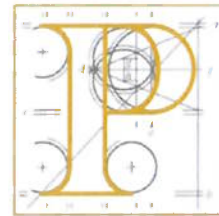


Our Case Number: ABP-318446-23

Planning Authority Reference Number:



An
Bord
Pleanála

N. Windsor Smith
The Dale
Ballinamult via Clonmel
Co. Waterford

Date: 30 January 2024

Re: Proposed construction of Coumnagappul Wind Farm consisting of 10 no. turbines and associated infrastructure.
In the townlands of Coumnagappul, Carrigbrack, Knockavanniamountain, Barricreemountain Upper and Glennaneanemountain, Skeehans, Lagg, Co. Waterford.
(www.coumnagappulwindfarmSID.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.

If you have any queries in the meantime, please contact the undersigned officer of the Board or email sids@pleanala.ie quoting the above mentioned An Bord Pleanála reference number in any correspondence with the Board.

Yours faithfully,

Niamh Hickey
Executive Officer
Direct Line: 01-8737145

PA04

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

The Dale,
Ballinamult,
Via Clonmel,
County Waterford.

27th May 2024.

The Secretary,
An Bord Pleanála,
64 Marlborough Street,
Dublin 1,
D01 V902

Dear Sir,

Bord Pleanála Case reference: PA93.318446

**Strategic Infrastructure Development Application by Coumnagappul Wind Farm Ltd.
Development of a 10-turbine wind energy development by Coumnagappul Wind Farm Ltd.
within the townlands of Bleantasourmountain, Carrigbrack, Clooncogaile, Coumnagappul,
Glenaneanemountain, Kilkeany, Kilkeany Mountain, Knocavanniamountain and
Reanadampaun Commons, Ballymacmague North, Ballymacmague South, Colligan More,
Colliganwood, Eagle Hill, Garryclone, Garryduff, Kilcooney, Kiladangan, Knockacaharna,
Knockboy, Lackandarra Upper and Tinalira Co. Waterford.**

**In the townlands of Coumnagappul, Carrigbrack, Knockavanniamountain, Barricreemountain
Upper and Glennaneanemountain, Skeehans, Lagg, Co. Waterford.**

www.coumnagappulwindfarmSID.ie

Waterford City and County Council.

Description

Proposed construction of Coumnagappul Wind Farm consisting of 10 no. turbines and associated infrastructure.

Parties

Coumnagappul Wind Farm Limited (Applicant)

In response to the above referenced strategic infrastructure development planning application, I wish to submit the following observation to An Bord Pleanála, in accordance with Section 130 of the Planning and Development Act. 2000 as amended. Payment of the €50 fee paid online.

Having read the planning application and the applicant's supporting documentation, I am concerned that the proposed development, if permitted, would result in a number of adverse consequences, including damage to the health of residents, landscape quality, tourism, traffic, pollution, natural heritage, wildlife and depreciation of property values.

The applicant has failed to adequately address the in-combination effect of other planned wind farm developments in the locality, namely Dyrick Hill Wind Farm and Scart Mountain Wind Farm.

Dyrick Hill Wind Farm planning application is currently with An Bord Pleanála for consideration (PC93.312434).

Scart Mountain Wind Farm applied for Strategic Infrastructure Development status on 28th February 2023 (PC93.315920), this pre-application consultation has yet to be concluded, (as per the An Bord Pleanála website today).

They submitted a pre-application on 17th August 2023 (Ref: VC93.317824) for the Electrical Substation and Grid Connection. This was granted on 17th January 2024.

Scart Mountain Wind Farm has been excluded from Coumnagappul Wind Farm Ltd.'s application supporting documentation, despite the fact that all the plans were in the public domain long before their application was submitted on 13th November 2023. Scart Mountain Wind Farm issued its first public Newsletter on 14th October 2022, with further ones issued in February 2023, June, August and November 2023.

The prospect of a wind farm in the area has already created a bitter divide within the local community. There is resentment against those who stand to gain financially, when all residents would be losing out and effected. Such as a man who refused to give permission for his land to be used, but his neighbour 'sold out', so the first man will still have a turbine in front of his house, but his neighbour will be the only one to be compensated. Having spoken to other communities where wind farms have been built, the Community fund, offered by the wind farm developers, has caused even more of a divide, with some groups getting funding and others not. Far from being a benefit to the community, it has caused even more animosity and upset. Many believe that no amount of money could compensate for the effects of having a wind farm in their area.

