



An
Bord
Pleanála

Inspector's Report ABP-308244-20

Development	7 Wind Turbines, substation and ancillary infrastructure
Location	Derreendonee, Curraglass and Cappaboy Beg, County Cork
Planning Authority	Cork County Council
Planning Authority Reg. Ref.	20/350
Applicant(s)	Wingleaf Limited
Type of Application	Permission
Planning Authority Decision	Refuse
Type of Appeal	First & Third Party
Appellant(s)	Wingleaf Limited Tadhg Ó Duinnín & Others
Observer(s)	Macrom District Environmental Group Fáilte Ireland Tim & Kate Baker Brídín Ashe & Others
Date of Site Inspection	11 th & 12 th May, 2021
Inspector	Kevin Moore

CONTENTS

	<u>Page</u>
1.0 SITE LOCATION AND DESCRIPTION	5
2.0 PROPOSED DEVELOPMENT	5
3.0 PLANNING AUTHORITY DECISION	6
4.0 PLANNING HISTORY	8
5.0 LOCAL PLANNING POLICY CONTEXT	9
6.0 THE APPEALS	12
6.1 Grounds of First Party Appeal	12
6.2 Grounds of Third Party Appeal	19
6.3 Applicant Response to Third Party Appeal	23
6.4 Third Party Response to Third Party Appeal	27
6.5 Planning Authority Response	28
6.6 Observations	28
7.0 PLANNING ASSESSMENT	29
7.1 Introduction	29
7.2 Compatibility with Renewable Energy Policy	30
7.3 Planning History	31

	<u>Page</u>
7.4 The Development in the Context of the Wind Energy Guidelines and Department Circular PL05/2017	33
7.5 Public Consultation	36
7.6 Landscape Character and Visual Impact	37
7.7 Shadow Flicker	58
7.8 Noise Impact	59
7.9 Traffic Impact	65
7.10 Fire Risk	66
7.11 Impact on Biodiversity	68
7.12 Impact on Water	71
7.13 Archaeological Impact	72
7.14 Grid Connection	72
8.0 APPROPRIATE ASSESSMENT	73
8.1 Screening for Appropriate Assessment	73
8.2 Appropriate Assessment	78
9.0 ENVIRONMENTAL IMPACT ASSESSMENT	84
9.1 Introduction	84
9.2 Alternatives	85
9.3 Population and Human Health	86
9.4 Biodiversity	88

	<u>Page</u>
9.5 Land, Soils and Geology	90
9.6 Water	92
9.7 Air Quality and Climate	93
9.8 Material Assets	94
9.9 Cultural Heritage	95
9.10 Landscape and Visual	97
9.11 Noise and Vibration	98
9.12 Cumulative Impacts	99
9.13 Interaction of Impacts	99
9.14 Major Accidents	99
9.15 Reasoned Conclusion	100
10.0 CONCLUSION	102
11.0 RECOMMENDATION	105

1.0 Site Location and Description

- 1.1. The 61.73 hectare site is located approximately 6km north-east of Kealkill, 6km south-west of Ballingearry, and 3.5km south of Gougane Barra in West Cork. It is in an area where a previously permitted 10 turbine windfarm (now decommissioned), sited within commercial forestry, was in place. Each of the turbines have been removed. The site is accessed via a forestry track off the R584 Regional Road to the east of the site. The regional road in the vicinity of the access is known as The Pass of Keimaneigh. The forestry track rises steeply from the public road. A 38kV substation, which served the previous windfarm, remains, is enclosed by a palisade fence and is served by a control building. A 38kV overhead power line from the substation travels southwards. Large tracts of the commercial plantation have been felled at this location, although the areas in the vicinity of the substation remain planted.
- 1.2. The nearest residential property is located approximately 760 metres from the southernmost proposed turbine (Turbine 7), with four houses sited within 1km of the development.

