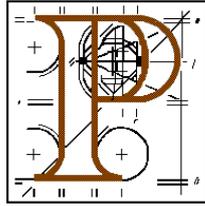


An Bord Pleanála



Inspector's Report

PL04. 245824

DEVELOPMENT: A windfarm with 6 turbines

ADDRESS: Barnadivane and adjacent townlands, Terelton,
Co. Cork

PLANNING APPLICATION

Planning Authority: Cork County Council

Planning Authority Reg. No.: 14/6760

Applicants: Barna Wind Energy (BWE) Ltd.

Application Type: Permission

Planning Authority Decision: Grant permission subject to conditions

APPEAL

Appellants:

1. Jerome Cohalan & Geraldine Hanley
2. Barna Wind Action Group

Type of Appeal: 3rd parties vs. grant

Observers:

1. Michael P. & Mary O’Riordan
2. Michael Allen
3. Anthony Cohu
4. Nigel Fennell
5. Teresa Flynn
6. Patrick Manning
7. Eleanor O’Leary
8. Sarah Hodgkinson, Tony Miller & Daphne Babbington
9. Sarah Larkin

DATE OF SITE INSPECTION: 24th and 25th February 2016

INSPECTOR: Stephen J. O’Sullivan

1.0 INTRODUCTION

- 1.1 This report deals with 2 third party appeals against a decision of Cork County Council to grant permission for a windfarm.

2.0 SITE

- 2.1 The site is in an upland area approx. 9km to the south of Macroom. The area is served by a number of regional and local roads linking Macroom town with Bandon to the south-east and Dunmanway to the south-west. The closest settlements are Terelton, (approx. 2km to the north west) and Coppeen (approx. 2km to Southwest) of the site. The site is located within a broad triangular area bordered by the N22 (Crookstown-Macroom), the R584/587 (Macroom to Dunmanway) and the R585 (linking the R587 north of Dunmanway back to Crookstown). The R585 travels in a NE-SW direction to the south of the upland area (through Bealnablath, Copeen and Slieveowen). The appeal site is located just over 1km north of the R585. The site is in the town lands of Barnadivane, Lissarda, Garraneragh, and Lackareagh.
- 2.2 The site has a stated area of 40ha. It includes a ridge which ranges in elevation from 170m OD in the south to 270m OD in the north. To the north of the site, the topography generally drops to about 70m OD towards the Lee Valley. The land slopes to the south towards the River Bride and there are a number of hills (generally around 250m OD) separated by river valleys to the east of the site, and a further series of hills to the west. The majority of the site consists of primarily agricultural grassland (cattle and sheep grazing) with grassland and commercial forestry in the surrounding area, which is characterised by an enclosed pattern of fields. There is a 110kv line passing through the site and several public roads traverse parts of the site. There is an existing development of 4 turbines 93m high immediately to the east of the site. There are 35 dwellings within 1km of a proposed turbine, of which 7 are stated to be stakeholder properties.

3.0 PROPOSAL

- 3.1 It proposed to build a windfarm with 6 turbines with a blade tip height of up to 131m, a maximum hub height of 85m and a blade length of 51.5m. The turbines would stand in a line. The most southerly would be at the lowest elevation, with the others on rising land to the north. There would also be a met monitoring mast 90m high. Around 1.96km of new access tracks would be laid, and 2.34km of existing tracks would be upgraded. The minimum width of tracks would be 5m, their maximum gradient 10%. A borrow pit would be

opened on the site to facilitate construction. Connection to the national grid would be via a sub-station which is the subject of a separate application and appeal – PL04. 244439, Reg. Ref. 14/557 – which itself would connect to the 110kV line that crosses the site. Underground cables would be laid to that sub-station from the windfarm proposed in this application– to which underground. The expected lifetime of the windfarm is 25 years. The EIS refers to an intention to establish a community gain fund that would make payment available to local residents, but details of its size or administration were not submitted.

4.0 POLICY

- 4.1 Directive 2009/28/EC on the promotion on the use of energy from renewable resources sets a target that 16% of the consumption of energy in Ireland be from renewable sources by 2020, and requires the state to make a national renewable energy action plan with targets for the share of energy from renewable sources that would be consumed in transport, electricity generation and heating, taking into account measures relating to energy efficiency on final consumption. Ireland submitted a National Renewable Energy Action Plan under the directive in July 2010. It sets a target that 40% of electricity consumed in 2020 will be from renewable sources.
- 4.2 The minister issued the Guidelines for Planning Authorities on Wind Farm Development and Wind Energy Development in 2006. Chapter 1 identifies the development of renewable energy sources as a national and European priority on grounds of energy and environmental policy, to be implemented with due regard to the binding requirements of the Habitats and Birds Directives. Chapter 3 states that the assessment of individual proposals for wind energy development must be undertaken on a ‘plan-led’ basis, which involves the setting out in development plans of areas considered suitable or unsuitable for wind energy development.
- 4.3 Chapter 5 refers to the environmental implications of wind energy development. Section 5.2.2 states that the potential impacts to birds are disturbance, barriers to movement and degradation of habitats, with collision mortality a low risk. Section 5.6 refers to noise. While is no set-back distance from houses is specified, it is indicated that noise is likely to a problem at less than 500m. A noise limit of 45dB(A) or a maximum increase of 5dB(A) above background levels at noise sensitive locations is considered appropriate., with a fixed limit of 43dB(A) at night. In low noise environments where the background level is less than 30dB(A) an absolute noise limit of 35-40dB(A)LA90, 10mins should be

applied. Noise is unlikely to be a problem where the nearest property is more than 500m away. 5.12 states that the impact at neighbouring offices and dwellings within 500m should not exceed 30 hours per year or 30 minutes per day. It goes on to state that at distances greater than 10 rotor diameters the potential for shadow flicker is very low.

- 4.4 Chapter 6 refers to aesthetic considerations. It provides indicative and general guidance. It states that particular landscapes of very high sensitivity may not be appropriate for wind energy development. Section 6.9 refers to various landscape types. In hilly and flat farmland, the spatial extent of windfarms can be quite limited in response to the scale of fields and topographic features. Sufficient distance from buildings must be established to avoid dominance by wind energy development. With regard to cumulative impact, it is important that the wind energy development is never perceived to visually dominate, but as these landscapes comprise hedgerows and hills the views across the landscape are likely to be intermittent and the visibility of two or more development is usually acceptable. Section 6.9.4 refers to transitional marginal landscapes. Wind energy developments should avoid adding to the complexity of these landscapes due to the risk of visual confusion and conflict. Developments with a small extent and irregular layout are recommended. The spatial enclosure in such landscapes is likely to preclude the possibility of seeing another development.. Section 6.16 states that the estimation of the likely impact on the landscape depends upon four parts – landscape sensitivity; visual presence of the development; aesthetic impact of the development on its landscape context; and the significance of the impact.
- 4.5 Chapter 7 refers to conditions that may be placed on grants of permission. Section 7.20 states that planning authorities may grant permission for a duration of longer than 5 years to ensure that permission does not expire before a grid connection is granted.
- 4.6 The minister published proposals for some revisions to the guidelines in December 2013 which would provide for: a more stringent absolute outdoor noise limit (day and night) of 40 dB for future wind energy developments; a mandatory setback of 500m between a wind turbine and the curtilage of the nearest dwelling for amenity considerations; and a condition to be attached to all future planning permissions for wind farms to ensure that there will be no shadow flicker at any dwelling within 10 rotor diameters of a wind turbine. The guidelines have not been changed to date

- 4.7 The Cork County Development Plan 2015-2020 applies. Objective CS4-2e of the plan is to strengthen and protect the rural communities of the area by encouraging sustainable growth in population, protecting agricultural infrastructure and productivity so that agriculture remains the principal rural landuse and focussing other employment development in the main towns and key villages. Policy RC1-1 is to strengthen rural communities and counteract declining trends within settlement policy framework while ensuring key assets in rural areas are protected to support quality of life and rural economic activity. The site is in a rural area identified as being under strong urban influence. Section 13.6 of the plan identifies high value landscapes. The Lee valley to the north of the site is one such landscape, but the site is outside the designated area. Policy GI-2 is to protect the character of views and prospects from designated scenic routes. A looped route south of Teerelton and north of the site is one such route: SR 36.
- 4.8 Section 9.3 of sets out a wind energy strategy for the county. This site is in an area designated as 'acceptable in principle' for wind energy development. Objective ED-4 is that commercial wind energy development is normally encouraged in these areas subject to protection of residential amenity particularly in respect of noise, shadow flicker, visual impact and the requirements of the Birds, Habitats, Flood and Water Framework Directives.

