S. 37

File With: _____

SECTION 131 FORM

Defer Re O/H ☐

Appeal NO: PL 04.245824

TO: SEO

Having considered the contents of the submission dated/ received 21/12/15

from Obs

I recommend that section 131 of the Planning and Development Act, 2000 be/not be invoked at this stage for the following reason(s): No new material issues raised

E.O.: Rob Forde Date: 13/01/16

To EO: _____

Section 131 not to be invoked at this stage ☐

Section 131 to be invoked – allow 2/4 weeks for reply ☐

S.E.O.: _____ Date: _____

S.A.O: _____ Date: _____

M _____

Please prepare BP _____ - Section 131 notice enclosing a copy of the attached submission

to: _____

Allow 2/4weeks – BP _____

EO: _____ Date: _____

AA: _____ Date: _____

File with _____

OBSERVER FORM

Appeal No: PL 245824

S.37

Received: 21/12/15	Date Appeal Lodged: 30/11/15
	Date Last Appeal Lodged: 30/11/15
	Date of E.I.S. Publication:

Name: Anthony Cohu

Address/Agent: Boston, Barry & Co Cork

Status: Invalid – (insert reason):

VALID	INVALID
M: R Sutton	
1. Acknowledge with BP 470	1. RETURN TO SENDER with BP
2. Keep copy of Board's letter ☑	2. Keep envelope ☐
3. Prepare refund form ☐	3. Keep copy of Boards letter ☐
	4. Prepare refund form ☐

Attach to file

(a) R/S ☐ (d) Screening ☐

(b) GIS Processing ☐ (e) Inspectorate ☐

(c) Processing ☑

RETURN TO EO ☐

EO: Rob Forde

Date: 22/12/15

AA: [signature]

Date: 04/01/16

Comments:

Ecological Planning, Landscaping & Design

Anthony Cohu, C.Arch.

Borlin, Bantry,
Co. Cork
Ireland

Tel: +353-(0)27 66042
E-mail: ajc46@iol.ie

AN BORD PLEANÁLA
Received:
Fee: 50- cheque
Receipt No: B131963

The Secretary,
An Bord Pleanala,
64 Marlborough Street,
Dublin 1

17th December 2015

AN BORD PLEANÁLA
TIME BY reg.
21 DEC 2015
LTR-DATED FROM
PL

ABP No: **PL04.245824**

Planning Reg. No: Cork County Council 14/6760

Applicant: Barna Wind Energy Ltd.

Development: The construction of six wind turbines, with a maximum tip-height of up to 131m. and associated turbine foundations and hard-standing areas, 1no.permanent meteorological mast up to 90m.in height, upgrade of existing and provision of new site tracks and associated drainage, new access junction and improvements to public roads to facilitate turbine delivery, 1no.borrow pit, underground electrical and communications cables, permanent signage and other associated ancillary infrastructure. This application is intended to replace the development already granted permission under PL04.219620 (05/5907) and subsequently extended under 11/6605. This application is seeking a ten year planning permission. An Environmental Impact Statement (EIS) and AA Screening Report have been prepared in respect of the planning application.

Location: Lackareagh, Garranereagh, Lissarda and Barnadivane, Terelton, Co. Cork

A Chara,

I, Anthony Cohu of the above address, wish to make a formal Submission to the Appeal on the proposed Barnadivane Windfarm development as described above and enclose a cheque for €50 to cover the relevant fee.

1. European and National Renewable Energy Policies and Programmes have never been through a clear, comprehensive and verifiable Strategic Environmental Assessment procedure to establish their veracity and viability as required under EU Law, and are currently before the Courts of both jurisdictions. Until such time as these SEAs are prepared with full public participation, and the Policies and Programmes are amended accordingly, a moratorium on all windfarm development Projects should be placed, and all current windfarm applications based on such illegal Policies and Programmes before Planning Authorities should be invalidated or refused as premature, including the subject Application.

2. The proposal does not conform to the Guidelines on Wind Energy Development from the Department of Environment, Irish Planning Institute, Cork County Development Plan 2014, nor with Sustainable Development criteria.

3.The Application is premature until Cork County Council have developed a comprehensive Sustainable Energy Policy with an Alternative Energy Strategy for the County incorporating realistic, measurable targets for all the different technological options in their appropriate locations, and subjected this Policy to a publicly verifiable Strategic Environmental Assessment of its costs and benefits.

4.Taken in conjunction with Permitted and Existing windfarms in the area the proposal will create an excessive concentration of such development in a given landscape area.

5. A decision to grant Permission for the proposal on this site would be inconsistent with Refusals for similar proposals on similar skyline locations in unspoiled, open, landscape types particularly PL. 209745, 03/6910 where larger turbines were refused to a previously permitted windfarm.

6. The proposal is a Material Contravention of the C.D.P. 2014 under the Objectives for Energy Networks and Infrastructure, Renewable Energy, Wind Energy Projects, and Heritage and Environment since it is located adjacent to a High Value Landscape Area.

7. The proposed location is prominently visible from Scenic Route SR36 around Terelton. The views and prospects of valleys and rugged mountainous landscape from this Scenic Route would be seriously damaged by such a large-scale and extensive hilltop development. It will also be obtrusively visible from SR35 near Kilbarry at around 4km to the SE, and from the Gearagh at around 5km. to the S, and noticeably visible from SR32 near Inchigeelagh at around 10km. to the E, and from SR26 near Renaniree at around 10km. to the SE. As such, the proposal would be a Material Contravention of the C.D.P. 2014 policy for preservation of Heritage and Environment "where views from Scenic Routes are to be preserved or improved".

8. County Cork has already contributed more than its proportionate share of wind energy development to national renewable energy targets, and its new Wind Energy Strategy is unfit for purpose and already obsolete in further promoting such development in the County at the expense of other technological and land-use approaches.

Brief Planning History in the subject area

The location of the subject Application is in a landscape which had been generally excluded from the first wave of windfarm development, until PL04. 219620 sanctioned the 05/597 development proposals against the carefully reasoned advice of its Inspector. Indeed, the Bord has a history of rejecting the considerations of its Inspectors in relation to windfarming development without sufficient contra-evidence. Two of the permitted windfarms which have been constructed at Cappaboy and Milane Hill were recommended for Refusal by the ABP Inspectors at the time, recommendations over-ruled by the Bord. The Inspector for the subject Permitted development considered that the proposal to construct 14 turbines of 105m. height in this upland intimate rolling farmland mosaic, would be out of scale, and create excessive visual intrusion to existing houses nearby. '*I consider that the visual impact from the numerous residential properties scattered throughout and close to the site is considerable due to the proximity of turbines, their visual dominance in a number of locations (from regional roads, scenic routes,etc) and the poor relationship of the windfarm with the character and intimate scale of the landscape.... Neither has sufficient distance from buildings been achieved in order to avoid dominance by wind energy development. It is considered that the height of the turbines does not relate to thescale of the landscape elements within the site.*' The Bord disagreed with these clear and reasoned conclusions with no substantiating contra-evidence, or examination of the physical location, merely the opinion that National policy should override local concerns in this instance.

