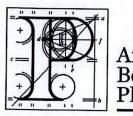
Our Case Number: ABP-309770-21

Planning Authority Reference Number:



An Bord Pleanála

John Delamere and Others Streamstown House Castlepollard Co. Westmeath N91 YX38

Date: 19 May 2021

Re: Proposed development of up to 15 wind turbines with a tip height of up to 175 metres and laying of approximately 26km of underground electricity cabling to facilitate the connection to the national grid, and all associated site development works

Townlands of Camagh, Carlanstown, Coole, Clonrobert, Clonsura, Doon, Monktown, Mullagh,

Newcastle and other townlands, Co. 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.

Eimear Reill

Administrative Assistant Direct Line: 01-8737184

BL50A



An Bord Pleanála.

64 Marlborough St, Dublin 1,

D01 V902.

May 11th 2021

Re: Case reference: PA25M.309770

The proposed development by Coole Wind Farm Ltd of up to 15 wind turbines with a tip height of up to 175 metres and laying of approximately 26km of underground electricity cabling to facilitate the connection to the national grid, and all associated site development works in the townlands of Camagh, Carlanstown, Coole, Clonrobert, Clonsura, Doon, Monktown, Mullagh, Newcastle and other townlands, Co. Westmean.

Westmeath County Council Planning Reference 20 / 6121

Dear Sir/Madam,

We urge that this Strategic Infrastructure Development Application be refused for the following reason:

1. There are fundamental inaccuracies in the application which I find misleading

Many figures relating to the hub height of the wind turbines have been calculated assuming a hub height of 100.5m and a blade tip height of 175m, in particular in Chapter 11 Noise. The application says the diameter of the blades will be 155m, thus is each blade will be 77.5m which must mean the hub height is reduced to 97.5m or the blade tip height is to be raised to 178m which is over the 175m stated in the application.

ii In the SID application in *Application Form for Permission / Approval in respect of a Strategic Infrastructure Development* on page 6, Coole Wind Farm Ltd state **NO** to the question *Is the site of the proposal subject to a current appeal to An Bord Pleanála in respect of a similar development.* This is misleading as this application was given the right to Judicial Review and having been heard is awaiting the ruling in the high courts. Planning has **not** been given for PL25M.300686. It must also be said that the 2017 application relied on the under lying commercial peat harvesting on site. This harvesting is illegal and has been stopped by the high court as it does not have planning permission.

The photomontage 10 in Volume 2 Photomontage Booklet depicts the wind turbines in the same picture as the Hill of Mael on the left at 240m and Mullaghmeen on the right at 258m above sea level. The ground where Coole Wind Farm Ltd is

applying to build the turbines is 75m above sea level so the tip of the blades will reach 250m above sea level. Thus they will be higher than the Hill of Mael and only 8m below the top Mullaghmean which is not at all how the turbines are depicted as they are all lower than the Hill of Mael, Photomontage 10 is very misleading. This wind farm will dominate these two landmarks of North Westmeath.

Photomontage 21 shows how the proposed Wind Farm will dominate the view from Mullaghmean and that is looking down on the turbines whereas they will actually be much higher.

Mullaghmean is the largest beech forest in Ireland, a major tourist attraction with many walks all kept in very good condition. It is a very important community asset and so building adjacent to this is outrageous.

- I do not believe this is the best way to reduce Ireland's carbon foot print:
 - Met Eireann's Annual Average Wind Speed data for 1981 to 2010 has Mullingar (14.1 kph) having the third lowest average wind speeds with only Kilkenny (12.8 kph) and Birr (12.4kph) lower. This again asks the question if you are going to build industrial wind farms why are you building in the middle of the country, where the winds are lowest and not off the coast where the winds are substantially stronger? The average wind speeds at Wexford for example is 20.6kph, this is nearly 50% higher average wind speeds to that of Mullingar.

According to Energy Educate from the University of Calgary if the wind speed doubles the power output will increase eight times. This would mean the power generated on the East Coast as in at Wexford would be 4 times that generated in Mullingar. The centre of Ireland is not the place to erect industrial wind farms, off shore has more wind and less effect on the population.

ii Appendix 10.1 Carbon Loss Calculations.