5.0 HISTORY

- 5.1 PL04. 204928, Reg. Ref. 03/2365 – the board refused permission in March 2004 for a windfarm of 23 turbines up to 100m high on the site as the development would be visually obtrusive and injure the amenities of the area and property in the vicinity. The planning authority had decided to grant permission.
- 5.2 PL04. 219620, Reg. Ref. 05/5907 – the board granted permission in February 2007 for a windfarm on the current appeal site with 14 turbines each up to 105m high, including a substation and a connection to the 110kV line that crosses the site. The planning authority had decided to grant permission. The inspector had recommended that permission be refused as the development would be visually obtrusive and injure the amenities of the area and property in the vicinity. The appropriate period for this permission was extended by the planning authority to 13th February 2017.

Concurrent applications

The following two applications were made by companies connected to the current applicant, and the three proposals were described by the applicant in this case as a replacement for the wind energy development authorised under PL04. 219620, Reg. Ref. 05/5907

- 5.3 Reg. Ref. 244439, Reg. Ref. 14/557 – An application is before the board for permission for an electricity substation that would connect the windfarm proposed in this case to the national grid. The planning authority had decided to grant permission.
- 5.4 Reg. Ref. 14/06803 – The planning authority granted permission on 27th July 2015 for a private road c150m between the R585 and L6008 that would facilitate delivery of components for the windfarm on the current appeal site.

Another application cited by parties

- 5.5 PL04. 243486. Reg. Ref.13/551 – An appeal is before the board against a decision to grant permission for 12 wind turbines at Shehy More c20km west of the appeal site. The applicant in that case has proposed connecting to the national grid at the sub-station proposed under PL04. 244439, Reg. Ref. 14/557.

6.0 DECISION

- 6.1 The planning authority decided to grant permission subject to 32 conditions, none of which significantly altered the proposed development. .
- 6.2 The reason for the decision referred to development plan objectives and the pattern of development in the area, and stated that the proposed would not injure the amenities of the area or be prejudicial to public health.
- 6.3 Condition no. 1 referred to plans and particulars submitted on the 19th December 2014, the 26th May, 5th June, 20th July and 10th September 2015.

Condition no. 2 stated that the permission would have a duration of 10 years in the interests of clarity and orderly development.

Condition no. 4 required the submission of a Construction Environmental Management Plan (CEMP).

Condition no. 23 sets operational noise limits of 43dB(A)_{LA90, 10min} or 5dB(A) above background levels at any sensitive receptor.

Condition no. 30 sets a limit on shadow flicker at any dwelling of 30 minutes per day or 30 hours per year.

7.0 REPORTS TO THE PLANNING AUTHORITY

- 7.1 Submissions – A large number of submissions were received by the planning authority that objected to the development on grounds similar to those raised in the subsequent appeals and observations to the board.
- 7.2 Department of Arts, Heritage and the Gaeltacht – Archaeological monitoring should be required by condition.
- 7.3 Area Engineer – The first report stated that further information is required regarding deliveries. The development is not likely to have a negative impact on surface water runoff. A bond for road repairs would be required. The report on the further information stated that it was satisfactory and recited conditions to be attached to any grant of permission.
- 7.4 Heritage Officer – The first report stated that the site is of lower ecological significance. There were some deficiencies in the information contained in the AA report and EIS. The report on the further information stated that the potential for significant effects on any cSAC or SPA can be screened out. The site does not have habitats or host species that are of significant ecological interest. No significant impacts on bird species is likely. Subject to the implementation of a CEMP agreed with the planning authority there is no objection to a grant of permission.
- 7.5 Environment Section - The first report stated that further information was required in respect of noise, as did the report on the further information. The report on the clarification of further information stated that it was acceptable and there was no objection to a grant of permission subject to conditions.
- 7.6 HSE – Concerns are expressed about the conclusions of the EIS in relation to noise, vibration and shadow flicker.

7.7 Planner's report – The first report stated that the principle of the development was established by the designation of the area under the county's wind energy strategy and the extant permission. Further information is required for a visual assessment, as the ZTV maps do not include heritage designations or scenic routes and the scale is too large. The impact of noise is not likely to be significant except at stakeholder properties. The EIS is technically sufficient, but it was recommended that further information be sought in relation to visual impact; ecology and bird activity; noise assessment; and traffic. The report on the further information stated that adequate information had been submitted with regard to the environment and water quality, and the Heritage Officer is satisfied with the information. Clarification should be sought with regard to noise in line with the report from the Environment Section. The report on the clarification included an EIA of the cumulative impact with the proposed grid connection to the Shehy More windfarm and its connection to the national grid. A grant of permission was recommended..

8.0 GROUNDS OF APPEAL

8.1 The grounds of the appeal from Jerome Cohalan and Geraldine Hanley can be summarised as follows-

- The proposed development would have a negative effect on the value of houses in the area, including the appellants'. A letter from an estate agent was submitted which states that adjacent windfarms make properties less desirable and thus more difficult to sell.

8.2 The grounds of the appeal from the Barna Wind Action Group can be summarised as follows-

- The extent of the local opposition to the proposed development is a material consideration for the board. It has been demonstrated in the large volume of submissions to the planning authority on the application and has been echoed by the elected members of the planning authority.
- While there are public policies to support renewable energy, these must be set against the also national, regional and local policies to strengthen and respect the life of rural communities and families, in particular policy CS4-2E of the development plan. The board needs to make clear in its decision how it reconciles these conflicting objectives.

- Large wind turbines can render homes uninhabitable. Many houses have had to be abandoned due to bad decisions by planning authorities to permit them. The review of the wind energy guidelines shows that the existing ones are not fit for purpose. Noise modelling has been shown to be unrealistic. The area is quiet and is designated for recreation. The baseline monitoring results presented by the applicant are unacceptable.
- The site drains via the Cummer River to the Carrigadrohid Reservoir which is part of the Gearagh SPA and cSAC. It was wrong to state that there were no hydrological connection between the appeal site and the Natura 2000 sites, and proper information has not been submitted to inform an appropriate assessment in accordance with the requirements set out in the Kelly judgment. SPAs have not been properly designated, as shown in the ECJ judgment in case C418/04, and the county's wind energy strategy is not compliant with the requirements of the Bird Directive. Adequate information was not submitted in relation to the White Tailed Sea Eagle which is expected to breed at Gearagh, nor on the impact of the development on Kestrel, snipe or meadow pipit. Hedgerows have been removed from the site since the application and EIS were submitted. This would effect the habitat of bats and requires a re-assessment of the proposed development. The submitted habitats map is inaccurate. The Senior Executive Planner was wrong to state that there were not major watercourses on the site as the Bride River runs along its southern margin. The issue of invasive species along the haul route was not properly considered.
- The proposed sub-station would constitute strategic infrastructure. It is an integral part of the proposed windfarm following the law set down in the O Grianna judgement, which should therefore also be considered as strategic infrastructure. The application form is incorrect to state that there would not be emissions from the development, as noise and dust would occur during construction, as would significant traffic. The application is therefore invalid.
- There is a high concentration of farms and houses near the site. The proposed windfarm would have a permanent visual impact that could not be mitigated. As such it would materially contravene the development plan's provisions to protect scenic routes. It would impinge on waymarked walking trails and tourism in the area. The previous permission on the site does not establish a precedent for the current proposal and should not be

used as the 'do-nothing' scenario against which its environmental are compared. There have been permission on the site for years which has not been implemented. The board's inspector recommended refusal in the previous case on grounds of visual impact. It has been established by the ECJ in the case C09-50 and by the High Court in the Kelly and O Grianna cases that the Irish regime for EIA and AA in force at the time of the previous decisions was defective.

