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An Board Pleanála Date 13/7/2023

Observation on a Strategic Infrastructure Development Application

# **Submission and Comment on Application number PA93.317265**

Construction of Dyrick Hill Wind Farm comprising 12 wind turbines and related works

Townlands of Ballymacmague North, Ballymacmague South, Ballynaguilkee Lower, Ballynaguilkee Upper, Broemountain, Carrigaun (Mansfield) and others, Co. Waterford

**Dear Sirs** 

I object to the above planning application for the following reasons

- A. Habitat, Flora and Fauna
  - Internationally rare and protected under EU law
- B. Site is situated on wetlands and mountain slopes providing water sources to the Blackwater (via the Glenshelane and Fhinisc rivers) and Nire rivers

  Vital for drinking water, flood and drought mitigation
- C. Unregistered Land Ownership and Rights
- D. Wind Speed

Insufficient

# A. Habitat, Flora and Fauna

Site is in the foothills Knockmealdown Mountains. Many rare birds and animals including the European wide protected hen harrier and peregrine falcon breed in this area, and the site forms part of their habitat.

Such a development would lead to major loss of biodiversity in the area. We should remember that protecting biodiversity is a priority in renewable energy development, and should not be a casualty.

# B. Site is situated on wetlands and mountain slopes providing water sources to the Blackwater and Nire rivers

These rivers are major sources of drinking water for the populations of Cappoquin, County Waterford, Youghal, County Cork (Blackwater river source via Glenshelane and Fhinisc rivers), and Clonmel, Co. Tipperary (Nire River source). First the roadworks required will obliterate many kilometres of natural habitat and destroy natural water cleansing. Second the foundation works required for windmills require large amounts of concrete, which will adversely affect the water quality which runs from the mountains to the Blackwater and the Nire, and will cause land instability, flooding and drought threats throughout areas of Counties Waterford, Tipperary and Cork.

Wetlands and mountain uplands provide FREE water services which are not appreciated by those who benefit. These include:

Clean drinking water Flood protection Drought protection

#### C. <u>Unregistered Land - Ownership and Rights</u>

Part of the project area is an area described on the land registry as 'unregistered'

Any permissions that Empower claims to have received from 'landowners' is questionable. People hold 'rights' on unregistered land (e.g. turbary (turf cutting) or grazing rights). They cannot give permission for any other activity (e.g. forestry or construction). This has historically protected these precious unspoilt areas from devastation by forestry monoculture and housing development.

ONLY the owner of the area may give permission for a change of use (which, in addition, would still be subject to planning regulations)

These areas of Irish land are currently under government discussion. Any development on unregistered land should take consideration of government and EU policy. Any deviation from this could have far-reaching legal implications.

#### D. Wind speed

#### Average windspeed

The <u>yearly average</u> windspeed is insufficient.

Only ONE MONTH in 22 months data shows an average windspeed high enough for 6.6 mw generation. Even during that month, only 16 days had a sufficiently high average windspeed.

Empower have ignored:

SEAI map

Which shows the area to be medium/low windspeeds – making it unsuitable for a wind farm.

Tree evidence

In the local area all types of tree grow symmetrically and straight with no sign of the 'flagging' that identifies consistently high winds. This indicates the area to unsuitable for wind power generation. Lack of trees on higher ground is simply evidence of sheep grazing.

Wind speed data

Empower has refused access to the data from the wind speed mast erected by Empower. They further tried to obscure the truth by providing only details of forecast stations, from which no historical data was available.

However, access to data from an actual weather recording station at Ballinamult (3km north-east of Dyrick Hill) is available. Note this is within the same SEAI wind type as the proposed windfarm.

Results from this station demonstrate that there is insufficient wind speed in the area.

It would be surprising and inconsistent if Empower claim completely different results from this nearby weather station. Such a shocking discrepancy would require investigation by a fully independent research body for both accuracy and potential fraudulent behaviour.

#### Is this economic?

It is certainly an obscenity to destroy such a valuable habitat for the sake of such a small power return.

(Full	data	analysis	attached	l along	with	weh	refere	nces)
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Yours faithfully

Ms. Elizabeth Alderton

More detailed information is now given on the succeeding pages

#### A. Habitat, Flora and Fauna

#### **Extract from the EU Birds Directive**

"The measures to be taken must apply to the various factors which may affect the numbers of birds, namely the repercussions of man's activities and in particular the destruction and pollution of their habitats.....

Certain species of birds should be the subject of special conservation measures concerning their habitats in order to ensure their survival and reproduction in their area of distribution.

The species mentioned in Annex I shall be the subject of special conservation measures concerning their habitat in order to ensure their survival and reproduction in their area of distribution.