Young people, who have grown up in the Comeragh area, and planned to build their own homes and raise their families here, are now planning to move away, because they don't want to be bringing up their children near a wind farm.

Local people are concerned about the depreciation in value of their properties. Already some have put their houses on the market, but have had sales fall through, when the prospective purchasers learned of the possibility of a wind farm in the area.

Emphasis has been made on rural development and encouraging people to live in rural areas, if this project was allowed to proceed, it would have the opposite effect.

The impacts on human health are a huge concern for residents in the area.

People living near existing wind turbines report health issues including tinnitus, migraines, and disturbed sleep.

The turbine blades are made of Bisphenol A, small particles shed into the air when the turbine operates, Bisphenol A is a known carcinogenic and hormonal disrupter.

Shadow flicker is a concern, particularly for residents with epilepsy or autism.

Effects on heart rate variability, from low frequency noise generated by wind turbines, have been found. (chiu,Chun-Hsiang; Lung,Shih-Chun Candice;2021-09-08 Scientific Reports.11(1):17817)

The visual impact of the wind farm, if permitted, would have a vast negative impact on the landscape. The photomontages shown by the developers, do not give a true and accurate view of the impact the wind turbines would have on the landscape. Their photos are taken from obscure places, at strategic angles and when the sky was of a colour to produce the least impact. We live in this area to enjoy the wonderful views of the mountains.

The area is also very reliant on tourism and many visitors come to enjoy the views from the scenic drives, such as the Comeragh Drive, and to walk in the beautiful mountains.

The Comeraghs are the jewel in the crown of Waterford.

This fine mountain range is an important landscape feature, as it dominates the entire county of Waterford, and is undoubtedly a visual and recreational asset. This extensive upland area is the most unspoiled area in Waterford and is certainly a landscape of outstanding natural beauty. Improvements to the main road from Dungarvan to Waterford, by Waterford City & County Council, have considerably enhanced the views of the Comeraghs from parts of this national primary road, the N25, which flanks the south-eastern side of the range, the funnelling effects of sloping roadside verges and the undulating topography of the road ensures that travellers obtain a panoramic and dramatic view of the range from a considerable length of this road. On the western side, views of the mountain are quite stunning from the minor roads and vantage points scattered throughout the hinterland there. The vista is certainly impressive, given the preponderance of heather-clad hills, ridges and valleys and the almost semi-wildness aspect of the range on this side. These very same roadside views from either side of the mountain afford residents of the county ample opportunities for an appreciation of the Comeraghs with considerable spiritual and cultural benefits, and the inculcation of a distinct sense of identity and attachment to county Waterford. The Comeragh Mountains are also of considerable conservation importance and there are notable botanical, ornithological, geographical, geomorphologic and archaeological features.

The magnificent mountain scenery and the wealth of heritage and wildlife interest of the range confer a special character on the entire region.

The Comeraghs are an invaluable recreational resource and different interest groups share the area with farmers, foresters and wildlife. Apart from the ability of the range to support economic activity (largely through sheep farming and forestry operations), the varied and impressive landscape features contribute to tourism in the county, through the attraction of the range for a large number of visitors, which enhances the local economy and encourages rural development.

The word Comeragh is from the Irish Cumarach meaning “abounding in hollows and river confluences” and Monavullagh is “Móin a’ Mhullaigh” meaning “bog of (or on) the summit (or top).

In recent years, the Waterford community recognised upland farming on the Comeragh Mountains as having the potential to provide public goods or services that build on its natural and cultural heritage. It is evidenced by Waterford City and County Development Plan 2022-2028. Among its strategic objectives are:

- Integrating climate change and adaptation considerations into land-use policy objectives.
- Protecting, managing, and enhancing the natural heritage, biodiversity, landscape and environment of Waterford City and County. Providing a unique identity and character for the county and city as a natural resource asset.

Comeragh’s ecosystem services and public goods include biodiversity and habitats, the provision of clean water, carbon sequestration, landscape, and public access and health. They offer an opportunity for the necessary increase in farmer incomes from the uplands to ensure their economic, environmental and social sustainability.

The supply of drinking water and flood control are two ecosystem services deliverable by the uplands. These two services are linked to upland biodiversity. Functioning upland bogs and wet heath can slow the water flow down the mountain following heavy rainfall, reducing the risk of lowland flooding. In addition, they will reduce the potential for sediment loss, which adds significantly to the cost of water treatment for human consumption. For example, the Glengary river is the primary water source for the water treatment plant used to supply the town of Clonmel and the surrounding area serving a population of 10,750 and delivering supplies of 3,734m³ of water per day. (www.epa.ie/publications/compliance--enforcement/drinking-water/audit-reports/tipperary/Glengary-06.09.18.pdf).