- Adequate information was not submitted regarding construction and traffic and the development would cause traffic hazard.
- Adequate information was not submitted regarding hydrology and the development would threaten was quality.
- There is no justification for a 10 year permission.
- Various documents were appended to the appeal, including the editorial from the British Medical Journal by Hanning and Evans regarding wind turbine noise and sleep; other submissions from Dr Hanning; a clinical review from the Journal of the Royal Society of Medicine on diagnostic criteria for the health effects of wind turbines; a Portuguese report on wind turbine noise and health; an e-mail from the deputy CMO regarding the health effects of wind turbines; and plans of the waymarked walking trails from Coppeen.

9.0 RESPONSES

9.1 The planning authority did not respond to the appeal.

9.2 The applicant's response to the appeal from Jerome Cohalan and Geraldine Hanley referred to studies in the UK and US that did not find a negative relationship between property values and proximity to wind turbines. It stated that the statements in the appeal were speculative, and that wind energy development was already established in the area.

9.3 The applicant's response to the appeal from the Barna Wind Action Group can be summarised as follows-

- The site is close to the N22 national primary road and the R585 regional road and is on a ridge line over the Bride River Valley. The nearest house would be c300m from a turbine and is occupied by a stakeholder. The

nearest of the 4 existing turbines to the east is c800m away. The reasons why three separate planning applications were made to supersede the previous permission granted under PL04. 219860 were outlined to the planning authority. Adequate information has been submitted to assess the likely environmental effects of the necessary grid connection. The extant permission remains valid. It was subject to EIA and will be implemented by the applicant if the current applications are not granted. All the current applications were accompanied by AA screening reports which appraised the cumulative impact.

- The type of development proposed is supported by national energy and planning policy. Its location is supported by the provisions of the development plan.
- The current guidelines provide the most useful and practical guide to assessing the impact on wind energy development on residential amenity. The 500m setback which it recommends is generally accepted as adequately dealing with issues of visual dominance. The proposed development maintains this separation distance from houses that are not involved in the scheme. It meets the noise and shadow flicker limits set down in the guidelines.
- The applicant stands over the information and appraisals provided in the EIS. Surveys of bats indicated a paucity of activity on the site which is due to its high wind exposure. The clearing of vegetation around turbines is a mitigation measure to avoid bats using their vicinity as part of the foraging routes.
- The applicant has not determined the precise model of turbine to be used. However it has produced a robust noise model based on a turbine with a rated sound power output of 107.8dB, which the actual turbines will not exceed, that demonstrates that the proposed layout will conform with the limits set down in the guidelines. The Institute of Acoustic's guidance on post-construction monitoring will also be implemented by the developer.
- The AA screening report acknowledges the link between the site, the Cummer River and the Carrigadrohid Reservoir. However the nearest turbines will be setback 600m from the river and the reservoir would be 11.5km further downstream. Also the cSAC is upstream of the point where the river joins the reservoir. So there is no significant possibility that the development could effect water quality in the cSAC.

- Every effort was made to obtain information on the White Tailed Sea Eagle. The council's heritage officer is aware of recorded sightings in the Lee valley. However the area around the appeal site lacks suitable breeding or nesting habitats for eagles. There was no sighting of an eagle during the vantage point surveys that were carried out for the applicant over the winter of 2013/2014 which occurred in accordance with the 2014 guidance from Scottish Heritage over a period of 36 hours. Snipe and kestrel use the area from time to time, but it would not be a significant habitat for those species. As a passerine bird, meadow pippits are not particularly vulnerable to wind turbines.
- The applicant does not control the site and cannot prevent minor alterations to it. The hedgerows that were removed since the making of the application are outside the footprint of the proposed development and would not alter the extent of vegetation clearance required as a mitigation measure for the proposed development. Walkover surveys were used to prepare the habitat map.
- Chapter 7 of the EIS adequately describes hydrology in the around the site. There would be no direct discharge to any watercourse, with all runoff from the windfarm draining to soakaways or vegetated filters. The watercourse along the southern boundary of the site is a tributary of the River Bride. The EIS addressed invasive species such as Japanese knotweed and specifies compliance with the NRA's guidelines on the matter. Liquid wastes were considered in chapter 2 of the EIS.
- An appendix to the response considers the likely cumulative effects on the environment from the proposed windfarm and the concurrently proposed substation and private road. It concludes that they would not be likely to be significant, over and above those that would arise from each element and which are described in the environmental report that accompanied the other applications and the EIS for this application.

10.0 OBSERVATIONS

10.1 The observations objected to the proposed development on various grounds, including those raised in the appeals. The additional grounds can be summarised as follows-

- The cumulative impact of the proposed development with existing and permitted windfarms must be assessed. They would result in a total of 63 turbines within 25km of the site. The proposed substation would serve more than just the current proposal. Related companies have permission for 5 turbines at Carrigarierk under Reg. Ref. 15/370 and 12 turbines are proposed at Shehy More under PL04. 243486. These should all be considered as one project. Effective mitigation measures cannot be implemented at all the sites together. The O Grianna judgement make it unlawful to split projects in the manner proposed by the applicant.
- Inadequate surveys were submitted to allow the impact of the proposed development on the birds of the SPA.
- Inadequate information was provided in respect of bat roosts, including those on observers' properties.
- It is not safe for people or animals to be in the vicinity of turbines due to the risks of fire, collapse and blade throw. The operation would also startle and endanger horses, and vibrations would have a negative impact on them and other animals.
- Adequate details were not submitted to demonstrate the consent of landowners to the application.
- The existing turbines interfere with wireless cameras at the dairy farm of Eleanor O'Leary.
- The policies supporting wind energy development have not been subject to strategic environmental appraisal, and there are better ways to meet the state's obligations and counteract climate change.
- The proposed development would lead to an excessive concentration of existing and permission windfarms in a landscape area beside one designated as of high value by the development plan. It would contravene that plan's objectives to protect views from the scenic route SR36 at Terelton, as well as views from SR26, 32 and 35.

- Inadequate information has been submitted on archaeology.
- Background ambient noise levels of 20dB(A) should be applied for this area. Noise levels in an open rural landscape are impossible to predict.
- The proposed development would give rise to a risk of flooding.