2.0 Proposed Development

- 2.1. The proposed development would comprise
- 7 turbines with an overall blade tip height of up to 178.5 metres and all associated foundations and hardstanding areas;
 - 2 no. borrow pits;
 - A permanent meteorological mast to a maximum height of 112 metres;
 - Upgrade of approximately 5km of existing access roads and provision of 2.5km of new site access roads;
 - Upgrade to existing access junction;
 - A 38kV electricity substation, including 4 no. battery storage containers, a control building with welfare facilities, associated electrical plant and equipment, security fencing, and waste water holding tank;
 - Forestry felling;

- A temporary construction compound;
- Site drainage;
- All associated internal underground cabling, including underground grid connection cabling to the existing overhead line; and
- All associated site development and ancillary works.

The proposed development seeks a ten-year permission with a 30-year operational life from the date of commissioning. A turbine model with a rated output of 4.3MW has been chosen, with the combined output from 7 turbines estimated to be 30MW.

2.2. A total of 41.32 hectares of forested area is proposed to be felled. 11.73 hectares of forestry would be permanently felled within and around the footprint of the development. 4.59 hectares of trees would also be felled around all turbines to facilitate infrastructure construction and turbine erection. Another 25 hectares of trees is estimated to be required to be felled to prevent those trees causing a turbulence effect around the proposed turbine locations. It is proposed that approximately 16.32 hectares of forestry would be replanted as a condition of any felling licence that might issue in respect of the proposed development.

2.3. Details submitted with the application included an Environmental Impact Assessment Report and a Natura Impact Statement. Letters of consent from landowners permitting the making of the application were also submitted. The EIAR included a Construction and Environmental Management Plan.

3.0 Planning Authority Decision

3.1. Decision

On 26th August 2020, Cork County Council decided to refuse permission for the proposed development for two reasons relating to adverse landscape and visual impact and adverse impact on local tourism, with particular reference to Gougane Barra.

3.2. Planning Authority Reports

3.2.1. Planning Reports

The Planner noted the site's planning history, other wind farm development in the area, the policy context, reports received, and third party submissions. Comment was made on the issues raised in these submissions. Third party reasons for refusal relating to the failure to restore the previous wind farm site and for the proposed battery storage units were rejected. Landscape and visual impact concerns were accepted. An assessment of some of the applicant's photomontages was made. The importance of tourism in the area was acknowledged. It was concluded that the highly scenic area cannot absorb the height of the seven turbines when viewed from the Wild Atlantic Way, from scenic routes and from High Value landscape areas and that the proposal has the potential to negatively affect tourism. A refusal of permission for two reasons was recommended.

The Senior Planner concurred with the Planner's recommendation.

3.2.2. Other Technical Reports

The Environment Section had no objection to the proposal subject to a schedule of conditions.

The Archaeologist had no objection to the proposal proceeding, given there was a previously approved development on the site and the results of the applicant's assessment.

The Area Engineer noted the site's planning history and that there was a previous wind farm on the site. There was no objection to the proposal subject to a schedule of conditions.

The Ecologist considered the proposed approach to construction works to be acceptable. It was considered that the peat stability assessment, peat management plan and the surface water drainage arrangements needed to be examined by technically competent persons. It was also considered that further review was required of data with a particular focus on potential impact on vulnerable bird species, including Red Grouse, Golden Plover, White-tailed Sea Eagle and Herring Gull. It was recommended that further review and assessment of potential impact on bats was required, as was examination of the potential of road widening to avoid Oak-Birch-Holly woodland and heath/bogland habitats, the exploration of the potential for replanting with native species and for peatland restoration, and the need for reinstatement of previously built surfaces as natural habitats. The conclusions of

the applicant's Natura Impact Statement were seen to appear reasonable but it was submitted that the need for technical examination by competent persons relating to peat stability assessment, a peat management plan and the surface water drainage arrangements was required to confirm the conclusions.

3.3. Prescribed Bodies

The Health Service Executive referred to community consultation undertaken, was satisfied with the development subject to mitigation measures being implemented in full, and recommended a schedule of conditions to be attached with a grant of permission.