In this connection, account shall be taken of:

- (a) species in danger of extinction;
- (b) species vulnerable to specific changes in their habitat;
- (c) species considered rare because of small populations or restricted local distribution;

Member States shall take appropriate steps to avoid pollution or deterioration of habitats or any disturbances affecting the birds, in so far as these would be significant having regard to the objectives of this Article. Outside these protection areas, Member States shall also strive to avoid pollution or deterioration of habitats.

Member States shall take the requisite measures to establish a general system of protection for all species of birds referred to in Article 1 (i.e. "This Directive relates to the conservation of all species of naturally occurring birds in the wild state in the European territory of the Member States to which the Treaty applies."), prohibiting in particular:

(d) deliberate disturbance of these birds particularly during the period of breeding and rearing"

#### C. Unregistered Land Ownership and Rights

"The person with the right does not acquire any other right in the land from which the turf is being taken.

Any person with a right of turbary only does not actually own the bog, they only have a right to cut turf from that plot

The person who owns the bog is the person who has such title to the bog that entitles him or her to grant rights of turbary over it."

Quote from: (https://walshandpartners.ie/blogs/know-your-turbary-rights-before-a-days-work-in-the-bog/)

The above applies to all 'rights-holders' of any sort (e.g. grazing/turbary).

### D. Wind Speed

#### Tree shape

Quote: "Also known as" Historical Wind Speed Indicator(s)", and it's a better localized judge of a proposed turbine site, that any wind map or on-line wind measuring tool." (<a href="https://www.mywindpowersystem.com/2012/03/26/using-trees-to-estimate-average-wind-speed-the-griggs-putnam-index-of-plant-deformity/">https://www.mywindpowersystem.com/2012/03/26/using-trees-to-estimate-average-wind-speed-the-griggs-putnam-index-of-plant-deformity/</a>)

#### Wind speed data

Detailed data can be found at

# www.wunderground.com/weather/ie/Ballinamult/IBALLY6

Measurement units and adjustment made for height of Ballinamult weather recording station.

Note that wind speeds are recorded in MILESPERHOUR (mph). Empower state their windspeeds in METRESPERSECOND (mps)

EMPOWER state wind speed at hub height (100 metres) needed for windmill to generate 6.6 megawatt is 4.1 mps (metres per second) which = 9.17 mph (miles per hour) (https://www.unitconverters.net/speed/meters-per-second-to-miles-per-hour.htm)

Since the height of the Ballinamult wind station is unknown it has been assumed that it is 10 metres high, which equates to a needed windspeed of 4.04mph (max generation) and 2.91 mph (generation started but at lower output). This allows for a high 'roughness' (see <a href="http://xn--drmstrre-64ad.dk/wp-content/wind/miller/windpower%20web/en/tour/wres/calculat.htm">http://xn--drmstrre-64ad.dk/wp-content/wind/miller/windpower%20web/en/tour/wres/calculat.htm</a> and <a href="https://backend.orbit.dtu.dk/ws/portalfiles/portal/112135732/European Wind Atlas.pdf">https://backend.orbit.dtu.dk/ws/portalfiles/portal/112135732/European Wind Atlas.pdf</a>)

#### *Confounding factors*

Please note that average windspeeds per month or day also include significant periods of low speeds. [An average of >=4.04 mph on any one day DOES NOT mean 24 hours of generation nor does an average of >=4.04 mph for any one month mean 31 days of generation.]

Empower refuses access to their own wind speed data.

# **Practicalities**

The table below shows Average wind speed per month and number of days when the average windspeed was at or above 4.04 mph.

These data DO NOT mean that the electric power would be available to the grid for this amount of time.

For example: grid forecasting and grid balancing are factors that determine the usage of any generated power.

# CONCLUSION

Wind speed is insufficient for an economically viable wind farm.

		Average		
		wind	days	
	Elev <b>466</b> ft, <b>52.21</b> °N, <b>7.74</b> °W	speed	average	
	Ballinamult wind		4.04 or	
	records	Mph	above	
2021	SEPTEMBER	1.3	1	
	OCTOBER	2.6	6	
	NOVEMBER	2.3	4	
	DECEMBER	3.9	12	
2022	JANUARY	2.2	5	
	FEBRUARY	4.7	16	
	MARCH	3.9	12	
	APRIL	2.9	7	
	MAY	2.9	7	
	JUNE	2.6	4	
	JULY	2.1	1	
	AUGUST	1.7		
	SEPTEMBER	2.1	4	
	OCTOBER	3.8	16	
	NOVEMBER	3.7	9	
	DECEMBER	2.7	6	
2023	JANUARY	2.9	8	
	FEBRUARY	2.7	5	
	MARCH	3.9	16	
	APRIL	3.3	7	
	MAY	2.3	2	
	JUNE	2.3	2	