11.0 APPROPRIATE ASSESSMENT

11.1 The appeal site is not within or immediately adjacent to any Natura 2000 site. So the proposed development could not have a direct effect upon any such site. The appeal site lies within two sub-catchment areas which drain to the River Lee and the Carrigadrehid Reservoir below the designated SPA and SAC at the Gearagh. There are no other natura 2000 sites on the River Lee below the inflow from the sub-catchments containing the site until the SPA at the estuarine environment at Cork Harbour. So the proposed development could not have any downstream effect on the quality of waters or habitats or aquatic or terrestrial species in any Natura 2000 site. The SPA at the Gearagh is 6.8km to the north, and upstream, of the site. The species for which it is designated are teal, wigeon, mallard and coot. The habitats on the appeal site are predominantly grassland. They would have not have a significant role in supporting populations of such waterfowl 6.8km away. The results on the vantage point survey carried out by the applicant demonstrated that the site was not adjacent to a commuting route for those species either, with only a single overflight by a mallard recorded after 36 hours' observation. The bird surveys were adequate to allow screening for AA. The proposed development would not give rise to an indirect effect on the SPA due to disturbance or collision of birds of the species for which the SPA is designated, or otherwise. The Mullaghanish to Musheramore Mountains SPA is 14.7km from the appeal site. The species for which it is designated is the hen harrier. The appeal site is farther from the SPA than the distance of 10km from their nest within which hen harriers generally forage. The improved pastoral habitats on the site would not be conducive to that species. It was not recorded as having a significant presence on the site during the vantage point survey, with two observations of only 187 seconds in total, both of males. So the proposed development would not give rise to an indirect effect on that SPA either. As the proposed development would not give rise to direct or indirect effects on any Natura 2000 site, its effects in combination with other projects, including the existing 4 turbines to the east, the proposed sub-station before the board under PL04. 244439, or the proposed 12 turbines wind farm at Shehy More under PL04. 243486 could not be significant. It is therefore reasonable to conclude on the basis of the information available, which I consider adequate in order to issue a screening determination, that the proposed development, individually or in combination with other plans or projects would not be likely to have a significant effect on any European site, and in particular the SAC and SPA at the Gearagh, sitecodes 000108 and 004109 respectively, or the SPA at the Mullaghanish to Musheramore Mountains, sitecode 004162, in view of those sites' conservation objectives. An appropriate assessment is therefore not required.

12.0 POLICY ASSESSMENT

- 12.1 The *Guidelines for Planning Authorities on Wind Energy Development* issued by the minister under section 28 of the planning act set out a policy that favours wind energy development. The type of development proposed in this case is supported by that policy. The guidelines direct planning authorities to set out policies in their development plans regarding the proper location of wind energy development. The current Cork county development plan identifies the area in which the appeal site lies as one where wind energy development is acceptable in principle. The location of the proposed development is supported by that policy. So both the nature and the location of the proposed development have support from explicit planning policies that are material considerations for this application and appeal. The validity or merits of policies adopted by the minister or planning authority are not open to review in the course of a planning application or appeal. The principle of the proposed development is therefore accepted. It does not inevitably follow from this conclusion that the proposed development would be in keeping with the proper planning and sustainable development of the area or that permission should be granted for it. There may be particular aspects of the proposal or the site on which it would stand that meant it would have an unacceptable impact. These matters are considered below.
- 12.2 One of the appellants cited public policies to strengthen and support rural communities, including policy CS4-2E of the development plan, as grounds to object to the proposed development. Such policies of the government and planning authority are material considerations for planning appeals before the board. However it is not clear that such general and aspirational policies would support a decision to refuse rather than grant permission in this case. If the proposed windfarm was likely to have a negative effect on the inhabitants of the locality, or upon the natural environment, or upon the function and development of the local community, this would in itself justify refusing permission. If not, then the explicit and specific planning policies in favour of wind energy development there should be followed. In either case the general policies in favour of rural development and rural communities could reasonably be cited to support the decision. The same appellant cited the volume and extent of local opposition to the proposed development as a ground of objection, including that from the elected members of the planning authority. However the submissions from parties in planning appeals fall to be judged on the merits of their particular arguments. The proper means whereby the weight of public opinion on a planning matter is given effect is through the policy making process set out

in part 2 of the planning act under which plans and guidelines are made by politicians who answer to the voters. These plans and guidelines then control decisions by officials under part 3 of the act who would not have the democratic mandate to determine the views of the public themselves. Part 2 of the act establishes a due process for the elected members of the planning authority to state policy which would take precedence over other statements by the same persons in other contexts.

13.0 ENVIRONMENTAL IMPACT ASSESSMENT

13.1 The following assessment draws on the environmental impact statement and other submissions made by the applicant, prescribed bodies and members of the public during the course of the application and the appeal. It seeks to identify, describe and assess the direct and indirect effects of the proposed development on the environment in relation to the following factors –

- Human beings, including the impact on human health and the effects of noise and shadow flicker
- Flora and fauna
- Soil
- Water
- Air
- Climate
- The landscape
- Cultural heritage, including archaeological and architectural heritage
- Material assets, including livestock, roads and houses
- The interaction of the foregoing
- Cumulative impacts

The assessment is of the project that is proposed under the application, which is the development of a windfarm of 6 turbines. The assessment has not been qualified or curtailed in deference to the previous grant of permission for another windfarm development on the site or the fact that the appropriate period of that permission was extended so that it remains capable of implementation at this time. The adequacy of the submitted EIS is also assessed.

Human beings, including the impact on human health and the effects from noise and shadow flicker

Health

13.2 One of the appeals included copies of documents discussing possible effects from windfarms on human health, including an editorial from the British Medical Journal by Prof Evans and Dr Hanning regarding wind turbine noise and sleep. With regard to the topic of human health I would refer the board to the statement in the Dáil by the minister on 25th March 2015 based on the professional advice of the deputy Chief Medical Officer which in turn cites the conclusions of Australia's National Health and Medical Research Council that evidence is absent that wind farms cause adverse health effects for people. The submissions from the appellants and observers would not give reasonable grounds to refute that authoritative statement. The proposed turbines are located at some remove from occupied structures and could not cause a significant risk to human safety due to fire collapse or blade throw. The development proposed in this application would not be likely to have significant effects on human health.

Noise

13.2 Section 9 of the EIS contains an appraisal of the effects of noise from the proposed development. It is founded on baseline noise monitoring at four locations that showed that background noise on the site exceeded 30dB(A) at wind speeds above 5m/s. The baseline information provided on noise is considered to be reasonably accurate and was consistent with the character of the area as observed at the time of inspection. From this the EIS sets out noise limits at table 9.7 that would apply under the wind energy development guidelines, with a fixed limit of 43dB(A) at night, of 40dB(A) during the day for wind speeds up to 5m/s, then of 45dB(A) rising to 48.8dB(A) at wind speeds of 12m/s. Predictions for noise levels after the proposed development at 7 locations are given at table 9.8 at windspeeds between 5m/s and 10m/s, taking into account the noise from the four adjacent turbines that stand at Garranereagh. The predictions followed the Good Practice Guide issued by the UK's Institute of Acoustics and were based on the use of a Nordex N100 2.5MW turbine, although a different model turbine with an equivalent or less sound power output may be installed as part of the proposed development. The predictions indicated that the noise limits derived from the guidelines may be exceeded at several sensitive receptors. However there are either derelict houses or are occupied by persons who have a stake in the proposed

development. The predictions were extrapolated to another 152 houses within 2km of the proposed turbines, where exceedances of the noise limits derived from the guidelines are not predicted. Further details of the data on which these predictions were based is provided in appendix I of the main EIS, and appendix 5 of the further information submitted to the planning authority on 26th May 2015.

13.3 Taken together, the information submitted by the applicant provides adequate information on the existing environment around the site with respect to noise. The prediction of the effects of the proposed development due to noise are based on reasonable assumptions and an accepted methodology laid down in a guidance document issued by a reputable technical institute. It takes proper account of the cumulative effects arising from the existing 4 turbines to the east of the site. Noise modelling is based on the physical characteristics of wind turbines and the environment in which they are placed, and so it has an empirical and scientific basis. It has not been shown to be unrealistic, as asserted by one of the appellants. The noise emissions from a development are capable of precise measurement, and can therefore be properly controlled by a condition on a permission that is readily enforceable by the procedures set out in part XIII of the planning act. The predictions set out in the EIS therefore provide a useful basis on which to conduct an EIA. They indicate that the proposed development would not result in an exceedance of the noise limits specified in the guidelines on wind energy development, save for relatively small breaches at a number of dwellings occupied by those with a connection to the proposed development. The limits set out in the guidelines are a material consideration under the planning act and provide a reasonable benchmark against which to determine the significance or otherwise of noise emitted by a wind energy development. There is no evidential basis on which to conclude that noise within those limits is capable of rendering an area uninhabitable, as asserted by one of the appellants. Neither would the predicted noise levels be likely to have an adverse impact on the recreational use of the surrounding area. This assessment therefore concludes that the proposed development is not likely to have negative significant effects on human beings arising from noise.