Inland Fisheries Ireland set out its requirements, which included a request that there is no interference with watercourses without consultation, that a contingency plan be put in place in the event of peat slippage, and bridging and culverting provisions.

Irish Aviation Authority recommended two conditions be attached in the event of a grant of permission.

3.4. Third Party Observations

53 third party submissions were received by the planning authority. The principal planning concerns raised are reflected in the third party appeal and the observations made to the Board.

4.0 Planning History

ABP Ref. PL 04.127297 (P.A. 00/6590)

Permission was granted by the Board in 2002 for 10 turbines (hub heights 50 metres), a substation, two 40m high meteorological masts and site access.

ABP Ref. PL 04.209745 (P.A. 03/6910)

Permission was refused by the Board for modifications to the previously permitted wind farm to include increase in hub height from 47m to 65m, increase in blade tip height from 75m to 91m, and the movement of a number of turbines.

P.A. Ref. 03/3773

Permission was granted by the planning authority for the construction of two overhead 38kV lines.

ABP-306263-19 (P.A. Ref. 19/519)

Permission was refused by the Board for an extension to the electricity substation at Curraglass comprising the construction of up to four battery storage units, fencing, electrical equipment and transformers.

5.0 Local Planning Policy Context

5.1. Cork County Development Plan 2014

On-Shore Wind Energy

Objectives include:

ED 3-1: National Wind Energy Guidelines

Development of on-shore wind shall be designed and developed in line with the 'Planning Guidelines for Wind Farm Development 2006' issued by DoELG and any updates of these guidelines.

ED 3-2: Wind Energy Projects

On-shore wind energy projects should focus on areas considered 'Acceptable in Principle' and Areas 'Open to Consideration' and generally avoid "Normally Discouraged" areas in this Plan.

The site lies within an area designated 'Open to Consideration'. The applicable objective relating to these areas is:

ED 3-5: Open to Consideration

Commercial wind energy development is open to consideration in these areas where proposals can avoid adverse impacts on:

- Residential amenity particularly in respect of noise, shadow flicker and visual impact;
- Urban areas and Metropolitan/Town Green Belts;
- Natura 2000 Sites (SPA and SAC), Natural Heritage Areas (NHA's) or adjoining areas affecting their integrity.
- Architectural and archaeological heritage;
- Visual quality of the landscape and the degree to which impacts are highly visible over wider areas.

Landscape

Objectives include;

GI 6-1: Landscape

- a) Protect the visual and scenic amenities of County Cork's built and natural environment.
- b) Landscape issues will be an important factor in all land use proposals, ensuring that a proactive view of development is undertaken while maintaining respect for the environment and heritage generally in line with the principle of sustainability.
- c) Ensure that new development meets high standards of siting and design.
- d) Protect skylines and ridgelines from development.
- e) Discourage proposals necessitating the removal of extensive amounts of trees, hedgerows and historic walls or other distinctive boundary treatments.

Landscape Views and Prospects

Objectives include:

GI 7-1: General Views and Prospects

Preserve the character of 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 (including buildings and townscapes) and views of natural beauty as recognized in the Draft Landscape Strategy.

GI 7-2: Scenic Routes

Protect the character of those views and prospects obtainable from scenic routes and in particular stretches of scenic routes that have very special views and prospects identified in this plan. The scenic routes identified in this plan are shown on the scenic amenity maps in the CDP Map Browser and are listed in Volume 2 Chapter 5 Scenic Routes of this plan.

Tourism

Tourism Promotion

The Objective is as follows:

TO 1-1: Promotion of Sustainable Tourism in County Cork

- a) Promote a sustainable approach to the development of the tourism sector within Cork County;
- b) Work in partnership with public and private sector agencies to implement the key tourism objectives in this Plan;
- c) Assist community groups to access funding for appropriate and beneficial tourism developments.