Barna Wind Energy (part of the Enerco Energy Group in Lissarda) currently holds a permit to erect 14 wind turbines of 105m. maximum tip height in Barnadivane near Terelton, CCC Ref. 11/6606. That planning permission includes a 110kV ESB substation. Arran Windfarm Ltd. (part of the Enerco Energy Group in Lissarda) applied for planning permission for a new 110kV substation in Barnadivane on 26 Sep 2014, CCC Ref. 14/557. Section 1.3 of the Environmental Report associated with this application specifically refers to the 14 permitted turbines. However, the site layout for the substation shows not one, but two transformers in the client compound.
A wind turbine of 105m tip height corresponds to a blade length of 35m on a 70m nacelle, with a maximum power output of 1.8MW. The permitted 14 turbines would therefore yield 14 x 1.8 = 25MW. What is curious is that Barnadivane windfarm has a Gate 3 connection assignment of 60MW (Ref. TG44). It would be reasonable to infer that 1 x 30MW transformer is for "Phase 1" and the second is for a second phase of another 25-30MW.
Two weeks after the closing date for objections to the substation passed (30 October 2014), Barna Wind Energy held a public information session in Macroom (12 November 2014) for proposed changes to the original 14 wind turbines permitted on CCC Ref. 11/6606. The Applicants now wish to replace the permission for 14 turbines of 105m maximum tip height with 6 larger turbines with a maximum tip height of 131m. as they consider it more economical to install fewer large machines. These will likely have a nacelle height of 85m and a blade length of 45m in order to generate the stated output requirement of 3MW per machine. Whilst the height increase is slightly under 30%, the swept area will increase by 70% from 3800m² to 6600m² with an associated power increase of 70% from 1.8MW to 3.0MW. One might assume that with 70% more power they will be louder than the originals, and 131m will certainly dominate anyone unfortunate enough to live close to the setback distance.

If the Planning Application for the new Barnadivane substation had been submitted in the name of the permit holder; Barna Wind Energy, it would have been a change to the existing permit which included the 14 turbines of 105m. However, it was submitted by Arran Windfarm Ltd. for the same location, although Arran Windfarm Ltd. has no turbines. But both companies are owned by Enerco Wind Energy. We assume that Arran Wind Energy had no knowledge that Barna Wind Energy was planning 6 large turbines to be connected to its substation, or it would have mentioned this in its environmental report (it did not – it referred to the permit for the existing 14).

It scarcely seems credible that two wind energy sub-companies of a major wind energy group could use such contradictory data in support of their Planning Applications at a single location in such a short time frame. The changes to the currently permitted Barnadivane windfarm consume just 18MW of the 60MW allocated to it. The question arises as to whether the remaining 42MW will be taken up with 14 more 3MW machines?
This appears another blatant example of project-splitting that is prohibited under the EIA Directive, and which has recently resulted in the Irish High Court quashing two ABP windfarm permissions for excluding critical elements of the windfarm development such as Grid connections in their EIAs.

In addition, the two 110kV circuits that are able to be connected to Aran Windfarm Ltd. substation are identified in the response by Fehily Timoney to the CCC request for Further Information. The response to Item2 of the FI request clarifies that Eirgrid requires the current 110kV AIS layout for new substations on page 2, stating that "*to allow for potential future expansion (in red on Eirgrid drawings)*". As can be seen from the Eirgrid site plans, Eirgrid required space provided for two transverse busbars (Busbar A and Busbar B). This facilitates connection of a second transmission line. What is curious is that the site layout in the planning application (Planning Ref. 14/557) does not show space for a second transverse busbar – it would therefore not comply with the Eirgrid template it purports to. It does however feature a blank space on its NE boundary.

Item3 of the FI request is for a detailed rationale as to why the original site is unsuitable. The response is revealing as Fehily Timoney submitted the constraints map showing proximity to turbine "X3" of the original permitted turbines (Planning Ref. 11/6605) as the reason. However, shortly after the Aran Wind Farm substation application, the modified Barna Wind Energy application (Planning Ref. 14/6760) was submitted to replace the 14 permitted 105m turbines with 6no. 131m turbines sited on different coordinates. This means that there would have been enough space to expand the original substation location. The new substation is of course nearer to the proposed six turbines, reducing cabling costs.

Policy Background

During the period since the original grant of Permission for a windfarm at this location by An Bord Pleanala in 2007, the intrinsic value and quality of such upland areas has not changed, nor their importance either nationally or to local inhabitants and visitors for amenity and recreation as well as agriculture and smallholding. What has changed are National Policies for expanding the Wind Energy industry brought in during the Celtic Tiger years with insufficient examination or review of the performance of existing windfarms, questioning of the economic incentives and cost-effectiveness of such developer-driven policies or indeed land-use implications. In the very recent past, we have seen what disastrous economic incentives have done to the property market and the rural landscape abetted by poor Planning decisions, despite warnings from informed commentators of this unsustainable approach.
The retiring An Bord Pleanala Chairman, Mr John O'Connor, told the National Planning Conference in Galway in May 2011 that "*my greatest regret is that the Bord did not take a stronger stand against residential developments that were based on bad zoning, remotely located and of poor design quality... **It is essential if we are to avoid a recurrence of the boom/bust cycle that demand is not artificially inflated by financial incentives and considerations.***" This is also true for the Wind Energy sector which is undergoing a heavily subsidised boom, and Mr. O'Connor believes that Government policy in aiming to develop indigenous and renewable energy sources, has in itself given rise to ongoing conflicts between the needs of such developments and other issues such as nature preservation, landscape and residential development. He said that the Bord had endeavoured to address these issues as best it could while receiving considerable criticism on occasion, and that policy development in the energy sector needed to factor in these considerations. Indirectly he was referring to the policy erosion evidenced by the current DoE Guidelines for Wind Energy 2006 which have effectively removed landscape protection as the primary planning concern in considering sanctioning of this form of development, and the unrealistic and unsubstantiated policy goals of tripling the contribution of the Wind Energy sector to the National Energy supply with the resultant land-use implications for 250% more windfarms sites – a total of over 450 windfarms if they are all to get built.

Ireland's National Renewable Energy Action Plan

Since the NREAP is the main policy foundation justifying the proposed project development, and one which is heavily relied upon by both Applicants and Assessors in examining all such windfarm proposals, it is perfectly reasonable to investigate both the aims and objectives of such policy, and the real performance of resulting project developments to see whether they are delivering on their claims. In doing so, our Objection makes no apologies for highlighting some of the realities, questioning myths which have arisen, and the consequences of further uncritical sanctioning of such a form of development. Planning Authorities must be mindful of short-term national public policy, but must balance this against the long-term public interest of landscape protection from any form of inappropriate and damaging development – not least in remote or unspoiled rural locations.
In answer to the claim by the Applicants that wind energy is having real and significant benefits in reducing the carbon intensity of electricity generation right across the EU, we submit extracts from three significant papers which contradict this view for Ireland.

The first by Owen Martin using Eirgrid's own data, shows that the watt-for-watt displacement of thermal power by wind power has not occurred in Ireland, and that wind power is only saving fuel from a larger generation capacity that has grown out of proportion due to accommodating wind.

• Including the East West interconnector, Ireland's back-up capacity increased by 21% since 2006. This is despite falling demand. For every 1MW of wind, 1MW of back up conventional (dispatchable) generation was built.