Shadow Flicker

13.4 Section 10 of the EIS provides a prediction the casting of shadow flicker from the proposed development on the 35 houses within 1.1km of a proposed turbine, which distance would be 10 times the length of the proposed rotors. The results are set out in table 10.3 of the EIS. They indicate that there is the

potential for the limits established in the guidelines of 30 hours per year or 30 minutes per day to be exceeded at 10 houses as a result of the proposed development. It is unlikely that the annual limits would be exceeded, given the occurrence of cloud cover. However mitigation would be required in relation to the daily limit. The EIS describes measures to be agreed with a resident that might be effected, including screen planting. However if no agreement is reached then an automated system would be installed to switch off turbines when the limit is reached. Such a measure is practicable and is likely to be effective. Subject to its implementation, the proposed development is not likely to give rise to a significant negative impact due to shadow flicker.

Flora and fauna

13.5 The habitats on the site and its vicinity as described in the EIS are predominantly improved agricultural grassland, interspersed with hedgerows, wet grassland, scrub and conifer plantations. This description is consistent with what was observed at the time of inspection. These habitats are of local significance only. The report of walkover surveys of the site did not record indications of the presence of rare or protected species of flora or fauna. Foxes and rabbits were recorded, and hedgehogs are likely to be present. Bat activity surveys were carried out between June and August 2014. A concentration of bat activity to the south of the site was recorded, as were passes by Leisler's bat, Common pipistrelle, Soprano pipistrelle and Natterer's bat. A roost of a Brown long-eared bat was found in the farm building to the east of the site. Breeding bird surveys were conducted in June and July 2014. Vantage point surveys were carried out in the winter of 2013-2014 from two points for a total of 36 hours. Two hen harrier observations were recorded for a total of 187 seconds, both male. A flock of golden plover were recorded once c2km east of the site. There was a single record of a mallard flying over the site. No Whopper swans or lapwings were observed. Potential impacts on ecology during construction include the siltation of watercourses, and the impact on bats due to the removal of hedgerows. The watercourses downstream of the site are not known to contain populations of freshwater pearl mussels and no effect on that species is likely. The operation of the windfarm would also pose a risk of mortality to bats, particularly Leisler's bat which is a high flying species. The site a considerable distance from the SPAs at the Gearagh and the Mullaghanish to Musheramore Mountains and it does not contain habitats that would play an important role in supporting population of bird species for which those sites are designated, so the development would not be likely to have significant effects upon them. Mitigation measures described in the EIS include standard drainage measures to avoid the release of sediments to

watercourses. Hedgerows that are removed will be replaced with new planting, and a minimum of 10 bat roosts will be installed during construction. Hedgerow and tree removal will occur outside the breeding season for birds, in accordance with the Wildlife Act 1976. A buffer zone will be maintained free of around each turbine to a distance of 50m from blade tip to minimise bat collision mortality during operation. During operation monitoring of bird activity and of bird and bat mortality shall be carried out. Given that the site does not host habitats or species of significant ecological interest, the proposed mitigation measures are considered reasonable and proportionate. In particular the site is not likely to be significant in supporting the White Tailed Eagle, and the proposed development upon it would not be likely to have a significant effect on that or other bird species including kestrel, snipe or meadow pipit. Adequate survey information and mitigation measures were provided with respect to bats. A planning application or appeal is not the appropriate forum to determine allegations that works have been carried out that may breach the planning act or some other legal code. As agricultural land predominates on the site, works to hedgerows upon it are likely to occur in the course of its established agricultural use without giving rise to significant ecological implications. This environmental impact assessment concludes that the proposed development would not be likely to have significant effects on flora or fauna.

Soil

- 13.6 Mineral soils predominate on the site, so peat instability is not a significant risk from the proposed development. The carrying out of the development, including the excavation of the borrow pit, could lead to increased erosion of soil and the release of sediments from the site. Mitigation measures described in section 6.4 of the EIS include the expeditious backfilling of excavations, which will not be left open overnight. Excavations would also cease during heavy rainfall. Surplus excavated material will be stored in a level area near the borrow pit and will be used to reinstate the pit on completion of works. No stockpiles will be left on site, and no soil will be disposed of off-site. A shallow profile on reinstatement will allow natural re-vegetation. These measures are considered proportionate and practicable. They are also adequate to counter any possible impact due to invasive species that might arise in the course of development. Subject to their implementation, the proposed development would not be likely to have significant effects on soil.

Water

13.7 The site drains into two waterbody catchments, north to the River Cummer, and south into the River Bride, both of which drain to the Lee. The operation of the proposed windfarm is not likely to have significant effects on water. It could result in a marginal increase in surface water runoff from the site but this would not be likely to give rise to a significant risk of flooding. Its construction could affect water quality due to the run off of silt or sediments, or the spillage of pollutants including fuel, lubricants and cement. Mitigation measures are described in section 7.6 of the EIS, including the installation of stilling ponds, swales and cross drains at access tracks, the use of a fuel bowser and bunded storage tanks for oil and ongoing monitoring of water quality during and for a period after construction. The proposed measures are standard techniques for ground works in rural areas whose efficacy is established. If implemented in conjunction with the soil handling measures described above, and in accordance with the an approved construction environmental management plan based on the outline submitted with the EIS, they are likely to avoid any significant effects on water quality arising from the development either individually or in combination with the other projects including the concurrently proposed substation. Adequate information has been submitted in the course of the application and appeal with regard to hydrology to allow the EIA to make this conclusion

Air and climate

13.8 The proposed development would not be likely to have any significant effects on air quality or the climate.

The landscape

13.9 The landscape around the site consists of hilly farmland, according to the schema set out in the guidelines, with a landcover of sloping grassy fields defined by hedgerows, along with stands of conifers and scrub on the lower land between the hills. The site lies towards the head of the Lee Valley. It has clear views to and from the mountains and moors that enclose the valley. The views to the pastures around the site and the lower lands on the valley floor are intermittent due to the vegetation and topography there. It is apparent in the landscape that several other windfarms have been developed in the upper reaches of the valley. They do not dominate the landscape. Nor have they fundamentally altered its character, but they are apprehended as a part of its character. Other windfarms have been permitted in this landscape, as described in table 8.9 and figure 8.5 of the EIS, and more are proposed

including 12 turbines at Shehy More under PL04. 243486, reg. ref. 13/551. The four existing turbines to the east of the site are close to and highly visible from the site. The proposed development would introduce 6 further turbines into this landscape. They would be tall, moving metal structures. Their visual impact could not be mitigated to any significant degree. They would appear as part of the same windfarm as the existing 4 turbines to the east in most views. The EIS and the further information submitted to the planning authority, including the photomontages and the mapping of the zone of theoretical visibility and in particular the cumulative ZTV submitted on the 26th May 2015, provide a useful and sufficient description of the likely visual impact of the proposed development. It would have a slight but perceptible effect on the wider landscape, as it would tend to reinforce an impression of an upland agricultural area where windfarms were present. However the landscape in the area is not unusually sensitive or scenic and it is not designated as one of high value in the development plan. The proposal would not lead to the hilly farmland being dominated by wind energy development. As such its impact on the wider landscape would not contravene the provisions of the guidelines or the development plan, whether considered individually or cumulatively with other permitted and proposed developments, including the designation of an area of high landscape value to the north of the site and scenic routes 26, 32 and 35.

