund was advertised in the Midland Tribune on Thursday 9th November and being advertised once again in this week's paper, dated Thursday 16th November. "We encourage local community groups to apply," said Claire, "and we will announce recipients in Q1 of 2024."

Regarding the complaints about noise, Claire pointed out that "Ensuring we comply with noise limits is a critical aspect of our operations for all of our wind farms. A noise compliance report was undertaken by an independent noise specialist who deemed the wind farm to be compliant with the noise limit set out in the planning permission. This report can be viewed upon request to Offaly County Council."

Regarding the Shadow Flicker complaints she said, "The wind farm has a Shadow Flicker Control System which is currently operating as per the planning conditions of the wind farm. We are in the process of engaging with members of the community who are experiencing shadow flicker so that we can alter the settings of the Shadow Flicker Control System to prevent shadow flicker during specific periods of the day and times of year where the shadow flicker is affecting the property."

"We welcome engagement with the local community," she continued, "and have been proactive in our outreach over the construction period and from the time the wind farm became fully operational. We have been in regular contact with number of local residents and neighbours and have engaged with them on the concerns they have. However, we will ensure that we review our current engagement programme in light of these more recent concerns raised with particular focus on response times to local residents' concerns."

The Community Liaison officer can be contacted at claire.dineen@statkraft.com

## Birr Christmas Lights planning Santa Experience

BIRR - Christmas turning on of the Christmas lights in Emmet Square at 7pm. Back again this year will be their Santa train, face painting, magician shows, joca the Clown and no

Christmas experience would be complete without visiting Santa and Mrs Claus in the grotto. Santa is looking forward to seeing the girls and boys in Birr on the day.

Rb P / Rb P 100



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**Roscrea says sad farewell to much loved Chaplain**

Page 6



**Ferbane/Cloghan SVP mark 50th anniversary**

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**Cloghan record historic football victory**

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## New extension opened at Killeen National School



Chairman of the Board of Management of Killeen NS Mark McDowall cutting the ribbon to officially open the new extension to the school. Also in the photo are School Principal, Jessica Whelan (on left) and Deputy Principal Lorraine Carroll (right) with Fr Antony, Julie Power (Parents Assoc), Billy Bourke (Malachi Cullen Consulting Engineers), Deirdre Bane (Planning & Building Dept. Of Education). Pic: Rose Mannion.

## Roscrea Stands Up returns for public meeting on social issues

Darren Keegan

ROSCREA Stands Up have arranged a public meeting planned for this week to hear concerns over several issues causing distress for the local community.

Roscrea Stands Up - formed in 2014

to address issues relating to drug problems shot to national attention after an impromptu march on Roscrea Garda Station happened after their inaugural meeting - have called on the community to attend the public meeting in the Muinir na Tire Hall on Chapel Lane this Friday (November 17th) at 7.30pm.

The depletion of Garda resources in Roscrea and dissatisfaction with Roscrea Garda Station's opening hours, rising anti-social behaviour and overburdening the town's essential services due to the sudden dramatic

Continued on page 2

## An 'Evil' monster found guilty of murder

Geordie Keegan

THE man who murdered Offaly schoolteacher Ashling Murphy will be formally sentenced to life in prison on Friday.

Jozef Puska is in custody this week after a jury at the Central Criminal Court last Thursday found him guilty of killing the young woman after an 18-day trial.

The 33-year-old from Slovakia had denied stabbing the young Blueball woman on the bank of the Grand Canal at Cappincur near Tullamore on January 12 last year.

The merciless murder, which was committed in broad daylight on a sunny afternoon, sent shockwaves around the county, country and globe.

In a dramatic comment which veteran observers of the criminal courts in Dublin said was unprecedented, Mr Justice Tony Hunt remarked: "We have evil in this room, no doubt about that."

He was speaking after the jury returned what he said was a "prompt" verdict.

The nine men and three women had spent only about two hours on their deliberations.

"I agree with your verdict and I've no hesitation in saying so," Mr Justice Hunt told the jury.

"I'm glad you didn't waste any more of your valuable time with Puska's nonsense, because that's what it was."

After initially describing himself as "the murderer" when questioned by gardai in hospital, Mr Puska then changed his story during the trial.

The father of five said he had been attacked himself by a masked man at the canal and that same man assaulted Ms Murphy.

He further claimed he tried to help the 23-year-old.

Mr Justice Hunt told the jury that everyone, even Puska, was entitled to a defence but it was "threadbare" in his case and though defence counsel Michael Bowman did his best with "poor stuff", the judge was reminded of the old saying: "You can't make bricks without

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Wind Watch is a registered educational charity, founded in 2005.

posted: December 16, 2011 • Denmark, Health, Noise

## Letter from Vestas worried about regulation of low-frequency noise

Author: [Engel, Ditlev](#)

Translate: [FROM English](#) | [TO English](#)

Dear Karen Ellemann,\*

Following previous correspondence, I am writing this letter to express my concern regarding the limits for low frequency noise from wind turbines now being proposed.

Back in January 2011 we applauded your announcement of the new regulations regarding low frequency noise and the fact that you also then emphasised that those regulations would not be tightened and that it was a question of improving the security in connection with the installation of wind turbines. Accordingly, the reaction from the industry branch back in January 2011 was positive, although as an industry we were uneasy about having heavier demands imposed on us than other industries.