• An additional minimum of 1,200 MW of fossil fuel/dispatchable plant is required to back-up the amount of additional wind farms required to meet the renewable targets - that's equivalent to a thermal plant 1 and a half times the size of Moneypoint.

• Reducing demand for electricity in Ireland is crucial to reaching renewable targets. The Irish Government are in precarious situation whereby they have to encourage growth and resulting increased electricity consumption and at the same time encourage less electricity use.

• Grid25 is needed to accommodate extra wind and back-up capacity to keep the system secure. Eirgrid admit this will have potential environmental effects.

• Capacity payments have increased and will increase more to keep back-up generators viable, all paid for by consumers.

• No justification is given for the surplus of generation supply. Ireland is still dependent on the EastWest Interconnector despite this surplus and reduced demand.

• Tarbert heavy fuel oil plant, one of the most polluting plants in Ireland, was due to close last year but will now stay open until after 2020. In other words, it is (paradoxically) crucial to meeting our renewable targets.

• Due to increasing wind penetration, back-up plant has been forced to cycle frequently, increasing the risk of unexpected outages. So we have the bizarre situation whereby additional back-up plant is required to back-up existing back-up, which accounts for the surplus of generation supply.'

Each additional windfarm now added to the Grid is counterproductive in real terms, not simply environmentally, but economically too. The second study, by Pat Swords, examines the recent SEAI Report claiming that wind energy was making substantial savings to our imported fuel bills and found to the contrary.

"SEAI claim for 2011 that 20% renewables reduced fossil fuel usage in electricity generation by €300 million, which implies that €1.5 billion of fossil fuel is required for electricity generation without renewables. However, in a different report for the same year, they demonstrate that fossil fuel usage for the no wind situation is €1.14 billion per year – a discrepancy of 32%. Eirgrid / SEAI used a computer model which is incomplete, as it makes no allowance for the inefficiencies induced on the thermal power stations, which have to burn more fuel balancing the highly variable and intermittent input from wind turbines. When these inefficiencies on the grid due to wind energy are included in the financial assessment, the total cost of fossil fuels for the 'no wind' scenario in 2011 was €1.04 billion, which was somewhat elevated due to the non-availability of some cheaper coal and peat generation for part of that year and the corresponding higher use of expensive gas.

Furthermore, in 2011 it cost Irish electricity consumers an additional €157 million in electricity charges to substitute €130 million of fossil fuel generated electricity with wind energy. This represents a price increase of 121% for the substituted electricity and is actually an underestimation of the true cost, as it does not include the cost of grid expansions to facilitate those wind turbines.

(i) With wind energy one has to have two grids with two sets of generation systems. The first the conventional one, while the second one scattered around the country with new grid lines, turbines etc, is really only effective when the wind speed is double the national average, which simple maths indicates doesn't happen very much.

(ii) The existing conventional generation is now working more inefficiently, in stop-start mode like a car in urban cycle rather than on steady load like a car on the motorway. Therefore the unit generation costs from the conventional

generation increase.
(iii) Wind energy when it does produce is not cost-competitive with conventional generation, that is why it has to be given preferential treatment, namely priority access to the grid when it is able to produce and a tariff (payment) above conventional generation market rates.
When you add (i), (ii) and (iii), it is not in the least bit surprising that one comes up with the figure above for 121%, which reflects how the grid actually behaved in 2011. As more wind goes on, the cost situation will become worse. In fact one can see this with the electricity rates which apply today in all countries which aggressively pursued the installation of large amounts of intermittent wind and solar based generation."

Assessments of the environmental and economic benefit of wind power are not credible unless they are based on accurate emissions, fuel and cost savings.
Both the above studies refer to the work of Dr Joseph Wheatley "*Quantifying CO2 Savings from Wind Power: Ireland*", which is again based on actual real-time data from Eirgrid Network Reports. The CO2 emission savings claimed by public agencies are considerably lower in reality, from the 0.53tCO2/MWh rate used by Eirgrid to 0.28tCO2/MWh – an emission reduction effectiveness approaching 50%. This doesn't include the life-cycle emissions involved in the construction and installation of windfarms which are estimated to be in the range of 0.02–0.08tCO2/MWh, and at the upper end of this range become a significant fraction of operational CO2 savings. The subsidies (REFIT) required to induce the required investment in wind power to meet the legally binding renewable targets are granted under a National Renewable Energy Action Plan (NREAP) which was enacted in breach of the Aarhus Convention and thus the NREAP and REFIT are likely illegal rather than legally binding. Grid 25 is a component of a system which was, in toto, imposed in breach of the Aarhus Convention . The only sustainable and legal solution is an energy policy that is based on sound engineering and properly balances electricity demand, economic costs and environmental impacts.

Finally, in relation to claims that wind energy is having real and significant benefits in reducing the carbon intensity of electricity generation right across the EU, we would highlight the following comments:

"The amount of electricity generated from coal is rising at annualised rates of as much as 50% in some European countries. Since coal is by the far the most polluting source of electricity, with more greenhouse gas produced per kilowatt hour than any other fossil fuel, this is making a mockery of European environmental aspirations. How did it happen?"
http://www.economist.com/news/briefing/21569039-europes-energy-policy-delivers-worst-all-possible-worlds-unwelcome-renaissance
"But at the moment, EU energy policy is boosting usage of the most polluting fuel, increasing carbon emissions, damaging the creditworthiness of utilities and diverting investment into energy projects elsewhere. The EU's climate commissioner, Connie Hedegaard, likes to claim that in energy and emissions Europe is "leading by example."
The Danish Economic Council has stated that: "*The wind power expansion in the 1990's is an example of a policy that was unprofitable from society's point of view, even taking the economic advantages that the wind industry enjoyed into consideration*" (DORS 2006, P.14). "*Taxes and charges on electricity for Danish household consumers make their electricity by far the most expensive in the EU (OECD, CEPOS Wind Energy-The case of Denmark, 2009). These taxes and charges stem from the substantial subsidies which have been directed to the Danish wind industry over the years. From 2001 to 2005, for example, the yearly subsidy was 1.7-2.6 billion DKK and the subsidy per job created was 600,000-900,00 DKK ($90,000-$140,000). Furthermore, the arrival of wind power in Denmark has done nothing to replace the need for thermal plants that can deliver secure and cheap district heating."*

We would reiterate that the most cost-effective means of CO2 reduction for the energy sector is not the generation of superfluous electricity supply, but the reduction of electricity demand through energy efficiency measures. These have always been the primary strategy advised by the EU, and in the initial NREAP proposals formed the significant proportion of public policy measures to meet emissions targets, that were subsequently diverted to promoting wind energy development.

Wind Turbine Size and Performance

Since the first 1996 DOE Guidelines examined the wind energy technology available at the time, it is perfectly relevant to examine the limitations of the development of wind energy technology, particularly since the size of towers and rotors has grown in the belief that they can therefore produce more electricity from a given site area. Re-powering with bigger turbines might look like obtaining more electricity from the same area of windfarm, but for a number of fundamental physical reasons this is unlikely to be true. As machine size and power increase so the necessary spacing between towers increases, both following a square law, thus cancelling the gain. Simplistically, the amount of wind energy which can be collected from a windfarm of a given area is a constant.