- 13.10 The visual impact on the immediate vicinity of the site would be more significant and needs to be considered in cumulation with both the existing turbines there and the substation proposed under PL04. 244439, Reg. Ref. 14/557. This local impact would be significant and would change the appearance of the area. In particular it would change the appearance of the landscape viewed from the designated scenic route SR36 where the turbines would be prominent features, although the proposed substation would not be visible. However is not considered that these visual effects would be so adverse as to amount to a material contravention of the policy GI-2 of the development plan regarding scenic routes or to warrant refusing permission for the proposed development given: national and local policies in favour of renewable energy development; the identification of the area as acceptable in principle for wind energy development in the county development plan; and the advice in the guidelines that wind energy development can be accommodated in hilly farmland provided it does not dominate that landscape. However the board should be cognisant of such effects on the local landscape when it considers the application and appeals before it.

Cultural heritage, including archaeological and architectural heritage

- 13.11 Adequate information on archaeology has been submitted in the course of the application and appeal. The proposed development would not impinge upon any recorded monuments or protected structures. Exclusion zones of 100m radius shall be established around nearby recorded monuments CO083-078 and CO094-036, which are a ringfort and enclosure respectively, as mitigation measures. Archaeological testing and monitoring of ground disturbance is also proposed. These measures are sufficient to render it unlikely that the proposed development would have significant effects on cultural heritage.

Material assets, including domesticated animals and roads

- 13.11 The operation of the proposed development would not have significant effects on material assets. Turbines do not move in sudden or unpredictable ways and so would not interfere with the keeping of domesticated animals on the surrounding land, including horses and cattle. The construction of the windfarm would generate traffic movements that would effect the road network in the area, including movements by heavy goods vehicles and 42 deliveries of large turbine components by extended articulated trucks. The latter would have the most significant effects. Section 11.5 of the EIS describes the impact of that traffic on a series of junctions from the national primary road network on the N22 to the site, indicating works that will be required at several of them. At the junction of the regional road R585 and the local road LS6008 c150m of new roadway would be required to allow the large loads to negotiate the junction, for which permission was granted under a separate planning application Reg. Ref. 14/6803. The works authorised under that permission are an integral part of the project that is the subject to this EIA and so should be considered by the board. Nevertheless, despite short term disruption to traffic, it is not considered that the construction of the development would have significant negative effects on the road network serving the area, or upon material assets in general. Adequate information has been submitted regarding the traffic that is likely to be generated during construction to allow this conclusion to be made by the EIA, as well as to demonstrate that it should not give rise to undue traffic hazard if managed competently in accordance with the EIS and the outline construction management plan submitted with the application.

The interaction of the foregoing

- 13.12 The impact of the proposed windfarm on human beings interacts with its impact on the material assets comprised of the houses in the vicinity of the site. As this assessment concludes that the project would not have significant

negative effects on human beings, either through noise, shadow flicker or otherwise, it would not have a significant impact on those material assets either. The effects of the construction of the windfarm on soil is closely linked to its effects on water quality, which itself interacts with its impact on aquatic habitats downstream of the site and the species which depend upon them. However as the measures proposed to mitigate effects on soil and water are likely to be effective, they would also avoid downstream effects on flora or fauna.

Cumulative impacts

13.13 Adequate information was presented in the course of the application and appeal for such the cumulative impact of the development in conjunction with other wind energy developments to be properly assessed. The impact of the proposed development on the landscape of the upper Lee Valley has been assessed as part of the cumulative impact of several existing and permitted wind energy developments there as described in the EIS, including that before the board at Shehy More under PL04. 243486, reg. ref. 13/551. The effect on the landscape in the vicinity of the site, which is likely to be significant, has been assessed in cumulation with the effects of the existing turbines to the east of the site and the proposed substation. There is little that could be done to mitigate the visual impact of wind energy developments in such a wider landscape, the question of the implementation or otherwise of such measures is not relevant to the assessment of their impact in this regard. The impact on human beings due to noise and shadow flicker has been assessed in cumulation with the adjacent 4 turbines. The impact on flora, fauna, soil, water and material assets has been assessed in cumulation with the proposed substation. The impact on soil, water and material assets has been assessed in cumulation with the impact of various works to the road network required to facilitate the delivery of turbine components for the proposed development, including that authorised by the planning authority under Reg. Ref. 14/6083. Where likely significant cumulative effects were identified they are cited in the paragraphs above.

Adequacy of the EIS

13.14 The environmental impact statement submitted with the application, as supplemented by the further information submitted to the planning authority in the course of the application, provided an adequate description of: the proposed development; the main alternatives studied by the developer and the reason for this choice; a description of the aspects of the environment likely to

be affected by the proposed development; the likely significant effects of the proposed development on the environment and the forecasting methods used to assess them; the measures designed to mitigate them; a non-technical summary of the foregoing information; and an indication of the difficulties encountered in compiling the information. It provides a sufficient basis on which to conduct an environmental impact assessment of the proposed development following public consultation, including an assessment of its cumulative effects in conjunction with the substation by which it would connect to the national grid and the works to facilitate the delivery of turbine components to it, which are an integral part of the project, as well as the cumulative effects in conjunction with other existing, permitted and proposed wind energy projects in the area. The requirements of section 173 (1C) and (1D) of the planning act have therefore been met.

14.0 ASSESSMENT OF OTHER ISSUES

Property prices

- 14.1 One of the appeals argued that permission should be refused as the proposed development would have a negative effect on property values, including that of the appellants' house, with letters from an estate agent supporting that proposition. The applicant responded that the argument was speculative, citing studies from the UK and US which indicated that windfarms did not affect property values. As stated in the EIA above, the proposed development would not be likely to have significant adverse effects on people who live in its vicinity, nor would it be likely to have significant adverse effects on the residential function of the material assets that are the houses there. However what price a prospective buyer would pay for such a house would depend on many factors, including the availability of comparable houses, the cost of credit, the level of income in the wider economy, and matters of sentiment. The progress of house prices over recent decades shows that state and its emanations are not capable of them by moderating either booms or busts, even when such moderation was accepted as a necessary social good. In this context it would be futile to try and predict and control property prices in the wider area in the course of a particular planning application and appeal, even if such control were considered to be for the common good. In this context I would advise the board that its decision should be based the policies which the planning act identifies as material considerations for planning applications, with due regard for the likely tangible effects of the development on the surrounding environment, including the people and houses located there, which can be

predicted and assessed through the EIA process. Both of these would support a grant of permission in this case.

Appropriate period

- 14.2 The applicant is seeking a permission with an appropriate period of 10 years. One of the observers has asserted that there is no justification for such an extended period. I agree. Section 40(3) of the planning act establishes 5 years as the normal period within which to implement a planning permission. An explicit reason should be provided to depart from that statutory provision. Specifying periods for more than 5 years can hinder the proper planning and sustainable development of the area as it can lead to an accumulation of permissions that have not yet been implemented but which were granted under obsolete development plans or when there was a different legal or policy regime was in place. This has occurred on the current site, where a permission for a windfarm has been extant for 9 years already. The wind energy guidelines advise that a period of longer than 5 years may be specified to avoid a permission expiring before a grid connection offer is obtained. However the applicant has not specified whether such an offer is in place or is imminent or has been delayed for some particular reason or specific period in relation to this site that would justify having planning permission for a windfarm in place for a total of 20 years. If the board grants permission, therefore, it should specify an appropriate period of 5 years in line with the planning act.

Telecommunications

- 14.3 It is unlikely that the proposed windfarm would interfere with wi-f signals on a particular property. Any interference with broadcast or telecommunications signals can be mitigated in accordance with the methods set out in section 7.15 of the guidelines.