Tourism Product

The Objective is as follows:

TO 1-2: Tourism Opportunities

Facilitate the development of the tourism sector and provide for the delivery of a unique combination of tourism opportunities drawing on the network of attractions in Cork County and potential future attractions.

Protection of Tourist Assets

The Objective is as follows:

TO 2-1: Protection of Natural, Built and Cultural Heritage

Protect and conserve those natural, built and cultural heritage features that form the resources on which the County's tourist industry is based. These features will include areas of important landscape, coastal scenery, areas of important wildlife interest, historic buildings and structures including archaeological sites, cultural sites

including battlefields, the Gaeltacht areas, arts and cultural sites and the traditional form and appearance of many built up areas.

Principal Attractions

The Plan states in Section 8.3 that County Cork has a number of key tourist attractions of national importance which should be protected from inappropriate development and that the physical setting of tourist attractions is often a major component in their attractiveness. It notes that the surrounding landscape or particular features of the built environment often contribute to the setting or mystique of an attraction.

The key tourist attractions of national importance identified in the Plan and which attract significant visitor numbers include Gougane Barra.

Walking/Cycling

The Objective is as follows:

TO 7-1: Walking/Cycling and Greenways

Promote the development of walking and cycling routes throughout the County as an activity for both international visitors and local tourists in a manner that is compatible with nature conservation and other environmental policies.

6.0 The Appeals

6.1. Grounds of First Party Appeal

The grounds of the appeal may be synthesised as follows:

Reason 1

Suitability of Location – Landscape and Visual Impact Analysis

- The site, located within the Ridged and Peaked Upland Landscape Character Area, is only recognised as having ‘Local Importance’ and is not classified as a ‘High Value landscape’ in the County Development Plan.
- It comprises lands classified as ‘Open to Consideration’ for wind energy development. Chapters 3, 5, 6, 11, 12, and 13 of the EIR are particularly

relevant in the context of assessing the development against the criteria of Policy ED 3-5 relating to areas 'Open to Consideration'.

- The site has previously been subject to EIA which deemed the provision of wind energy infrastructure, albeit at a reduced scale, to be appropriate as evidenced by the grant of permission for 10 turbines.
- The design process has taken into account all constraints on the site and within the vicinity with specific considerations of the provisions set out in Policy ED 3-5 of the County Development Plan. The site selection and layout has minimised the theoretical potential for visibility. Where visibility occurs the design is in accordance with best practice.
- The reason for refusal is not whether the site can accommodate wind energy infrastructure but rather can the site and receiving environment accommodate turbines with a blade tip height of 178.5m as proposed. The proposed turbines at the location and scale proposed have uniquely restricted visibility from landscape character areas away from the site and from receptors referenced. The zone of theoretical visibility (ZTV) mapping shows unequivocally that there is not even theoretical visibility from a large extent of the wider landscape surrounding the site, in particular the High Value landscapes. The photomontages show what the visibility will be. The applicant's assessment illustrates the lack of open views elsewhere.

Turbine Layout and Siting

- A review of the photomontages and the wireframes presented in the application does not support the view that Turbines T4 or T7 are in any way separated or visually isolated in terms of siting relative to other turbines. The turbines read as a single cluster from locations where there is some visibility.
- It is not reasonable to conclude that the proposal would be excessively domineering from many vantage points over a wide area having regard to the ZTV mapping.

Capacity of the Site to accommodate the proposed development

- The landscape value of the site is deemed 'Low to Moderate' and the landscape sensitivity as 'Moderate'. The susceptibility of the landscape to the change is considered to be low to medium.
- The addition of the turbines into the landscape would have an influence on some of the perceived characteristics of other landscape character areas where views of turbines are available. Hence, the potential for changes to other landscape character areas is strongly influenced by visibility of the proposed development. This visibility is limited due to the great variation in topography surrounding the site, and in particular to the north where Gougane Barra and the surrounding High Value landscape are located.

