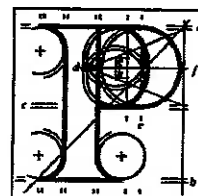


Our Case Number: ABP-316051-23

Planning Authority Reference Number:



**An
Bord
Pleanála**

Dr. Niall Colgan
Cluain Bui
Moyvoughly
Moate
Co. Westmeath

Date: 09 May 2023

Re: Renewable energy development comprising 9 no. wind turbines and associated infrastructure.
Umma More and adjacent townlands, County Westmeath.

Dear Sir / Madam,

An Bord Pleanála has received your observation or submission in relation to the case mentioned above 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.

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.

For further information on this case please access our website at www.pleanala.ie and input the 6-digit case number into the search box. This number is shown on the top of this letter (for example: 303000).

Yours faithfully,

Niamh Thornton
Executive Officer
Direct Line: 01-8737247

BL50A

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

Date 3/5/23

SID reference: 316051

To Whom It May Concern:

My communication is in reference to the strategic infrastructure status which is being sought by Umma More Development Ltd, referred to as the applicants from this point forward. The applicants are seeking permission to erect 9 wind turbines with a rotor diameter of 162 meters and an overall height of 185 meters. I am submitting my observations on the bases of interactions with the Community Liaison Officer (CLO) from 2019 onwards, publicly available site survey maps, and the engineering practices onsite.

Community Liaison Officer

In autumn 2019 an information leaflet was placed in my letterbox by the applicant's CLO informing the local community of a proposed wind farm to be sited in the area. As part of this brochure, a frequently asked questions section was included. The first purported fact quoted in their brochure stated that "there is no reliable evidence to support adverse effects of wind turbines on health" and applicants attribute this quote to the World Health Organisation. The World Health Organisation has never made this statement.

The World Health Organisation stated in 2018 (ISBN 9789289053563) that:

"Further work is required to assess fully the benefits and harms of exposure to environmental noise from wind turbines and to clarify whether the potential benefits associated with reducing exposure to environmental noise for individuals living in the vicinity of wind turbines outweigh the impact on the development of renewable energy policies in the WHO European Region".

I made a complaint in November 2019 on the basis of false safety claims to the Advertising Standards Authority of Ireland (ASAI). They concluded their investigation

on the 2nd February 2021 and published their findings on the 12th of February (case report 35165.sp appendix A). The ASAI upheld my complaint and found that aspects of the leaflets which the applicants had distributed were deemed to be in breach of Sections 4.1,4.4,4.9 and 4.10 of the Advertising Standards Authority of Ireland Code (refer to appendix A)

The applicants have omitted all of this information and are claiming that community engagement commenced in April 2021. The publicly available ASAI documented process refutes this claim.

Furthermore, the applicants continue to allege that “There is currently no published credible scientific evidence to positively link wind turbines with adverse health effects”. The main publications supporting the view that there is no evidence of any direct link between wind turbines and health are summarised in Chapter 5 of this EIR” (MKO., Non-Technical Summary, p. 15)

This again is a statement without reference to cited “main publications” and contravenes the World Health Organisation’s Noise Guidelines 2018 and the “Position Paper on Wind Turbines and Public Health” by the HSE Public Health Medicine Environment and Health Group.

Publicly available site and wind survey maps

In appendix B I have attached the SEAI’s wind atlas and OSI topography map for the proposed site downloaded in May 2023 (<https://gis.seai.ie/wind/>). This is a publicly available resource. “The wind atlas for Ireland is calculated for different heights above ground level on a nationwide 100 metre grid basis. The standard Atlas displays onshore wind speeds at 20, 30, 40, 50, 75, 100, 125 and 150 metres above ground level, based on 2013 data.” The map attached as appendix B is the indicative wind speeds at 150 metres which is most relevant to SID reference: 316051.

As can be seen in the OSI topography map the area selected for this application is in a valley. The number of tributary rivers on the map as well as the main Dungolman river is indicative of a basin or the lowest point on the map for the rivers to flow through. The surrounding hills are 175 metres at the highest point. I then draw your attention

to the SEAI wind speed maps overlaid on the same proposed area which indicate the lowest wind speeds in the locality. As can also be seen on the map the proposed sites are in a wind shadow of the Umma Baskin region. The placement of 185-meter-high turbines in this valley will result in one blade of the turbine at a time escaping the wind shadow resulting in unequal distribution of force. Wind turbine output is based on an equal distribution of a cube function of the incoming velocity. This cannot occur based on the geography of the sites identified. Secondly, the longevity of the turbine is estimated by equal loading on the three turbine blades, this unbalanced loading will result in vibration losses and excessive bearing wear. Lastly, under Betz's limits on wind turbine efficiency, an 81-meter turbine blade and a windspeed of 6-8m/s (as per SEAI map) would result in an estimated 3-4 MW output per turbine at a Cp of 38%.

The applicants state in their non-technical summary that "it is assumed that the wind turbine model installed as part of the Proposed Development will have an output of 6.2MW" (M.K.O., Non-Technical Summary, p.2).