Another consequence of power laws is that increasing the diameter of the rotor is initially a very productive way of enhancing wind generation, but requires more investment in structural materials for tower and rotor. The height–diameter relationship follows a square law but the need for additional strength of materials is cubically related, and thus overtakes growth in size and potential generation. This "square–cube" relationship will probably set a maximum size to wind generators. The area relationship with energy harvest and cubic relationship with wind speed are not just a matter of academic interest but have implications for all aspects of wind power from the size and visual impact of the machines in the landscape, to the huge problems of integrating intermittently variable output into a distribution system which must maintain instantaneous and close-tolerance balance of generation versus consumption.

Wind turbines are both relatively inefficient, and ineffective for different reasons. They are not actually turbines, as they do not use the Venturi effect to increase the air-flow pressure on the generator by funnelling the energy source to increase velocity as a water turbine or jet turbine does, so are more correctly called aerogenerators. No more than about 59% of the wind energy can be extracted by such an air-rotor as the airstream passes through it, but once losses in the drive–train and alternator are added in the overall efficiency is around 30% or less which is lower than the fuel efficiency of thermal power stations. Such machines have become bigger but no more efficient.

They are ineffective because they frequently cannot run at all and for much of the time generate far less than maximum theoretical output. For example, according to Eirgrid's winter forecast, the expected capacity factor in Ireland for 2013–2014 was in the region of 15%, hardly enviable worldwide one would imagine. Because of the short-term variability of wind power, when more windfarms are built, maintaining security of supply will become progressively more difficult and steps will have to be taken to ensure adequate backup is available. **This is a key problem of wind power and other intermittent renewables as shown in the attached reports.**

There are multiple consequences of wind power intermittency:
1.Generation can be entirely lost and must be replaced by instantly available capacity from another source usually fossil fuelled generation as back-up.
2. Over time, because the generation is often way below maximum, and because wind speed is chaotically variable, the available MW can vary rapidly and unpredictably between zero and maximum, so the back-up must also be able to cope with such fast variation of demand.
3. Over time, fewer than the potential maximum MWh are generated. The ratio between the actual MWh generated and the potential maximum is referred to as the Load Factor. The designer of the turbines, the developer and the developer's bankers have a vested interest in predicting Load Factor as it determine the income and cost-effectiveness of the venture, based on MWh per year generated.
4. If, as policy-makers often do, it is suggested that wind power may increase security of electricity supply by replacing thermal fuels from politically unstable sources, then intermittency affects the "firm capacity/capacity credit" of wind power which indicates how much thermal generation could be permanently closed down per unit of wind power installed.
5.Over time, fewer than the potential maximum MWh are generated, thus displacement of fossil fuel CO_2 is a function not only of the installed capacity of the turbines, but also of the Load Factor. This is often misunderstood and repeatedly misquoted in the media, as in the recent SEIA report.

Department of the Environment Guidelines

In referencing the original 1996 Dept. of Environment Guidelines on Wind Energy, it is intended to illustrate how public policy had been blown off-course and deviated from sensible and appropriate land use considerations for such development. The 2006 Guidelines made no meaningful attempt to comprehensively advise Planning Authorities on quantities of windfarms, appropriate sizes of installations, appropriate locations in relation to normal planned infrastructure – in fact no land use planning guidance at all in quantitative or qualitative terms. If indeed the Guidelines were deliberately designed to avoid being prescriptive, giving the maximum freedom to locate such development regardless of even SAC Designation, they are now being used prescriptively when suits, as in the case of the recent Ministerial Orders to Counties Westmeath and Donegal preventing the Councillors' decision to increase set-back distances between windfarms and dwellings in their Counties.

Rather than providing "very good guidance for Planning Authorities **wishing** to draft wind energy strategies for their functional areas", they give little choice in the matter or so we are continually told by Planning Officers. If the recent decision by Laois County Council to instigate a blanket-ban on windfarming in the County is not

reversed by Ministerial Order or the High Court, then other Planning Authorities may indeed feel free to follow suit and consider the Guidelines non-prescriptive. No other form of development was ever given such promotion under the Planning system with so little performance monitoring, yet generated so much controversy and opposition.

The Heritage Council's comprehensive assessment of these DOE 2006 Guidelines is damning, finding them obsolete and unfit for purpose. The partial Revisions under Review go nowhere near remedying these deficiencies. The fact that over 40% of installed wind capacity is located in the South Western Counties of Cork, Kerry and Limerick alone demonstrates not how suitable the landscape is for such development, but how little landscape quality is truly valued, and how Planning Policy and the Development Control system has failed to prevent scattered ad-hoc rural industrial development reminiscent of suburban sprawl and the spread of ghost estates. In planning terms, the Guidelines should have advised where the optimum location for such development would be in the light of the National Spatial Strategy framework, given a whole range of parameters, not simply leaving it to the market to find the best location for wind speeds on the cheapest land.

In the original "*Windfarm Development - Guidelines for Planning Authorities 1996*", the D.o.E. addressed many of the landuse challenges presented by wind energy development. However, they failed to identify the limitation of the technology currently available, which is at best only 25% efficient in converting wind to electricity, and which is at the limits of its potential development. **Wind "turbines" of the tower and rotor variety are getting larger but no more efficient.** The biggest turbines currently operating have a theoretical capacity of 3.0MW, but since the average output is only ca. 25% of theoretical capacity, this gives an actual output of under 750kW. The D.o.E., in using the term Windfarm, also fell into the linguistic trap of assuming rural locations for such development. The original Guidelines did attempt however to indicate which areas of the Country were suitable for wind energy development and significantly, this did not include the South-West. They also suggested that locations close to existing energy infrastructures from peat burning electricity stations were more suitable while flat landscapes, which allow steadier wind flows, were of greater benefit to windfarms. As a consequence, the question must be asked as to whether Windfarm proposals are at all appropriate to the scenic upland areas of West Cork.

However, the Wind Energy Guidelines 2006 eroded this cautious approach to Windfarm location, and no single area in the country is protected either by designation or otherwise from the possibility of Windfarm development. These current Guidelines 2006 pay more attention to the promotion of windfarms without a substantial analysis of their performance since 1996, or the landuse implications of increased targets for their deployment. They overstate the strategic importance of the Wind Energy Sector in contributing to the National Climate Change Strategy, reducing dependence on fossil fuels and reducing greenhouse gas emissions while producing no independently verified substantiating evidence. They effectively remove any landscape type or location in Ireland from the potential siting of windfarms on the basis that there are few landscapes that have not already been influenced by man, and that windfarms are just another form of development that must be accepted and can be integrated into the landscape through "mitigation measures". While advising Local Authorities to utilise Grid network data and routes in preparing Strategic Search Areas, they fail to require Grid connection details as part of the Planning Application as required by EU Law, and they omit to classify different sizes of windfarms or their impact on different landscape types. This is in direct contravention of EU case law on Project Splitting. As Guidelines, they should be urgently updated to restore an accurate balance in examining social benefits and environmental costs better reflected in the original 1996 document.