Scenic Routes

The five Scenic Routes referenced in Reason No. 2 of the planning authority's decision are analysed.

Scenic Route S29

- The lack of visibility along this route coupled with the distance means that there is no real potential for overbearing or domineering effects. Where turbines are visible the landscape has the capacity to absorb and accommodate the project at the scale proposed.

Scenic Route S32

- There are two short sections where there would be theoretical visibility of 1 to 2 turbines, one 10.9km from the nearest turbine and the other 11.71km. There is dense route screening at these locations. This route would not be affected by the development.

Scenic Route S33

- There is one 1.29km section of partial theoretical visibility at approximately 6km from the nearest turbine where 1-2 turbines would be theoretically visible over 780m and 3-4 turbines over 510m. The proposal is nearly entirely

screened by Doughill Mountain. Views are also partially screened towards the site by roadside vegetation. Scenic route 32 will not be impacted.

Scenic Route S34

- For the stretch of the scenic route close to the site there will be either no impacts or very slight impacts for momentary duration. This cannot be considered excessively overbearing, domineering or incongruous. Where the route runs near Lough Allua there would be no visibility of the turbines. The effects on Scenic Route S34 are imperceptible.

Scenic Route S111 and Wild Atlantic Way

- There are three sections of the N71 that have theoretical visibility which account for less than a third of the Scenic Route. Screening adjacent to the road and in the intervening landscape would screen views to the proposed development. The focus of the view and the visibility of the proposal on Scenic Route S111 would not be affected.
- The Wild Atlantic Way follows the whole of Scenic Route S111 and would not be affected. The closest part of the Wild Atlantic Way experiencing visibility would be 17.1km from the nearest turbine. The residual effect would be 'Not Significant'. The previous turbines on the site would also have been visible. The primary focus would be towards Bantry Bay and the mountain ranges that form the backdrop.

High Value Landscapes

- The proposed turbines would not be located within a High Value Landscape and would be seen outside the nearest High Value Landscapes (HVL).

HVL 16a – Glaciated and Forested Cradle Valley (North and West of Site)

- There is full or partial theoretical visibility only in the far eastern and western parts. This area is approximately 1.2km from the nearest turbine at its closest point and 9.2km at its furthest.

- The vast majority of this area would have no visibility of the turbines, including Gougane Barra.
- The individual landscape character of this area would not change significantly as the proposed turbines would be located at a distance or could not be seen due to intervening topography or vegetation. Where visible, the landscape provides the capacity to absorb the development.

HVL 4 – Rugged Ridge Peninsulas (South-East of Site)

- This area is approximately 4.1km from the nearest turbine at its closest point and 67.3km at its furthest. Viewpoints 1-4 in the EIAR are within the areas of visibility. Theoretical visibility occurs in two main bands running from Bantry Bay in a north-westerly direction.
- The broad landscape and rolling hills provide the capacity to accommodate a development of such scale seen in the distance intermittently.

Catalyst for other Wind Farm Developments

- Every planning application is assessed on its own merits. It is therefore unclear as to what the material basis is for the planning authority’s decision to label the proposal a ‘catalyst’ for “other inappropriate and similar wind farm developments of excessive turbine height.”
- The continuing evolution of wind energy technology since 2004 must be acknowledged. Typical turbine heights have increased and there are larger turbines in fewer numbers.
- It is not accepted that the proposal could be an inappropriate catalyst or precedent for repowering proposals.

Reason 2

It is submitted that the planning authority has designated the site as ‘Open to Consideration’ for wind energy development. The visual assessment shows that the

development can be accommodated without adverse impacts on any sensitive features, tourism assets or trails in the vicinity.