The original Planning permission application which is under Judicial Review had very different values for the output for each turbine. Appendices 10.1 Carbon Calculations for the present, 2020, application has the Power Rating for one Turbine as 5MW to 6MW whereas the same appendices in the original application, 2017, has the power rating of each turbine as 3.6MW to 3.8MW. This seems a very large increase per turbine with no qualifying of these figures other than a line in the documents to An Bord Pleanala that the blades on the turbines was to exceed the permitted length but staying below the 175m high blade tip maximum height.

The 2020 figures give output of 15×5 to 6MW = 75 MW to 90 MW. The capacity factor is quoted as 35%. Thus the actual output would be 26.25MW to 31.5MW

The 2017 figures give output of 15 x 3.6 to 3.8 MW = 54MW to 57 MW. The capacity factor is quoted as 40%. Thus that actual output would have been 21.6MW to 22.8MW

For the Wind Farm to quantify its saving of carbon and therefore helping of the Climate, the carbon figures are the centre pin of the whole application. Coole Wind Farm Ltd must explain this amazing improvement in the efficiency of the turbines. With the capacity factors given by Coole Wind Farm Ltd in their application this Wind

Farm does not meet the SID requirements of 50MW so why can they circumvent the Westmeath County Council planning application structure?

- iii Coole Wind Farm Ltd have not chosen the exact wind turbines they are to use in the proposed Wind Farm so how do they know the figure of carbon loss for manufacturing, constructing and decommissioning of said the turbines? There are many factors that would affect this figure dimensions of the blades, the mining of the rare metals that will be needed for the motors, where the parts of turbines are built and thus transport carbon costs. The figures in the carbon loss calculations should be quantified before Ireland uses this form of power generation.
- iv Coole Wind Farm Ltd claim that Westmeath County Council does not have a plan to reduce dependency on fossil fuels without this development. Westmeath County Council has given planning permission for a solar wind farm at Tullynally Castle, between Castlepollard and Coole. There was no outrage from the local community or ruining of the countryside this is the way to proceed in the midlands.

3 Government action needed

- This application is saying it is a Strategic Infrastructure Development and so the Government must have official rules for these developments. There are now more than 300 industrial wind farms in the Republic of Ireland and yet the Government has not carried out an independent assessment. The country is still working off the Irish Wind Energy Association's (IWEA) updated Wind Energy Best Practice Guidelines for the Irish Wind Industry in 2012. This is irresponsible on three accounts, firstly the industry has changed enormously since 2012, thus these guidelines are out dated. Secondly, the country should be working from legislation not GUIDELINES. Thirdly this country now has enough information to stop using research from other countries that have completely different weather, geology and landscape. This application uses case studies from many different countries, which are very different to Ireland, to back up the reasons why they believe these industrial turbines are relevant to Ireland this is wrong.
 - There are alternative power generation projects which the Government must encourage in Ireland. Small wind farm projects which can link into the grid directly. This needs the Government to encourage the ESB to facilitate this. Solar wind farms, solar panels on the roofs of schools, all Government buildings, farm buildings again which link into the grid or power the local area. Again Government can legislate that new building should have panels in the roofs and other projects of a similar nature. The reduction of reliance on fossil fuels is out dated and the conversion to renewable energy is essential however the idea that large scale on-shore wind farms is the only option is blinkered and similarly out dated.