Based on the SEAI wind speed map the topography of the map, this is a two-fold overestimation by the applicants and as per the provisions of Section 37 of the 2000 Act (as amended) as strategic infrastructure for the purposes of that Act the applicants have failed to provide sufficient evidence in their application that the 9 proposed turbines can generate the necessary threshold of 50 MW to supply the domestic grid and can be deemed as strategic infrastructure. The Planning and Development Act, 2000 is prescriptive in its terms, the wind farm must have the ability to generate in excess of 50 MW as a matter of scientific fact as opposed to assumption.

The applicants have also accepted that the proposed site is in Area 7 which is designated as a low wind capacity area and the Office of the Planning Regulator has deemed this to be a low wind capacity as of 22 January 2021, in contradiction to the claims of the applicant.

Engineering practices

On 12 March 2021, the applicants erected a meteorological tower which collapsed on 14 March 2021. The applicants then erected a second mast on 10 April 2021 which also collapsed on 20 January 2022. The days when a meteorological tower, as

the validation measurement methodology¹, was available on site for measurement was 286 days.

I trust that this information is sufficient; please let me know if further details are required.

Sincerely,

Dr Niall Colgan BSc, MSc, PHD, mIPAM, mEFOMP, mIOP

Physicist

Cluain Bui

Moyvoughly

Moate

Co Westmeath

Appendix A

¹ EIRGRID Met Mast and Alternatives Study 2019

Advertising Standards Authority for Ireland



In Reply Please Quote
Our Ref: 35165.sp

By Email

12th February 2021

Dr Niall Colgan
Chunin Bui
Moynoughly
Moate
Co Westmeath
[REDACTED]

RE: Advertising for Enerco Energy

Dear Dr. Colgan,

I refer to our previous correspondence in the above matter.

The Complaints Committee of the Authority has now considered the above case and has approved the Case Report which was forwarded to you on 2nd February. A further copy of the Case Report is enclosed for your convenience.

The Case Report will be included in the next Complaints Bulletin which will shortly be released to media for publication and posted on the ASAI website.

Yours sincerely,

Orla Twomey,
CHIEF EXECUTIVE

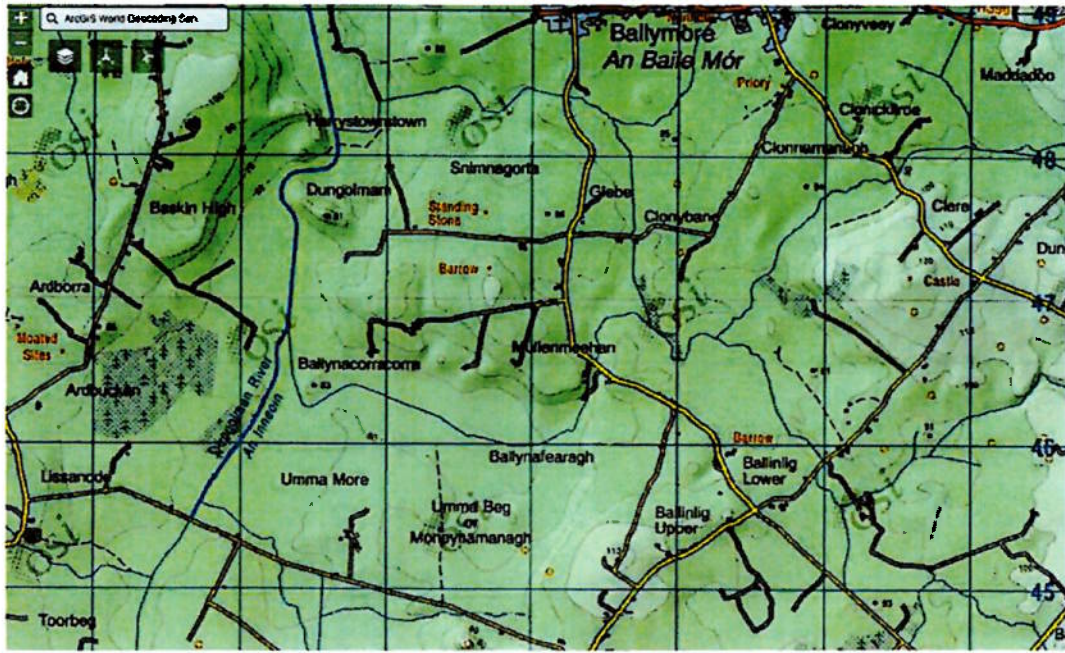
Encl

Note: In limited circumstances an application can be made by either party to the case to have this decision reviewed by a Review Panel. Information on the review is contained in the enclosed extract from the Code. An application form for a review can be obtained from this office.

7 Herbert Street, Dublin 2, D02 K838
Tel: 353-1-6137040 Email: standards@asai.ie
Web: www.asai.ie



Chairman: Seán O'Meara
Chief Executive & Secretary: Orla Twomey
Registered in Dublin No. 82219



Wind Mapping System