Irish Planning Institute - Guidelines for Wind Energy

This document, originally published in 1995, was far more comprehensive and detailed than the DoE Guidelines and addressed all of the issues raised by large-scale Wind Energy development projects in the Irish landscape. It acknowledged the wind resource of the Western seaboard, but clearly recognised the semi-wilderness landscape quality and scenic amenity of such areas and the potential land-use planning conflicts already witnessed in other European Countries, notably the UK and Denmark. It suggested that primary locations should be sought near existing electricity-generating stations or in already developed / industrialised areas. The I.P.I. recognised that the usefulness of wind energy generation to the National Grid was limited (and still is) to complementing supplies from conventional sources; that an optimum size of wind tower and rotor would be around 65m in total; and that windfarms should be classified as small scale (5–10 turbines), medium scale (10–15 turbines), large scale (15+ turbines).

They also recommended that Development Plans deal with wind energy development and wi[illegible]arms by producing suitable policies that would include:

- Assessment of the County's natural resources in terms of renewable energy potential.
- Suitability of different areas for transmission to the National Grid.
- Landscape assessment and suitability for Windfarm development.

But, as a first step, they recommended a County Statement of Renewable Energy Potential:

- Major developments or municipal facilities with potential for combined-heat-and-power (CHP) or landfill gas exploitation;
- Pilot projects for community-based Biogas production in agricultural areas;
- Wind energy potential of different parts of the County;
- Areas where Tidal or Wave Power could be carried out;
- Areas with small-scale Hydro potential;
- Areas with Biomass conversion potential.

Unfortunately, these IPI Guidelines have never been updated and cannot now be found on the IPI website. Indeed, the Irish Planning Institute sadly appears to have adopted the 2006 DoE Guidelines, without their own independent assessment of the performance and land-use implications of the Wind Energy sector.

Cork County Development Plan 2009

The Cork County Development Plan 1996 has been reviewed twice, in 2003 and 2009, and each time policy support for Wind Energy projects has been strengthened with detailed policies for Energy Networks, Renewable Energy, and Wind Energy. However, there is still no **Sustainable Energy Policy for the County, which places Sustainable Energy Consumption, Energy Conservation Measures and Efficiency of Generation at the head of its programme. And there is still no Renewable Energy Strategy for the County that assesses the County's natural resources in terms of renewable energy potential, and indicates the most appropriate locations for the most appropriate technologies for the different areas of the County.** Consequently, the new 2014 Policy on Renewable Energy is incomplete, while that on Wind Energy gives unjustifiable encouragement with insufficient guidance to potential developers. Even the size of windfarms has not been categorised into small, medium or large scale, while the map of Strategic Wind Areas is ambiguous, too large a scale, and fails to clearly show the locations of all existing and permitted windfarms in the County.

The following objectives from the CDP 2009 would have precluded the 11/6605 Grant of Permission to the extended proposed development had they been rigorously followed:

INF 7-1 *(c) It is an objective generally to protect areas of recognised landscape importance from construction of large-scale visually intrusive energy transmission infrastructure. In such circumstances it is an objective to seek alternative routing or transmission methods.*

INF 7-3 *It is an objective generally to encourage the production of energy from renewable sources, including in particular that from biomass, waste material, solar, wave, micro-hydro power and wind energy, subject to normal proper planning considerations including in particular impact on areas of environmental or landscape sensitivity.*

INF 7-4 *(a) It is an objective to encourage prospective wind energy businesses and industries. In assessing potentially suitable locations for projects, potential wind farm developers should focus on the strategic search areas identified in the Plan and generally avoid wind energy projects in the strategically unsuitable areas identified in this Plan.*

(b) It is an objective to support existing and established businesses and industries who wish to use wind energy to serve their own needs subject to proper planning and sustainable development.

(c) It is an objective in the strategic search areas (and in those areas that are identified as neither strategic nor strategically unsuitable areas), to consider new, or the expansion of existing, wind energy projects on their merits having regard to normal planning criteria including, in particular, the following:

- *The sensitivity of the landscape and of adjoining landscapes to wind energy projects;*
- *The scale, size and layout of the project, any cumulative effects due to other projects, and the degree to which impacts are highly visible over vast areas;*
- *The visual impact of the project on protected views and prospects, and designated scenic landscapes as well as local visual impacts;*
- *The impact of the project on nature conservation, archaeology and historical structures;*
- *Local environmental impacts including noise, shadow flicker;*
- *The visual and environmental impacts of associated development such as access roads, plant, grid connections;*

(d) Similar criteria would be taken into account in the strategically unsuitable areas except that suitable projects will generally be on a smaller scale and on very special, carefully chosen sites.

A whole range of policies for the protection of the Environment and Heritage of Cork County were contained in the C.D.P. 2009, and proper observance of these would have precluded the subject site from the proposed development.

ENV 1-9 *Features of Natural Interest. It is an objective to maintain and enhance these features including hedgerows, woodlands, tree lines, and veteran trees, grass lands, rivers, streams, lakes, and other wetlands, coastal and upland habitats.*

ENV 2-6 *General Visual and Scenic Amenity. It is general objective to protect the visual and scenic amenities of County Cork's built and natural environment.*

ENV 2-7 *Scenic Landscape. It is a particular objective to preserve the visual and scenic amenities of those areas of natural beauty identified as "scenic landscape" and shown in the Scenic Amenity maps in volume 3.*

ENV 2-9 *General views and Prospects. It is a general objective to preserve all important views and prospects, particularly sea views, river or lake views, views of unspoilt mountains, upland or coastal landscapes, views of historical or cultural significance or views of natural beauty.*

ENV 2-11 *Scenic Routes. It is a particular objective to preserve the character of those views and prospects obtainable from Scenic Routes identified in the Plan.*

ENV 2-12 *Details of Scenic Routes. It is an objective to preserve the character and quality of those particular stretches of Scenic Routes that have very special views and prospects.*

ENV 2-13 *Development on Scenic Routes. It is also an objective to require those seeking to carry out development in the environs of a Scenic Route and / or an area with important views and prospects, to demonstrate that there will be no adverse obstruction or degradation of views towards or from vulnerable landscape features.*

ENV 3-1 *Archaeology. Zones of Archaeological Protection. It is an objective to protect the zones of archaeological potential located within urban and rural areas as identified in the record of Monuments and Places.*

Cork County Development Plan 2014

This new CDP has just been approved, and during the Draft phase, a considerable number of public submissions were made on the Wind Energy Strategy urging the Planning Authority to limit the proliferation of further windfarm development in the County, and place a moratorium on such development. These submissions cannot be accessed or read on the CCC website, but it is clear that the Planning Authority rejected such recommendations despite the strong factual evidence presented, and the precedent set by Westmeath County Council in activating a moratorium on such development in its recent CDP. An Bord Pleanala is not bound by the inadequate provisions of the CDP 2014 in the following respects.

Proportionality

- The Cork County Development Plan 2014 extols the County as the location that exceeds the wind energy generation capacity of all other counties; this is an unnecessary burden on the citizens who are residents of the County. The principle of proportionality provides that it is sufficient to play an equal part with all other counties in the State.
- Since Cork County consumes only 12-13% of national electricity use, with a maximum likely increase of 6%, over the life of the CDP based on Eirgrid's national rate of 1%per annum, this should form the basis of developing specific targets for all of the potential energy sources in the County, and not the unsubstantiated demand increase of 60% quoted from the Regional Planning Guidelines in the Energy Background Paper.
- All the County renewable energy options should be ascribed generally suitable locations with quantified targets for each, to contribute to an overall target for the County proportionate to the overall NREAP target.