4 Chapter 4 Birds

Questionable assessment of bird collision rates

- i The potential mortality rates used in models for predicting the impact of particular wind farms are based on the majority of studies which quote low collision rates and these in turn are based only on found corpses. This has led to a significant under recording of the actual number of collisions.
 - ii Even when collision rates are low this does not necessarily mean the mortality is insignificant. Even relatively small increases in mortality rates maybe significant for populations of some birds especially long lived species with generally low annual productivity rates and notably when their numbers are in decline.
 - There are to date **no studies** comparing risk assessments published in wind farm submissions and the actual mortality rates recorded after a wind farm becomes operational. This lack of pre and post construction mortality comparison is alarming because these prior risk evaluations are an integral part of the procedure of accepting or rejecting permission of new wind farms. Ireland has enough Wind Farms for the Government to have commissioned surveys and thus have the necessary data available.
- 2 Steve M. Percival. 'Birds and windfarms; A review of potential issues and impact assessment' prepared in 2003.
- The submission places a total reliance on assessing the magnitude and significance of potential effect on the assessment prepared by Steve M. Percival. This was not a scientific study and was not subject to a peer review process. It was a desk-top study of available literature, some of which dated as far back as 1989, on wind farm impact on birds from around the world, none of which had been undertaken in Ireland. Whilst some attempt was done to match habitats these did not, in the main, match the bird species in Ireland.

To use a desktop study with data not generated in Ireland and some eighteen years old cannot be said to represent an accurate assessment relevant to this particular wind farm application in 2021. Yet again, Ireland has enough Wind Farms for the Government to have commissioned surveys and thus have the necessary up to date data available.

5 Chapter 8: Land Soils and Geology

i The Borrow Pit

The borrow pit is 6.21 Ha in size, that has not changed from the 2017 application however there is now 74,000 cubic metres top soil to remove and replace whereas there was only 38,000 cubic metres in the 2017 application.

If the borrow pit it still the same size how come there is more top soil or is the borrow pit to be larger than stated.

It is estimated that 251,915 cubic metres of hardcore will be extracted from the borrow pit for use on the Wind Farm site. This will take approximately 17,000 lorries. Each turbine foundation will require 600 cubic metres of concrete and lean mix. This will take approximately 1,050 lorries. Thus a total of 18,000 lorries will be arriving and leaving the site. The most likely route will be the L5755, this is a single tracked road which could not two lorries passing.

The noise and dust plus the major inconvenience for anyone else that needs to use that road is insurmountable unless major upgrades are made to the road which is not mentioned in the application.

6 Chapter 11 Noise

i 18,000 vehicles arriving and leaving the site along narrow roads in bad repair will make a great deal of noise. The mediation of flat, even roads to be sprayed with water to keep down dust will have little effect on roads like the L5755.

ii 11.3.3.1. Infrasound/Low Frequency Noise

With respect to infrasonic noise levels below the hearing threshold, the World Health Organisation (WHO) document Community Noise (WHO, 1995) has stated that:

In June 2020, a report was released by the Finnish Government4 presenting results of a project that investigated the infrasound produced by wind turbines and its effects through surveys, long-term measurements and exposure tests.

The surveys identified symptoms subjectively associated with infrasound from wind turbines were commonly within 2.5 km of the closest wind turbine and the range of symptoms experienced were broad. One third of residents with symptoms associated with infrasound subjectively were more likely to attribute their symptoms to wind farms and consider wind turbines disruptive health risks.

Long-term measurements were conducted collecting 308 days of data in two areas within 1.5 km of wind turbines operating between 3 to 3.3 MW. In measurements, infrasound levels were similar to the levels occurring typically in urban environments. The infrasound samples representing the worst-case scenarios were picked out from the measurement data and used in the exposure (listening) tests.

- i To be quoting from a WHO document from 1995 is very out dated for Wind Turbine noise.
- ii the test were carried out within 2.5km of the turbines whereas the Coole Wind Farm turbines are substantially closer to dwellings.
- iii Secondly the Coole Wind Farm turbines are to be operating at 6MW not the 3 to 3.3MW.

How do their deductions have any relevance to Coole Wind Farm?

iii 11.5.3.1 The Turbine Assessment

The noise levels:

Table 11-22 Review of Predicted Turbine Noise Levels against Relevant Criteria

The Noise Levels, dB La90 are given at wind speeds up to 9 m/s. Looking at the wind speeds in Table 10-9 below there seem to be max mean 10-minute wind speeds up to 16.4 m/s. This will give dB La90 well above the 45 dB La90 levels proposed for this development. This will majorly affect the lives of people living near the site.