Seven main rivers drain into the Suir valley and the Waterford coastal plain, the river Colligan is the longest at 20km. The habitats and biodiversity have evolved in this landscape, forming the Comeragh mountains rich natural capital.

The flood risk would be increased by the felling of trees, 5.4 ha of coniferous forest, trees which each use 20 to 30 gallons of water per day, (www.montana.edu/news) along with the additional roadway, hard standings, and non porous foundations, (Ten concrete foundations each 25m in diameter and 4m deep).

Increasing the roadway within the site, along with 10 x 25meter diameter and 4meter deep concrete foundations, plus hard standings, and creation of the borrow pit, cannot be done without altering the natural paths of the water within the site.

The Colligan drains a large part of county Waterford west of the Comeraghs and flows for around 20km before emptying into Dungarvan Harbour. It rises high up in the remote but

beautiful Coumnagappul, which is unlike any of the Comeragh coums in that there are no cliffs or enclosed corries, but there are hills and hollows surrounded by visually superb mountain moorland. Up near the headwaters of the range there are rounded hills at Knockavanniamountain, Bleantasourmountain and Glennaneanmountain; these and other townland names in the area are associated with animals or birds – Gleann na nÉan – “Glen on the Birds”, Com na gCapall – “The Horses’ Hollow”, Tuairin – “Little Cattle Field”, Banrach Cairr Fhia (Barra Croí) – “The Deer Paddock”). There is one large and significant upland tributary of the Colligan, the Coumduane stream, which drains to steep slopes between Carrigbrack and Barracreemountain. The surrounding slopes are damp and vegetated and can be good for heath spotted-orchids and other moisture loving plants in summer.

The Nire is one of the bigger river systems of the Comeragh mountains and it has a large catchment area on the western part of the range, draining the extensive slopes around Coumfea, Coumalocha, Sgilloges, Coum Lara, the westernside of the Knockanaffrin Ridge and the southern slopes around Lachtnafrankee. The overall catchment area of the Nire encompasses almost 94 square kilometres and the upland parts around the Comeraghs contribute over a third of this.

There are 3 watercourses within the site, Skeheens Stream, Knockavanniamountain Stream and the Colligan River. The planned grid connection route crosses the Colligan River, Ballinagulkee Lower Stream and Skeheens Stream. Due consideration has not been given to the proximity of the Special Areas of Conservation or the fact that tributaries from the site feed into SACs, and Ballinagulkee Lower into the Finisk, which is a tributary of the River Blackwater and is protected, for the freshwater pearl mussel. The site is also a Blue Dot catchment area for waters flowing into the Colligan, to Dungarvan Bay, and the Nire River. The Comeragh SAC is approximately 700m from a proposed turbine site, but hasn’t been included in the Environmental Impact Statement.

Mitigation measures of settlement ponds and providing emergency spill kits are insufficient. The possibility of water pollution, caused by means including excavation, run off from site, cleaning of vehicle wheels and under body, hosing/dust suppression on haul route, frac-out, fuel spills and any release of concrete to an aquatic environment altering the pH nitrate, phosphate, turbidity and biological oxygen demand in the water. As listed as ‘potential impacts’ on Page 62 of Fehily Timoney’s Environmental Impact Assessment Report Section 2.6. These mitigation measures are insufficient to guarantee, beyond reasonable doubt, that there will be no risk of harmful effects to any Special Area of Conservation.

There are a large number of archaeological monuments in the Comeraghs, anyone rambling or walking in the range is likely to encounter these. There are many such features within the site, which have not been given adequate consideration regarding their proximity to turbines. Also on the grid connection route, for example the famous classical hedge school at Baile na Giolcaí – Ballinagulkee Lower has not been taken into consideration.

The applicant plans to place turbines on areas which are classified by the Geology Survey Ireland as Blanket Bog areas.

The local roads are not suitable for the large vehicles or the volume of traffic, which would be required during the construction stage. These roads weren't built to withstand the weight and volume of traffic needed for this proposed development. The roads are narrow, with no footpaths for the safety of pedestrians. This area is popular, and well used, by walkers, runners and cyclists.