Deployment

- The deployment of any further Cork County wind energy projects should be confined to the corridor of the 220KV network rather than the 38/110KV network which is dispersed into many areas of scenic landscape.
- The only further installations to be sanctioned in the few areas remaining appropriate for wind energy consideration in County Cork should be those that serve households, farms and estates sited close to the Grid as part of a renewable strategy that is community-based.
- A much reduced total area of appropriate location, open to consideration would be 5%, not 55% as stated in the Wind Energy Strategy.

Visual Impact

- Precautionary separation distances for wind energy installations from domestic dwellings and schools, based on the latest recommended factors of 2km for 100m overall height, should be incorporated into the sieve-mapping methodology.
- Property values should also be mapped from the Local Property Tax (LPT) database and used as another sieve layer to inform the WES.
- Sieve-mapping should also include layers of Archaeologically sensitive landscapes and designation of these should be prioritised before the WES can be completed.

- Physiographic cross-sectional data should be used to demonstrate the landscape designations and the potential visual impacts of wind energy installations on the 'areas likely to be most suitable for wind energy projects' and the adjacent 'areas of high landscape importance'.
- Physiographic cross-sectional data should be used to demonstrate the cumulative visual impacts of existing and permitted wind energy installations in the County.

Protected Areas

- The river Ilen basin and the area South of the Gearagh Nature Conservation Area should be considered as sufficiently important to be protected from wind energy development as per para. 4.65 of the Background Paper. It is completely contradictory to designate such areas as Acceptable in Principle for wind energy development, when adjacent to areas of High Landscape Importance where it is normally discouraged.
- This could result in commercial wind energy installations directly above Castletownshend for example, or along the Scenic Route above Skibbereen and Leap. No areas acceptable in principle should be designated outside the 220kv corridor.
- The Borlin, Ouvane, and Mealagh Valleys should all be designated as High Value Landscapes from their sources to their outfalls in Bantry Bay. The roads serving them should be given Scenic Route status and they should not be Open to Consideration for commercial wind energy generation. They could, however, be considered appropriate for micro-hydro energy generation. There are already two existing commercial small-scale hydros on the Borlin river system and one on the Owengar/Ouvane system.

Obsolete Assumptions

- There is a risk that the Cork County Development Plan 2014 Energy Policy in general and Wind Energy Strategy in particular are based on obsolete and incorrect assumptions, such as the 60% projected increase in County electricity demand during the life of the Plan. In particular the 'Planning Guidelines for Wind Farm Development' issued by DoELG in 2006 have been overtaken by subsequent technical developments and the National Renewable Energy Action Plan (NREAP) which was submitted to the EU in 2010 under Article 4 of Directive 2009/28/EC is now before the High Court.
- Two recent High Court decisions have quashed ABP Grants of Permission for windfarms, one at nearby Renaniree, which did not include full details and assessment of Grid connections as part of their EIA of each project. This practice is known as 'project-splitting' and has been ruled on frequently in Europe by the ECJ as in conflict with the spirit and substance of Environmental Impact Assessment Directive.
- Two recent ABP decisions in West Cork, near Ballingeary and Kealkil, have refused Permission for windfarms on the basis of inter-visibility with other existing and permitted windfarms, and excessive density of windfarms in a given landscape area. These aspects of prior rulings have not been translated by the Planning Authority into the Wind Energy Strategy as appropriate, nor has requiring a developer to submit full details of proposed Grid connection with any windfarm Application, nor indicating which areas of the County have already reached saturation density of existing or permitted windfarms.

Transmission Network

- The national electricity network extension and renewal priorities were examined and set in the National Development Plan 2002-2020. They did not require a completely new parallel grid development for wind energy generation, or a spatial strategy to locate this form of development at such a distance from the main grid in County Cork.
- This has only recently appeared on the menu, driven by the wind energy export lobby and by EirGrid's conflicted status as a semi-state infrastructure provider which must also create profits. Claims that such unscheduled grid extensions are strategic infrastructure and therefore necessary for security of supply make no sense in areas where there are already parallel existing duplicate networks, such as the deeply resented additional 110kv line between Macroom and Dunmanway recently permitted by An Bord Pleanala.
- The existing 38kv network serves mainly the more outlying areas of the County, particularly West Cork. The Energy Infrastructure map shows the main 220kv network running West to East picking up the main population centres, and much of the concentration of wind energy installations in North West Cork and its Kerry border.
- This corridor makes better land use and economic sense for wind energy grid connection than a random and scattered approach using the 38kv and 110kv networks, with reduced collateral damage to the less developed landscape.

The policies towards Renewable Energy, Wind Energy and Energy Networks contained in Chapter 9 of the 2014 CDP, include a map showing Strategic Search Areas for Wind energy projects and the subject site is located in an area Acceptable in Principle which is adjacent to a High-Value Landscape. However, it is not buffered by an area Open to Consideration, as would be logical and sensible, and require a greater standard of suitability assessment

Sustainable Development Criteria

Under the Planning and Development Act 2000, Local Authorities must regulate the Proper Planning and Sustainable Development of their subject areas. However, in the absence of specific Sustainable Development Criteria such as those published by Cork Environmental Forum in 1998, and included in the CDP 2003, this term has become devalued, or subject to misinterpretation. Nevertheless, these principles, derived from the original 1992 Environmental Summit in Rio, are still valid and applicable to the assessment of all types of development projects :

Resources are used efficiently and waste is minimised by closing cycles;
Pollution is limited to levels which natural systems can process without damage;
Natural Diversity is valued and protected;
Local needs are met locally where possible;
Good food, water, shelter, and fuel are available to all at reasonable cost;
Satisfying work in a diverse economy is available to all;
Good health of the community is protected;
Environment is not damaged by access to facilities, services, goods and other people;
Personal safety of the community is secured from crime and violence;
Skills, knowledge and information are accessible to all;
Participation in decision-making is extended to the whole community;
Culture, leisure and recreation opportunities are readily available to all;
Local distinctiveness and character are valued and protected.

In terms of meeting Sustainable Development criteria, this current Application for a windfarm proposal:

- does not preserve the **distinctiveness and character of the area**; rather it alters these qualities significantly in ways which are not acceptable to those residents who will have to live with it;
- does not meet **local needs for the production of electricity services** of which the local population will be direct economic beneficiaries;
- does not prevent **damage to the environment** in providing infrastructure services;
- does not **promote participation in decision-making of local residents** since it is not a proposal generated by the community itself or one in which they have participated.
- does not **value or protect natural diversity** of an upland habitat area.

The current Application 14/6760 Environmental Impact Statement

We have consistently argued that Planning Authorities should seek their own EIS preparation from a panel of respected independent consultants, with the costs levied on the Applicant. Not only would this ensure better quality and impartiality, but would relieve the Planning Officers of the need to be technically conversant with every aspect of environmental engineering during assessment. The current failure of any Local Authority, including Cork, to produce its own Environmental Impact Assessment on any particular qualifying proposal is illegal under EU law as explained in Annexe 1 to this submission. This particular developer's EIS is not sufficiently scoped to establish the full range of social, economic and environmental impacts of the proposal and its connection to the ESB grid. The EIS reads more like a promotional document for the windfarm, and is not a substitute for a balanced environmental impact assessment of the suitability of the area for further wind farm development. Various factors have not been considered, inadequately addressed or misrepresented. It should not be considered as a thorough scientific assessment given the doubts that can be shed on its impartiality, methodology and accuracy. The Planning Authority must be confident that a) the work contained in the EIS has been fully prepared with due diligence and that b) should the development be permitted that the conditions imposed (if any) would be complied with and enforceable.