10-9 Data Met Eireann Weather Station at Mullingar 1978 to 2008

Wind ((knots)

Mean monthly speed

7.6 knots = 3.8 m/s average per annum

Max gust

58.5 knots = 28.5 m/s average per annum

Max mean 10- minute speed 32.8 knots = 16.4 m/s average per annum

Appendices 7-5

Table 2-1 Windfarm Parameters at Coole Wind Farm Wind Farm Component Scenario Modelled

Assumed turbine model SG6.0 - 155	GE 3.6 -137
Number of turbines 15	13
Blades per turbine rotor (3d model used) 3	3
Rotor diameter (m) 155	140
Rotor radius (m) 77.5	70
Hub height (m) 97.5	105
Swept height (m) 20-175	35-175
Pitch of blade (degrees) 25	30
Maximum chord (m) (i.e. depth of blade) 4.5	4
Rotational period (s) 6	6.82

The figures in black are the 2020 application the figures in red are the 2017 application

11.3.7.2.1. Turbine details

iv

'For the purposes of this assessment predictions have assumed the source of noise at the hub height of 100.5 m.'

This hub height mentioned in Appenices 7-5, table 2-1 above of 97.5m does not with the assumed height mentioned in 11.3.7.2.1 of 100.5m also mentioned above. The lower hub height will surely give rise to higher noise levels in the surrounding areas. The depth of the blades has increased from 4 to 4.5m which would also increase the noise levels but they have not shown any increase.

There should be consistency within the application, this would not be allowed if I was trying to put an extension on my house, or if the width of a wall for a nightclub was narrowed and thus the noise levels increased.

This is not a robust application.

7. This Application is contrary to goals for tourism and heritage in North Westmeath

i Westmeath County Council has recently awarded almost €500,000 to Castlepollard for regeneration and restoration with tourism very much in mind. The town is less than 7km from the proposed windfarm. Westmeath County Council comments as follows on this funding, emphasising the exploration of North Westmeath. It says that the award is

"To regenerate Castlepollard, building on the unique architectural heritage of the Town Square and Green, creating space for the community and visitors alike, restoring the Market House and delivering a Town Park, establishing Castlepollard as base, from where, visitors will explore the many sights of North Westmeath, enhancing the towns critical role as an economic driver for the region".

This application for the installation of giant industrial-scale wind-turbines into the landscape of north Westmeath will damage the context, detract from the interpretation and destroy the character of the archaeological and historic sites of the area. It will run contrary to the Council's wish to see people explore the many sights of North Westmeath. We say that An Bord Pleanla have ridden rough shod over the democratic process by circumventing Westmeath County Council by allowing Coole Wind Farm Ltd to call this a Strategic Infrastructure Development and thus 'taking over' the future of North Westmeath.

ii Coilte's long-established forest recreation area at nearby Mullaghmeen was selected recently as the Irish Time's' Westmeath hike of choice for Westmeath¹. Mullaghmeen is an isolated area of forest, comprising the largest beech plantation in Ireland, rising above farmland to a height of 258m above sea level. This forest

¹ https://www.irishtimes.com/life-and-style/health-family/fitness/32-great-hikes-around-ireland-one-in-every-county-1.4514690

features on all hiking and outdoor sporting websites, such as Sport Ireland, Coilte² and Visit Westmeath.³ A few kms to the west, the proposed 15-turbine wind farm will reach to almost the height of the Mullaghmeen summit. The turbines stand on land that is 75m above sea level. The turbines are 175m high. The turbine tip will therefore reach 250m in height above sea level. This intrusion cannot be reconciled with strategies to develop tourism.

- iii Westmeath County Council has already instigated plans for development of Greenways around North Westmeath which will go through this Wind Farm. They will not be GREENways if they go through an Industrial Wind Farm
- There are two Protected Properties on the Grid Connection route, one is Simonstown House, on the edge of Coole on the L1826 which has a Protected wall along the edge of the road carrying the Grid Connection and the second is Levington House at the other end of the Grid Connection. Levington House has two Protected Gatehouses and walls on the edge of the road, the road at this point is very narrow indeed. The Applicant has not given any plans of how the curtilages of these two Protected is to be protected from digging such a deep trench so close to these old walls and buildings. Without plans how do we know they will take the necessary care needed.