Community gain

- 14.4 Section 2.5 of the EIS refers to the institution of a community gain fund in connection with the proposed development, but details of its amount or disbursement were not submitted. As this is a planning appeal under section 34 of the act, the board does not have the same specific power to impose a condition on the matter as it would on a permission granted for a strategic infrastructure development under section 37G(7)(d) of the act. The matter was

not referred to in the planning authority's decision either, nor was it raised by parties in the course of the appeal.

Validity of the application

14.4 The proposed windfarm would not come within the scope of the 7th schedule of the planning act and would not constitute strategic infrastructure for which an application for permission is to be made directly to the board. The proposed windfarm would be connected to the national grid via the substation currently before the board under PL04. 244439, Reg. Ref. 14/557. Adequate information is before the board to allow an environmental impact assessment of the proposed windfarm together its connection to the national grid to be completed before a consent is granted for the proposed development. A grant of permission could therefore be made without contravening the law set down by the High Court in the Ó Grianna judgement or the requirement to assess the cumulative and indirect environmental effects of all integral parts of the proposed windfarm project. The likely emissions from the construction and operation of the development were adequately described in the various submissions from the applicant. An observation asserted that the consent of landowners to the application has not been properly obtained. However no persuasive evidence was presented that could support such a conclusion against the applicant's assertion to the contrary. The board is therefore advised that the application is valid and it may proceed to consider its decision upon it.

15.0 CONCLUSION

15.1 The proposed development would be in keeping with national policy to promote wind energy development, including that set out in chapter 1 of the *Guidelines for Planning Authorities on Wind Energy Development*. Its location would be in keeping with the wind energy strategy and objective ED-4 of the Cork County Development Plan 2014-2020 which designates wind energy development as acceptable in principle in the area in which the site lies. The proposed development is not likely to have significant effects on any Natura 2000 site, either individually or in combination with other plans or projects. After an environmental impact assessment of the proposed development it has been concluded that it would not be likely to have significant negative effects on the environment with respect to human beings, flora and fauna, soil, water, air, climate, material assets or cultural heritage, either directly or indirectly or in cumulation with other existing, permitted or proposed developments. In particular the proposed development would not give rise to unacceptable

effects on the residential amenities of houses in the vicinity due to noise or shadow flicker or otherwise. It would not give rise to a significant adverse impact on the wider landscape. It would give rise to a significant effect on the landscape in the immediate vicinity of the site in conjunction with the existing windfarm at Garranareagh and the proposed substation at Barandivane to which appeal PL04. 244439, Reg. Ref. 14/557 refers. However this effect would not be so negative or severe as to contravene the provisions of the development plan regarding the protection of high value landscapes and scenic routes. The proposed development would therefore be in keeping with the proper planning and sustainable development of the area.

16.0 RECOMMENDATION

16.1 I recommend that permission be granted subject to the conditions set out below.

REASONS AND CONSIDERATIONS

Having regard to –

- (a) the European and national policies to increase the proportion of energy that is generated from renewable sources including wind set out in the Renewable Energy Directive 2009/28/EC and the National Renewable Energy Action Plan which sets a target that 40% of the electricity generated in Ireland would be from renewable sources by 2020,
- (b) the Guidelines for Planning Authorities on Wind Energy Development issued by the Department of the Environment, Heritage and Local Government in June, 2006 and the limits set therein for noise and shadow flicker,
- (c) the provisions of the Cork County Development Plan 2014-2020, including objective ED-4 and the designation of the area as one where wind energy development is acceptable in principle,
- (d) the character of the landscape of the area,
- (e) the distance to dwellings and other sensitive receptors from the proposed development,
- (f) the separation of the site of the proposed development from sites designated as part of the Natura 2000 network and the nature of the connections between them
- (g) the environmental impact statement and further information submitted by the applicant, and
- (h) the submissions made in the course of the planning application,

It is considered that the proposed development would be in keeping with national energy policy and with national and local planning policy on wind energy development and the protection of landscapes and scenic routes.

After carrying out a screening exercise in relation to the potential for impacts on nearby Natura 2000 sites and, having regard to the nature and scale of the proposed development, the nature of the receiving environment, the appropriate assessment screening report submitted with the application and the submissions on file in relation to ecological matters, it is not considered that the proposed development would be

likely to have a significant effect individually or in combination with other plans or projects on any European site.

After carrying out an environmental impact assessment of the proposed development, it is considered that it has been concluded that it would not be likely to have significant negative effects on the environment with respect to human beings, flora and fauna, soil, water, air, climate, material assets or cultural heritage, either directly or indirectly or in cumulation with other existing, permitted or proposed developments. In particular the proposed development would not give rise to unacceptable effects on the residential amenities of houses in the vicinity due to noise or shadow flicker or otherwise. It would not give rise to a significant adverse impact on the wider landscape. It would give rise to a significant effect on the landscape in the immediate vicinity of the site in conjunction with the existing windfarm at Garranareagh and the proposed substation at Barandivane. However this effect would not be so negative or severe as to contravene the provisions of the development plan regarding the protection of high value landscapes and scenic routes. .

The proposed development would, therefore, be in keeping with the proper planning and sustainable development of the area.

CONDITIONS

1. The development shall be carried out and completed in accordance with the plans and particulars lodged with the application, as amended by the further information received by the planning authority on the 26th day of May 2015 and the clarifications on the 5th day of June, the 20th day of July and the 10th day of September 2015, except as may otherwise be required in order to comply with the following conditions. In particular the mitigation measures identified in the environmental impact statement and the further information shall be implemented in full by the developer. Where the conditions below require details to be agreed with the planning authority, the developer shall agree such details in writing with the planning authority prior to commencement of development and the development shall be carried out and completed in accordance with the agreed particulars.

Reason: In the interest of clarity.

2. The appropriate period of this permission during which the authorised development may be carried out shall be five years from the date of this order.

Reason: Having regard to the nature and extent of the proposed development, the planning history of the site appropriate period longer than that provided for in section 40(3) of the Planning and Development Acts 2000-2015 would not be justified.

3. The authorised windfarm shall operate for no more than 25 years from the date on which electricity is first exported from it or from date of the expiry of the appropriate period, whichever is the sooner.

Reason: To clarify the nature of authorised development in accordance with the details submitted with the application.

4. The mitigation measures identified in the environmental impact statement and other particulars submitted with the planning application and as further information, shall be implemented in full by the developer and by the operator of the authorised windfarm, except as may otherwise be required in order to comply with the other conditions of this permission.

Reason: In the interest of clarity and to protect the environment during the construction and operational phases of development.

5. Noise levels emanating from the authorised development following commissioning, when measured externally at noise-sensitive locations, shall not exceed the greater of 45dB(A)L90, 10 min or 5dB(A) above background levels between the hours of 0700 and 2300, or 43dB(A)L90, 10 min between 2300 and 0700. All noise measurements shall be made in accordance with I.S.O. Recommendations R1996/1 and 2 “Acoustics – Description and measurement of Environmental Noise”.

The noise mitigation measures described in the environmental impact statement shall be implemented in full. Prior to the commencement of development, the developer shall agree a noise compliance monitoring

programme for the operational wind farm with the planning authority. The operator shall maintain and make available for inspection by

Reason: In the interest of residential amenity.

6. Shadow flicker arising from the proposed development shall not exceed 30 hours per year or 30 minutes per day at existing or permitted dwellings or other sensitive receptors. The measures to mitigate the impact of shadow flicker described in the environmental impact statement shall be implemented to ensure that any turbines which might cause an exceedance of this limit are stilled. Prior to the commencement of the export of electricity from the proposed windfarm, the developer shall submit certification from a suitably qualified person who was not previously engaged in the construction of the windfarm that the equipment necessary to implement those measures has been properly installed and is functional

Reason: In the interest of residential amenity.