For example, the map showing concentric distance radii on page 17 of part 2 (main) of the EIS shows numerous non-consented houses within the 1km radius, including H55 (580m), H15 (600m), H17 (700m), H39 (700m), H29 (800m) and H41 (800m). The safety of these in view of the recent spate of Irish wind turbine blade throws (Loughderryduff, Corkermore and Cappaboy) must form part of the EIS and the EIA process. The shadow flicker analysis appears totally inadequate, while the noise data seems minimal. Section 1.2 (2) of the main EIS states that this proposal reduces the number of turbines from 14 to 6. It would be desirable that in any Grant of Permission, the remaining potential of 8 are explicitly prohibited from being the subject of a future application, particularly since the 18MW for these 6 does not consume the substation sized capacity of 22.5MW specified in the introduction to part 1. Section 2.3.4 of part 2 mentions that the turbine transformer will be self-bunded, but there is no mention of nacelle fluid bunding.

Visual Impacts

The current windfarm proposal fails to conform to the IPI Guidelines. The turbines towers and rotors at a total height of 131m. are nearly twice the height of County Hall and twice the IPI recommended height of 65m. and will have considerable visual impact over large distances. The proposal does not avoid the skyline and is not sited against the backdrop of a hill to lessen the impact. Connecting lines from the windfarm to the ESB 38kv line have not been included in the Application. The transformer housing is not underground and potential damage to the local road network is not recognised. Mitigation of the visual obtrusion is impossible, even when nearby afforestation has reach maturity of around 25m height.
The section on Visual Impact Assessment prepared by the planning consultants fails to meaningfully demonstrate through photo-montages the likely visibility of the proposed development from sufficient relevant view points. Its visibility from Scenic Routes to the West, the North West, the North and particularly around Terelton, is significant and not thoroughly examined. Since the site is in an area Acceptable in Principle that is adjacent to an area High Landscape Value, and very visible from this area, it is inaccurate to say that there will be a minor visual impact only. It is also confirmed in the EIS that numerous properties will experience a high level of visual intrusion, although not all of these will experience high levels of shadow flicker and that no mitigation of these levels can be achieved.

Planning History

In relation to the Planning history, it is implicit in the EIS that the main objection to windfarm development is the views from designated Scenic Routes rather than inherent difficulties with the receiving landscape itself. This is patently contradicted in the An Bord Pleanala Inspectors' Reports recommending Refusal for windfarms at Milane Hill, Cappaboy, Goulacullin, Mullaghmesha, and Coomlea. There are many other grounds for Refusals stated including: adverse impacts on amenity, tourism, and recreational potential; being visually and unduly obtrusive and out of character; injuring the natural beauty of an area; creating cumulative impacts with other windfarm developments; and having adverse effects on property values.
In common with many of these previous Applications, it is clear that the local residents in the nearest properties will bear the environmental cost without gaining any social or economic benefits. In fact they and the wider community will bear hidden economic costs through paying more PSO levies for their electricity to subsidise the construction and operation of this and all other windfarms.

Green Tourism

The EIS ignores the tourism value of the receiving landscape, and that the environment should be maintained and enhanced as the fundamental resource of the tourism sector. It suggests that windfarms do not affect the way tourists view our countryside, contrary to the views of the Bord's Inspector, while the latest Failte Ireland Survey on visitor attitudes to wind farms has evidence of increases in negative views of windfarms. The West Cork Development Partnership has recently calculated that hill-walking tourism is worth around €22m. annually to the West Cork region. Locally, green tourism has been promoted, while activity holidays based upon hill-walking and cycling on way-marked routes are now the most important attraction in this part of South West Cork. Accommodation is provided in guest houses, smallholdings and farms from Inchigeelagh to Ballylickey, together with a planned Hillwalking and Cycling Centre at Carriganass, and an up-grading of the Mealagh Valley Community Centre to cater for visitors, recently awarded funding by the WCDP.

Natural Heritage Impacts

While the baseline studies of the Flora and Fauna in the EIS do assess whether there are significant species whose habitats will be damaged by the proposed development, no mention is made of the fact that local people consider and confirm that there is important bird life in the area, including regular sightings of Hen Harriers, Choughs, Ravens, while Sea Eagles have now begun to be sited on Lough Allua. In the context of the death of a Sea Eagle in collision with a wind turbine near Kilgarvan 20km. to the West of the subject site, it is not just bird habitats that are at risk from the proposed windfarm, but the birds themselves.

Archaeology Impacts

The proposed windfarm site lies within an area richly endowed with significant archaeological structures, and of Significant Archaeological Potential. There are numerous recorded monuments including Stone Circles, Standing Stones, a Souterrain, a Boulder Burial, Megalithic Tombs, and Fulacht Fia sites within a 5km study area of the site.

The location of most of these monuments will have visibility of the proposed windfarm. The potential impact on the archaeological features and an important local archaeological landscape has not been thoroughly assessed by the EIS. The various visual impacts mentioned omit the most obvious factor - that the many important archaeological sites in the surrounding landscape, surveyed, catalogued and valued by local residents and professionals alike as a uniquely dense association of sites, are to be completely overwhelmed after between 500 and 2500 years by overlooking from this wind farm development. The landscape will become a monument to scattered and inappropriate industrial development, rather than to a cultural history from Prehistoric times to the present day existing in contemporaneous harmony. In relation to the subject proposal, the Archaeological Impact Assessment submitted is insufficient to reasonably conclude that the acknowledged visual impact would not be significant and would be acceptable.

Noise Impacts

This is one of the most worrying and contentious issues for nearby residents. The change in the likely planning environment which may come about due to increasing public concern about the health implications of siting windfarms in such close proximity to dwelling houses is particularly relevant as a Bill has been introduced into the Oireachtas by Senator John Kelly limiting the proximity of future windfarm developments to human habitation. The limits he proposes are in line with changes proposed in the UK and other parts of Europe and would definitely preclude this development, as the proposal is for a separation distance of 1km minimum for a wind turbine maximum height of 100m and a separation distance of 1.5km for a turbine height of 100m-150m. In recent months, Donegal County Council have voted in a 10 times tip height setback distance to protect private and public properties. In the case of the subject application this would mean 1.3km. for 131m. high machines.

There is now considerable evidence that the lack of DoEHLG Guidelines on measurements of background noise levels is allowing measurements made with dubious methodology which allow elevated levels to be set as the base criteria for defining the maximum noise levels permitted at nearby receivers. The original Guidelines referred to (DoEHLG) are based on a UK recommendation ETSU-R-97 which again is not universally accepted (except by the Wind Industry). These guidelines were prepared for the Department of Trade and Industry in the U.K. which is the government department charged with the promotion of industry rather than the protection of the environment. The DoEHLG Guidelines do mention that areas of special recreational amenity importance where a quiet environment is highly desirable may have noise limits imposed. This is such an area, especially considering its proximity to a way-marked Cycling Route, and the rights of the neighbours of a windfarm to continue to enjoy the peace and quiet which forms such a valuable amenity in their lives. Background ambient sound levels of 20db would be more realistic than the 35db figure used.