8 Chapter 6 Biodiversity

1 Water Quality

The EU water Framework Directive (2000/60/EC) requires all Member States to protect and improve water quality in all waters. The Glore and Inny rivers are the boundaries of the site in some places. The scale of this construction and its proximity to water bodies will neither protect nor improve water quality as required under the directive. Lough Bane is only 10m from the nearest road infrastructure and 50m from the nearest turbine – yet even with this close proximity Coole Wind Farm Ltd claim there will be no direct effects and no potential for indirect effects.

At present the silt traps installed by the illegal commercial peat harvesting are at best not functioning fully and at worst completely ineffectualThe proposed wind farm is intended to coexist with peat harvesting on the same footprint. This would lead to a cumulative effect potentially reducing water quality even further and consequently having a detrimental effect on biodiversity in the immediate vicinity and downstream. Coole Wind Farm Ltd will need to take control of the silt traps and ensure they are working properly. This is not mentioned anywhere in the application.

2 Flora and Fauna

Table 6.8 NPWS records for rare and protected species -referred to but not included.

² https://www.coillte.ie/site/mullaghmeen-forest/

³ https://www.visitwestmeath.ie/get-outdoors/walks-wilderness/mullaghmeen-forest-trails/

i "Evidence of additional non-volant Mammals was not recorded during site surveys. However it is likely that species such as Pine marten, Irish Stoat, Red squirrel, Pygmy shrew etc. occur within the study area at least on occasion."

Pine Marten and Pygmy shrew are plentiful in the area. The statement above is very unscientific – the species are not recorded but are probably there. It seems the survey was not thorough enough.

The studies conducted for non-volant mammals focused only on the construction phase of the development and have not referred to the operational phase of the wind farm and its effects on non-volant mammals living in it's vicinity. Lopucki et al 2017 states that "greater weight should be given to the effects of wind farms on non-volant wildlife than is currently the case. Investors and regulatory authorities should always consider and attempt to mitigate the likely impact of wind farms on terrestrial animals during environmental impact assessments. The impact of a wind farm should be considered in terms of not only the construction but also the operational phase."

"Wind turbines may have a stressful impact on some species of small mammals living in their proximity." (Lopucki et al 2018) The main factors "include permanent exposure to the aerodynamic noise of wind turbines and episodes of mechanical noise. These factors may increase the general vigilance of animals by masking the acoustic warning signals from the environment most of the time and by exposing animals to sudden, unexpected mechanical sounds repeated many times throughout the day." (Lopucki et al 2018)

It is essential that the full effect on non-volant species is essential and this complete lack of interest in their health is inexcusable.

habitats directive and listed as vunerable. They have been identified as present in N36, N37, N45 and N36 hectads which are in the footprint of the site. NPWS 2013 states that the population and future prospects are inadequate and the overall trend for this species is declining. Peat extraction is deemed a medium threat to its habitat and anthropogenic reduction of habitat connectivity is ranked as a high threat to their habitat. The two activities would surely have a cumulative negative effect on its habitat which is the cornerstone to the survival of this species in Ireland.

References

Lopucki R, Klich D, Gielarek S. Do terrestrial animals avoid areas close to turbines in functioning wind farms in agricultural landscapes? Environ Monit Assess. 2017; 189)7):343 (http://creativecommons.org/licenses/by/4.0/)

Lopucki R, Klich D, Scibior A, Golebiowska D, Perzanowski K. Living in habitats affected by wind turbines may result in an increase in corticosterone levels in ground dwelling animals. Ecological Indicators, Volume 84, January 2018, Pages 165-171

9 Chapter 5: Population and Health

All people in the area around this site will be effected. There are four 4 autistic individuals living close to the Borrow Pit who will be very severely affected.