Traffic numbers will also increase by 200% to 2400%, again, this is totally unacceptable for these local roads. This would also cause considerable inconvenience on the regional roads, particularly the cumulative effect, should this and any other project in the area be granted permission to proceed.

No agreements are provided for use of third party land, where required on the haul route.

Decommissioning of the turbines cannot be fully assessed, as it is unknown how or where the turbines will be disposed of.

The 2006 Wind Energy Development Guidelines are outdated considering the vast change in technology since they were implemented – when the typical turbine size would have been 50m.

The Waterford City and County Council Development Plan 2022-2028, has been prepared in accordance with the requirements of the Planning & Development Act 2000 (as amended) and the Planning & Development Regulations 2001 (as amended).

Chapter 10 of the Plan covers Landscape, Coast/Marine and Blue Green Infrastructure (BGI)

Strategic Objectives

Protect our sensitive landscapes and seascapes which contribute to the distinctiveness of Waterford as a place.

Establish Blue Green Infrastructure as a key component in the planning process and promote the sustainable development of recreational trails that do not adversely impact landscapes and ecological integrity.

The European Landscape Convention (2000) promotes the protection, management and planning of all landscapes, including rural, peri-urban and degraded landscapes. Article 5 of the ELC urges recognition in law that landscape is an essential component of people's surroundings, an expression of diversity of shared cultural and natural heritage, and a foundation of identity. The convention advocates the establishment and implementation of landscape policies aimed at landscape protection, management and planning, and urges the participation of the general public, and local and regional authorities in these policies. The management of Waterford's landscape involves:

- Ensuring adequate protection to our most sensitive and vulnerable landscapes through appropriate policies and objectives.
- Providing for development that will enhance and benefit the receiving environment, and
- Protecting the landscape from inappropriate and unsustainable development.

A Landscape and Seascape Character Assessment was prepared for Waterford City and County Council in 2020 and identified seven landscape types: coastal landscapes, river corridor and estuary landscapes, farmed lowland landscapes, foothill landscapes, upland landscapes and urbanising landscapes. These landscapes are subject to varying forces for change and in turn have varying capacity to accommodate development that can impact on that particular landscape character.

Each unit of character is assigned an indicator of sensitivity, which indicates the extent to which the landscape will be vulnerable to change in its character. The categories reflect the criteria of the capacity to absorb new development as well as the potential to create disproportionate visual impacts.

The Comeragh area is categorised as “Most Sensitive”.

Section 10.5 of the Development Plan - Comeragh Mountains

The Comeragh Mountains from the Nire Valley in the West to Coumshingaun in the east, is a very popular area attracting visitors and walkers to County Waterford. The Council recognises the tourism value of this area for local communities and acknowledges the area is actively farmed, in private ownership and with high wildlife value subject to habitat protection and scenic landscape designations. All these uses bring forces for change and require to be managed with recognition and consideration for all uses and values for the overall socio-economic, landscape and environmental benefit of the area. Appropriate recreational and tourist developments in the Comeragh Mountain Area which will enhance the economic prospects of the area will be considered, subject to appropriate environmental assessment and development management standards to ensure protection of the unique character of the area.

Under the Development Plan, Waterford County is categorised into three areas of sustainability for wind farm development.

- Preferred Areas;
- Areas Open to Consideration;
- No Go Areas.

These areas have been identified by way of overlaying the following series of maps and data:

- The Landscape and Seascape Character Assessment
- Natura 2000 network
- Urbanised areas
- Waterford Regional Airport
- Wind energy mapping of adjacent local authorities
- Major road infrastructure and
- Transmission grid.

The Comeragh Mountains are in a No Go Area.

Consequences of Wind Turbines on Farm Animals

Noise Pollution: One of the main concerns associated with wind turbines is the noise they generate. Farm animals, particularly those near wind farms, are exposed to continuous low-frequency noise. Studies have shown that excessive noise can lead to stress, decreased milk production in dairy cows, and lower weight gain in young livestock.

Shadow Flicker: Another significant concern is the shadow flicker effect created by rotating wind turbine blades. When the sun shines through the blades, it creates a repetitive pattern of shadows that can be disturbing for animals. This can potentially cause behavioural changes and agitation and adversely affect their overall well-being.

Electromagnetic Fields: Wind turbines generate electromagnetic fields (EMFs) due to the electrical currents produced. While there is ongoing debate about the potential health effects of prolonged exposure to EMFs, some studies suggest that it may disrupt animals' biological functions, including their sleep patterns and reproductive cycles.