This more appropriate standard coupled with correct calculation of measurements is crucial to the accept-ability or otherwise of this project by the Local Authority, as background levels determine what is the acceptable/allowable noise level at the most sensitive receptors once the windfarm is operational. And once the development is operational, there is no chance of re-creating the conditions which existed before the development commenced, consequently no background reference upon which to compare the noise during operation. There is in effect no protection for the nearby residents emanating from this, and any noise nuisance would have to be resolved through legal action. This is a course which would be extremely unfair and burdensome to the windfarm's immediate neighbours, as noise levels in the open rural landscape are almost impossible to predict or contain. The first case of windfarm closed by a Local Authority due to persistent noise nuisance occurred in Scotland recently, but only after considerable and protracted complaints by nearby residents. That particular windfarm was sanctioned with similar standards of Noise Impact Assessment, and to noise thresholds as used in this Application. The Wind Noise website shows visualised data for the subject location with predicted sound pressure levels in the vicinityof the existing and proposed wind turbines. Three noise sensitive locations show values greater than 43dB(A) and two greater than 40dB(A), the World Health Organisation maximum nightime limit.

Hydrological Impacts

The main potential hydrological impact on aquatic ecology will be an increase in run-off following a rainstorm event, increasing the peak flow to the watercourses on site, and further problems can be caused by the washing down watercourses of large amounts of minerals and peat debris. The EIS deals to a limited extent with this but the fundamental flaw is the lack of appreciation of the particular idiosyncrasies of the site, and there is no mention of any local survey of residents to establish whether or not there have been any unusual rainfall events in the last 50 years. The assessment of potential hydrological impacts from the proposed windfarm construction

in this EIS are seriously deficient, despite considerable attention paid to this aspect of the development. In summary, the rainfall data used in the calculations of landslide risks are underestimated by not using data from the immediate locality. The departure in any one year from the long term average of rainfall data can be easily +/- 50% (a figure obtained from one phone call to Met Eireann). A more in depth look at Rainfall Return Events is provided in pdf document available at: http://www.met.ie/climate/dataproducts/Estimation-of-Point-Rainfall-Frequencies_TN61.pdf

Grid Connection

The lack of information on the connection to the ESB grid is major cause for concern. Without such a link it is possible that Permission could be given to a Windfarm that cannot be connected to the National Grid, which would also apply to all the Permitted windfarms within 20km of the subject site. This would be the equivalent of granting Permission for multiple residential development where no infrastructure services are in place or planned and the land is not zoned.

A cursory look through the Eirgrid website will show that this and neighbouring windfarms will have to be connected through the substation Dunmanway. The connection forms a major part of the Planning Authority's proper concern particularly in view of the local protests in the area which resulted in the connection of the Glanta Commons windfarm to the substation at Ballylickey being buried underground. The result of that public outcry was the discovery that the ESB had no right of entry under existing legislation to construct a connection to a windfarm as it was not part of their network under the meaning of the Electricity Supply Acts. Therefore it follows that, as the connection is at the expense of the developers, has to be maintained by the developer, and belongs to the developer, it must *de facto* follow the public road. There is no reason why this request could or should not be complied with on an either/or basis as it should properly form part of this application. It is inconceivable that if an application for permission is split that one could be permitted without the other!

The European Court of Justice has ruled (C.227/01) that "Project-Splitting" is invalid and undermines the effectiveness of the E.I.A. directive 2011/92.EU. In fact the granting of Permissions for windfarms without the concurrent application for the grid connection route and method is illegal under European Law and has been recently found so in two recent cases before the Irish High Court. A Class Action to examine all such such Permissions is now under consideration.

Planning Permission Duration

The EIS notes that "large scale developments" are often accorded 10 year Planning Permissions. In this case it is not the scale of the development that requires the 10 year permission; it is the speculative nature. If there has been no application under Gateway 3 for a Grid connection and connections under that Gate are not schedule for completion up until 2023, it would be more appropriate for the developer to wait for an offer to connect before seeking planning approval. There are at least some applications in Gate 3 that have been refused Planning Permission so this is not an unprecedented step.

There are many reasons for Refusal of Permission on the shortcomings of the submitted Environmental Impact Statement (EIS) alone. But there are other proper considerations of which the duration of the Planning Permission sought must invite scrutiny. The most obvious reasons for the current wave of windfarm Applications coming before the Planning Authority are the prospect of tighter regulation in the future and reduced subsidies.

If this development is refused at this stage there is nothing to stop a subsequent application in the future when a connection to the Grid is possibly confirmed and any further regulations have been enacted. There is nowhere any explanation of the necessity of seeking such a long duration of a planning permission, giving the developer a speculative gain would seem to be the most likely reason. This is effectively permit-hoarding, equivalent to hoarding zoned land. Granting permission at this time would be premature, since engineering considerations would indicate that only two years would be required to plan and construct such a project .

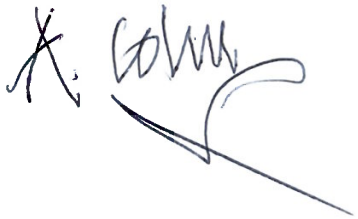
While the EIS claims that windfarms are not a permanent landscape feature, this is contradicted by the declaration that there is an option to re-submit for Planning Permission and replace the components with new state-of-the-art technology, thereby prolonging the operational life of the windfarm. Should the Planning Authority's standard Condition requiring the removal of all equipment, roads, and underground foundations within three months of decommissioning actually be enforced, then the claimed emissions saved from entering the environment would be so reduced as to render the whole 25-year operation an exercise in futility.

Conclusion

I refer you to the summary recommendations for Refusal of the Windfarm with replacement larger turbines at Cappaboy, West Cork (03/6910 – PL04.209745), by the An Bord Pleanala Inspector and confirmed by the Bord's decision, where it states: ***"It is considered that the proposed Windfarm development would be visually and unduly obtrusive and out of character in this scenic and natural mountainous landscape and would seriously injure the amenities and natural beauty of the area. It is also considered that the proposed development would be contrary to the objectives of the planning authority, as set out in the current C.D.P. for the area, to preserve the scenic views in this area of West Cork ...It is considered that, having regard to the proposed increased hub height and blade tip height and consequent greater visibility, the proposed development would seriously injure the visual amenities of this sensitive scenic area, which is not within a Strategic Search Area for windfarms, as designated in the Cork County Development Plan, 2003. The proposed development would, therefore, be contrary to the proper planning and sustainable development of the area."***

The protection of some of the most sensitive and scenic upland areas of West Cork from inappropriate Windfarm development has been seriously eroded in the last ten years. The opportunity exists to remedy this situation and restore complete protection from any further damaging intensive Windfarm development in one of the more scenically sensitive areas of County Cork, thereby allowing its beauty and amenity to continue to be enjoyed for future generations. I would respectfully request Cork County Council to Refuse Permission for the proposed development at Barnadivane, in the interests of the proper Planning and Sustainable Development of the area.

Mise le meas,



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