When the new regulations were then published on 26.05.2011, we were of course convinced of your initial point of view. As a result, we were extremely surprised to find that the proposed new regulations do in fact include a significant and severe tightening of the previous noise regulations.

In fact, according to our analyses, the most economical turbines, the 3 MW category, are the ones that will be strongly affected by the new rules. This applies to open terrain in particular, where in future low frequency noise will dictate and increase the distance requirements to neighbours for close to half of the projects that we are already aware of over the next 2 to 3 years.

In a small country such as Denmark this means that a significant number of projects will not be viable as the increased distance requirements cannot be met whilst maintaining a satisfactory business outcome for the investor.

The Danish market for wind turbines is of minor importance for Vestas in terms of sales, typically less than 1% of our sales per year. However, the Danish market provides a number of other functions for Vestas which are of considerable value from a business point of view. By means of its high wind penetration,

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24% in 2010 – still a world record – Denmark has a role as a forerunner country and a full scale laboratory for conversion to renewable energy.

This means that other countries often look to Denmark when adjusting their legislation regarding wind energy. We are therefore concerned – justifiably so as history shows – that the proposed Danish regulations for low frequency noise from wind turbines will spread to a large number of other markets with much higher commercial impact for Vestas and consequently for employment in the business.

The Danish wind turbine industry employs approx. 25,000 people in Denmark and boasts an export which is about 8.5% of total Danish exports. Such "over-proportional" presence has become possible because Denmark has been able to create the conditions for good correlation between demonstration, education and industry research and development. In reality we fear that the demonstration element will suffer irreparable damage as a result of the new regulations regarding low frequency noise. When combined with the imminent danger that important markets will copy the new Danish regulations, I consider the new regulations to be extremely damaging to the prospects of further popularisation of land-based wind energy.

At this point you may have asked yourself why it is that Vestas does not just make changes to the wind turbines so that they produce less noise? The simple answer is that at the moment it is not technically possible to do so, and it requires time and resources because presently we are at the forefront of what is technically possible for our large wind turbines, and they are the most efficient of all.

In the light of this it seems strange that the wind turbine industry is being discriminated against compared to other industries. All other industries are subject to differential noise requirements regarding low frequency noise for night and day (20 and 25 dB, respectively), whereas the wind turbine industry are subject to requirements of 20 dB 24 hours a day.

The proposed low frequency limit values may hinder the development of onshore wind in Denmark, including meeting our commitments in relation to the EEC. Ultimately, we consider there is a danger that the regulations will be copied by other countries and accordingly this will provide an obstacle to the popularisation of wind energy at a global level. Both issues will damage Vestas as a business, including affecting Danish activities.

Yours sincerely,  
Vestas Wind Systems A/S

[Signature]

Ditlev Engel

Chief Executive Officer

Alsvej 21, DK-8940

~~Phone: +45 70 00 00 00, www.vestas.com~~



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A copy of this letter was sent to Lykke Friis, Minister for Climate and Energy

\*Karen Ellemann, Minister of Environment  
Department of Environment  
Højbro Plads 4  
1200 Copenhagen K

Randers, 29 June 2011/erlgs

*Translated from Danish by Bente H. Sorensen, Translationz.com.au*

[See Danish news story about subsequent lax rules:  
Miljøstyrelsen anklages for at fikle med vindmøllestøj]

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Review Noise Health. 2004 Apr-Jun;6(23):3-20.

## Vibroacoustic disease

N A A Castelo Branco <sup>1</sup>, M Alves-Pereira

Affiliations

PMID: 15273020

### Abstract

Vibroacoustic disease (VAD) is a whole-body, systemic pathology, characterized by the abnormal proliferation of extra-cellular matrices, and caused by excessive exposure to low frequency noise (LFN). VAD has been observed in LFN-exposed professionals, such as, aircraft technicians, commercial and military pilots and cabin crewmembers, ship machinists, restaurant workers, and disk-jockeys. VAD has also been observed in several populations exposed to environmental LFN. This report summarizes what is known to date on VAD, LFN-induced pathology, and related issues. In 1987, the first autopsy of a deceased VAD patient was performed. The extent of LFN induced damage was overwhelming, and the information obtained is, still today, guiding many of the associated and ongoing research projects. In 1992, LFN-exposed animal models began to be studied in order to gain a deeper knowledge of how tissues respond to this acoustic stressor. In both human and animal models, LFN exposure causes thickening of cardiovascular structures. Indeed, pericardial thickening with no inflammatory process, and in the absence of diastolic dysfunction, is the hallmark of VAD. Depressions, increased irritability and aggressiveness, a tendency for isolation, and decreased cognitive skills are all part of the clinical picture of VAD. LFN is a demonstrated genotoxic agent, inducing an increased frequency of sister chromatid exchanges in both human and animal models. The occurrence of malignancies among LFN-exposed humans, and of metaplastic and dysplastic appearances in LFN-exposed animals, clearly corroborates the mutagenic outcome of LFN exposure. The inadequacy of currently established legislation regarding noise assessments is a powerful hindrance to scientific advancement. VAD can never be fully recognized as an occupational and environmental pathology unless the agent of disease--LFN--is acknowledged and properly evaluated. The worldwide suffering of LFN-exposed individuals is staggering and it is unethical to maintain this status quo.

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