The building of the roads and concrete standings for the turbines will increase the alkalinity of the area which will have a negative effect on the acid bogs and thus a fundamental effect on the structure of the bogs. 5.1 is completely inaccurate.

2 Turbine blades: Light flicker

"Possibility of 33 out of 55 properties may exceed the DOEHLG guidelines"

5.7.2: "The DoEHLG Guidelines state that at distances greater than 10 rotor diameters from a turbine, the potential for shadow flicker is very low."

"For the purposes of this assessment, a turbine with a rotor diameter of 155m is modelled in order to assess the worst-case scenario"

This would indicate that the diameter of the blades is 155m. The DOEHLG guidelines say the potential for shadow flicker is low at 10 times the rotor diameter that is: 155m x 10=1550m. So the shadow flicker is **NOT** low at distance of less than 1,550m. Coole Wind Farm Ltd has the following mitigation measures

5.9.3.9: Coole Wind Farm Ltd. continues to commit to zero shadow flicker at occupied residential receptors within 10 rotor diameters of the Proposed Development. Proposed Mitigation Measures

"The closest Coole Wind Farm, Co. Westmeath - EIAR Ch 5 Pop & Human Health F - 2021.03.22 - 200445 5-32 occupied dwelling H14 (i.e. dwelling not involved with the Proposed Development) is located at a distance of approx. 700 metres from the nearest proposed turbine T11. There are 2 no. dwellings, H18 & H24 which are located at distances of 638m and 679m from T15 respectively however these are individuals involved with the proposed development."

For people living in properties nearer that 1,550m and not including properties H14, H18 and H24 Coole Wind Farm Ltd suggests the following:

Flicker "may not be witnessed if curtains or blinds in the bedroom are closed"

This implies the mitigating measures for flicker is to close the bedroom curtains or blinds. What about the rooms where people spend most of their waking hours, are they supposed to close the curtains and blinds every time the sun comes out? Coole Wind Farm Ltd cannot be allowed to treat local inhabitants in this way.

10 Mobile Phone Connections

In Chapter 3 fig. 3.2 it appears that turbines 2, 6, 9 and 13 are in the path of the buffer zone for Three Ireland. Three Ireland has the best mobile phone connection in this area. It is not good, but is the only viable one locally. This now is to be destroyed

by the turbines. Remote working will be impossible in this area if the currently fair internet coverage is degraded by blockage from the turbines. Broadband of any decent strength is a long way off in rural areas and so mobile phone connections are essential – this cannot be allowed to go ahead.

I implore you as members of An Bord Pleanla to turn down this application on any of the above points. It really is undemocratic to override the local Council by circumventing the laws through bogusly claiming this application is an SID. Westmeath County Council Councillors have their view on the development of North Westmeath and will completely undermine that development. The increase in Tourism, the introduction of Greenways and the promotion of Castlepollard will be very seriously, negatively affected by this Industrial Wind Farm.

Yours faithfully

John Delamere

Streamstown House

Castlepollard

Co Westmeath

N91 YX 38

Clarissa Delamere Streamstown House

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Co Westmeath

N91 YX 38

Morag Newman Moortown Castlepollard Co Westmeath N91 EH75

Hard Jennen

STREAMSTOWN

CASTLEPOLLARD

LE WESTMEATH

SIMON TAYLOR CARRICK LOUGHBANE COLLINSTOWN WESTMEATH W91 WY48

do" Comell

Desmond O'Carroll Glenidan House Glenidan Collinstown Co Westmeath N91 WT29

Dais Taylor

David Taylor Bawnavullawn Loughbawn Collinstown Co Westmeath

HELEN KALT LONGK BISHOP HOUSE DERIGHNAGARAA COLUMSTAUN (O. WESTMEATH

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Voit, Butesfield Lough BANN House Collinstona W. Meath N91EYK4

X. O'Carroll

Katharina O'Carroll Glenidan House Glenidan Collinstown Co Westmeath N91 WT29

Bridget 17. Taylor

Bridget Taylor Bawnavullawn Loughbawn Collinstown Co Westmeath

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