7. Prior the commencement of the operation of the authorized windfarm, the developer shall inform the planning authority of the name and address of the person who shall occupy the site as its operator and who shall be responsible for the subsequent decommissioning of the windfarm and compliance with the various other conditions set out hereinunder. The operator shall inform the planning authority if there is any change in these details and provide the name and address of any new operator at least 3 months before the latter person assumes responsibility for the windfarm. There shall only be a single operator of the entire authorised windfarm at any one time.

Reason: To facilitate the enforcement of the various conditions of this permission that pertain to the operation and decommissioning of the authorised development.

8. Prior to the commencement of development the developer shall submit for the written agreement of the planning authority a plan for the decommissioning of the authorised windfarm and the reinstatement of the site which shall provide for the removal of the turbines, towers, meteorological monitoring masts and all plant and equipment and the reinstatement of the turbine bases and hard standing areas, as well as a time frame for the completion of such works which

shall not be greater than 12 months from the cessation of the operation of the windfarm.

Prior to the commencement of development, the developer shall lodge with the planning authority a cash deposit, a bond of an insurance company or such other security as may be acceptable to the planning authority, to secure the satisfactory reinstatement of the site in accordance with the details agreed under this condition. The developer shall also enter into an agreement empowering the planning authority to apply such security or part thereof to secure the necessary reinstatement of the site at the end of the period during which the operation windfarm is authorised or before that time if the operation of the windfarm has ceased for at least 12 months and the planning authority does not consider it reasonably likely to resume. The form and amount of the security shall be as agreed between the planning authority and the developer or, in default of agreement, shall be referred to An Bord Pleanála for determination.

Reason: To ensure the satisfactory reinstatement of the site and to prevent an accumulation of obsolete functional structures in the interests of orderly development.

9. The construction of the proposed development shall be carried out in accordance with a Construction and Environment Management Plan prepared having regard to CIRIA Guideline C848 which shall set out a construction method statement and timetable for all works and measures that are integral to the proposed development. The plan shall be submitted and agreed in writing with the planning authority prior to the commencement of development.

The Construction and Environment Management Plan shall include a comprehensive Construction-Stage Drainage Report and Management Plan with -

- (a) Details of the proposed water monitoring protocol and drainage inspection regime.
- (b) Full details of measures for the control of drainage during and after construction (including tree-felling prior to construction), including the use of settlement ponds, swales and silt traps, and measures for the control of run-off from temporary spoil storage areas.

- (c) Details of the nature of all materials used in constructing access tracks to the turbines.
- (d) Full details of storage proposals for hazardous materials, cement leachate, hydrocarbons and other materials to be used during construction.
- (e) Details of all aspects of the management of excess spoil, such that slope stability measures and prevention of water pollution are fully implemented. Soil, rock, peat and sand/gravel excavated during construction shall not be left stockpiled on site following completion of works.

Reason: In the interest of environmental protection and orderly development.

10. Prior to the commencement of development, the following details shall be submitted and agreed in writing with the planning authority –
- (i) a Transport Management Plan, including details of the road network/haulage routes and the vehicle types to be used to transport materials and parts on and off site,
 - (ii) a condition survey of the roads and bridges along the haul routes to be carried out at the developer's expense by a qualified engineer both before and after construction of the wind farm development. This survey shall include a schedule of required works to enable the haul routes and, in particular, regional and local roads in to cater for construction-related traffic. The extent and scope of the survey and the schedule of works shall be agreed with the planning authority prior to commencement of development.
 - (iii) detailed arrangements whereby the rectification of any construction damage which arises shall be completed to the satisfaction of the planning authority.
 - (iv) detailed arrangements for temporary traffic arrangements/controls on roads.
 - (v) a programme indicating the timescale within which it is intended to use each public route to facilitate construction of the development.

All works arising from the aforementioned arrangements shall be completed at the developer's expense, within 12 months of the cessation of each road's use as a haul route for the proposed development.

Reason: To protect the public road network and to clarify the extent of the permission in the interest of traffic safety and orderly development.

11. Prior to the commencement of development, the developer shall lodge with the planning authority, a cash deposit, a bond of an insurance company, or such other security as may be acceptable to the planning authority, to secure the reinstatement of public roads which may be damaged by the transport of materials to the site, coupled with an agreement empowering the planning authority to apply such security or part thereof to the satisfactory reinstatement of the public road. The form and amount of the security shall be as agreed between the planning authority and the developer

Reason: In the interest of road safety and the proper planning and sustainable development of the area.

12. The construction of the development shall not give rise to emissions of dust that exceed 350mg/m²/day, or emissions of noise that result in recorded levels at the facades of houses above 65dB(A)LAeq 1hour. The hours of work shall normally be restricted to between 0700 and 1900 Monday to Saturday and not at all on Sundays or public holidays, unless the prior written agreement of the planning authority has been obtained. Prior to the commencement of construction activities the developer shall agree, in writing, with the planning authority a plan to control such emissions for the duration of the construction works. The plan shall include details of the method and locations dust monitoring, measures to be implemented to reduce emissions and actions to be taken in the event of complaints.

Reason: In the interest of environmental protection and orderly development.

14. The developer shall facilitate the preservation, recording and protection of archaeological materials or features that may exist within the site. In this regard, the developer shall:
 - (a) notify the planning authority in writing at least four weeks prior to the commencement of any site operation (including hydrological and geotechnical investigations) relating to the proposed development,
 - (b) employ a suitably-qualified archaeologist who shall monitor all site investigations and other excavation works, and prepare a report on the

results of such monitoring to be submitted to the planning authority and to the Department of Arts, Heritage and the Gaeltacht,

- (c) provide arrangements, acceptable to the planning authority, for the recording and removal of any archaeological material which the authority considers appropriate to remove. In particular, archaeological excavation shall be carried out at Areas of Archaeological Potential identified in the environmental impact statement submitted,

A comprehensive report on the completed archaeological excavation shall be prepared and submitted to the planning authority and to the National Monuments Service within a period of six months or within such extended period as may be agreed with the planning authority.

Reason: In order to conserve the archaeological heritage of the site, it is considered reasonable that the developer should facilitate the preservation and protection or the preservation by record of any archaeological features or materials which may exist within it.

- 14. Cables within the site shall be laid underground. The wind turbines shall be geared to ensure that the blades rotate in the same direction. The colour and finishes of the turbines shall comply with the requirements of the planning authority.

Reason: In the interest of visual amenity.

- 15. Prior to commencement of development, details of aeronautical requirements shall be submitted to, and agreed in writing with, the planning authority. Subsequently, the developer shall inform the planning authority and the Irish Aviation Authority of the coordinates of the 'as constructed' turbines and the highest point of the turbines.

Reason: In the interest of air traffic safety.

- 16. In the event that the proposed development causes interference with telecommunications signals in the area effective measures shall be implemented to minimise such interference. Details of these measures, which shall be at the developer's expense, shall be submitted to, and agreed in writing

with, the planning authority prior to commissioning of the turbines, and following consultation with the relevant authorities.

Reason: In the interest of orderly planning and residential amenity.

17. The developer shall pay to the planning authority a financial contribution in respect of public infrastructure and facilities benefiting development in the area of the planning authority that is provided or intended to be provided by or on behalf of the authority in accordance with the terms of the Development Contribution Scheme made under section 48 of the Planning and Development Act 2000. The contribution shall be paid prior to the commencement of development or in such phased payments as the planning authority may facilitate and shall be subject to any applicable indexation provisions of the Scheme at the time of payment. Details of the application of the terms of the Scheme shall be agreed between the planning authority and the developer or, in default of such agreement, the matter shall be referred to the Board to determine the proper application of the terms of the Scheme.

Reason: It is a requirement of the Planning and Development Act 2000 that a condition requiring a contribution in accordance with the Development Contribution Scheme made under section 48 of the Act be applied to the permission.

Stephen J. O'Sullivan
4th March 2016