Evaluating the Research

Livestock Behaviour: Various studies have investigated the impact of wind turbines on livestock behaviour. A study conducted in the UK found that dairy cows located within 5km of wind turbines showed increased restless behaviour and reduced grazing activity. Similar observations were made in studies involving sheep and horses.

Milk Production: Dairy cows are highly sensitive to environmental stressors, including noise. A study published in the Journal of Dairy Science revealed that cows lactated close to wind turbines had a decreased milk yield compared to those in locations with less exposure to turbine noise.

Reproductive Health: Research conducted in Australia indicated that proximity to wind turbines was associated with lower reproductive performance in sheep. Ewes in areas with higher wind turbine density had decreased lamb survival rates and a decreased likelihood of pregnancy. The exact mechanisms underlying these effects are still being investigated.

Expert Opinions

Dr. John Smith, a veterinary expert specializing in farm animal health, suggests that preventative measures should be taken to minimize the potential negative impact of wind turbines. He emphasizes the importance of designing wind farms with sufficient buffer zones around livestock areas and implementing noise mitigation strategies.

Dr. Emily Johnson, an environmental scientist, highlights the need for long-term studies to fully understand the health consequences of wind turbines on farm animals. She suggests

multidisciplinary research involving veterinarians, environmental scientists and farmers to comprehensively evaluate the impact and develop sustainable solutions.

Conclusion

While renewable energy sources like wind turbines are crucial for combating climate change, it is essential to evaluate and address their potential impact on farm animals' health. The concerns surrounding noise pollution, shadow flicker and electromagnetic field cannot be ignored.

We should support initiatives that aim to strike a balance between renewable energy generation and the well-being of farm animals. Implementing adequate mitigation measures and incorporating expert advice will ensure that wind energy remains a sustainable solution for our future energy needs, without compromising the health and welfare of our valuable farm animals.

(energy5.com)

Habitats Directive

The Comeragh landscape is rich in flora and fauna.

The primary legislation transposing the Nature Directives (Birds and Habitats Directives) into Irish law is the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. No. 477 of 2011), as amended.

All birds are protected by Irish national legislation, some species are also included on Annex 1 of the EU Birds Directive and listed as Birds of Conservation Concern.

The hen harrier is recorded annually in the Comeraghs, in most months.

The new draft of the Hen Harrier Threat Response Plan (HHTRP) lists high threats for hen harrier SPAs. It highlights agriculture, climate change and wind energy development as pressure and threats to harrier habitats. According to the draft, "While wind energy production is identified as one of the key pressures on the species, wind energy development is also, more generally, a key part of the global and national response to alleviating climate change. Biodiversity and climate change commitments have equal standing, and creating opportunities to achieve both, without compromising each other, is critical, particularly as biodiversity can assist in climate change mitigation and adaptation".

At least 83 species of birds have been recorded in the Comeragh mountains.

The accuracy of the applicant's ornithology study is questionable, as the study has taken place at times when birds would not have been present, in poor weather conditions and failed to cover nesting sites.

For birds, food supply and the availability of suitable nest sites determines their occurrence in a given habitat. Loss of habitat, from tree felling, loss of natural ground cover by putting concrete foundations, hard standings and creating the new roadways on the site, will all result in loss of habitat.

The noise, vibration and presence of humans and machinery, particularly during the construction period, will have an adverse effect on avian, aquatic and all other wildlife in the area.

Wind turbines present the threat of bird strike, but also reduce the food supply for birds because of their affect on insects. Some species of birds will avoid the area of the turbines, and certain birds can be drawn to turbines, causing a change in species found around wind farms and therefore a change in biodiversity. The noise and electromagnetic fields created by turbines can also disperse birds from their natural habitat. This is also true for bats, which are also protected.

I will finish with words from a book by Declan McGrath - A guide to the Comeragh Mountains:

It is hoped that those who live near and those who visit the Comeraghs, and who draw inspiration from them, may help in some way to ensure the long-term protection of the range for the benefit of the generations to come. We are, after all, only looking after the Comeraghs for those who come after us, so that they may enjoy them and care for them as much as we do.

I trust that you will give due consideration to all of the above concerns when making your decision, and will uphold the democratic decision of Waterford City & County Development Plan to categorise the area as unsuitable for wind farm development, as you have done with other recent cases involving county development plans.

Yours faithfully,

N. Windsor Smith.