Precautionary Principle – Sustainable Tourism

- It is difficult to ascertain whether there is an evidential basis informing the planning authority's risk allocation in relation to impacts on tourism and if there is any negative correlation between wind energy development and tourism.
- Reference is made to tourism analysis by Board Inspectors in other planning appeals and to a Scottish Tourism Survey in 2016 and Fáilte Ireland Surveys in 2007 and 2012.
- Tourists and visitors taking advantage of cycling and walking trails in the vicinity of the proposed development would be constantly in transition and any available views would be fleeting.
- The amenity trails are not scenic routes and the need to protect views from them are not provided for in the County Development Plan.
- Wind energy infrastructure have become established landscape elements in West Cork without any discernible adverse effects on regional tourism.

Visual Analysis of Gougane Barra

- The ZTV mapping shows that there would be no visual effects from the turbines on Gougane Barra or the Forest Park trails.
- Although the proposed development is in the same area, a prominent ridgeline separates two valleys, one containing Gougane Barra and the other containing the proposed site.
- Viewpoints 10 and 11 of the applicant's assessment are the closest locations to Gougane Barra where there would be some visibility. Turbine 1 would be substantially screened by the eastern slopes of Foilstookeen Mountain. The development would not have significant landscape or visual effects from these locations.

- The applicant's assessment shows that no turbines would be visible from the complex of archaeological monuments at Gougane Barra.

Cycling and Walking Trails

- The ZTV mapping showed that there would be no visibility of the turbines along the entirety of the Gougane Barra Trails and Beara Way.
- The majority of the Sheep's Head Cycle Route and Sheep's Head Way are outside the study area and the nearest parts with theoretical visibility are at a distance of 17.1km and 15.9km. The potential for effects is considered imperceptible.
- Regarding the Gougane Barra Horseshoe Walk, there would not be domineering effects from where there is theoretical visibility along this route and the turbines and scale would be appropriate.
- Regarding the Pilgrim's Way, the majority of this route will not have visibility of the turbines. Where visibility occurs, it would be relatively close to the turbines and they would form part of the landscape at this location and when viewed from the route only the number of turbines and scale would have changed, as the previous turbines would have been visible. There would be open views of turbines for some stretches and local screening, particularly from forestry, would restrict views in other parts. The magnitude of change is not so great that it would negatively impact so as to detract from the trail and its appreciation.
- Regarding the Beara Gougane Cycling Route, the applicant's assessment shows that the significance of effects generally ranges from no impacts to slight to moderate for this cycle route. The higher elevation ridgelines where the most open views are available form a background in the view mitigating any potential for overbearing or domineering visual effects. The turbines would not fundamentally impinge on the cycling route or its potential future development.

The appeal submission includes a planning history analysis, consideration on planning policy, and offers a response to miscellaneous observations that were

submitted to the planning authority. Considerations are also offered on the reports to the planning authority, including from the HSE, the Council's Ecologist, and IFI.

The appendices to the appeal include an Archaeology & Cultural Heritage Technical Note and a Noise Technical Note in response to third party submissions.

6.2. Grounds of Third Party Appeal

The appellant requests the Board to refuse permission on more extensive grounds than those by Cork County Council. The appeal includes a petition and specific comments from residents living in the vicinity of the site. The grounds of appeal may be synthesised as follows:

Solicitor's Letter

- The Board has made serious errors in the past, underestimating adverse impact of noise from wind turbines. Reference is made to the Supreme Court judgement in *Balz and Heubach v An Bord Pleanála*. Deficiencies in the Wind Energy Development Guidelines 2006 are highlighted, consideration of WHO guidance on noise, and the need to review the MAS report on draft guidelines (attached with the appeal) are referenced.
- It is recommended that permission be refused because the applicant's information does not enable the Board to discharge its duties to ensure its decisions do not breach the human rights or constitutional rights of people and because the development would unreasonably interfere with the way of life and the residential amenity of those living in the vicinity.

Public Consultation

- The level of support for the appellant's petition and the number of observations made illustrate the strength of feeling on the unsuitability of the development at this location.
- The restriction of consultation to a 2km radius in a sparsely populated area angered those who were not consulted.

- Coiste Forbartha Béal Átha'n Ghaorthaidh CLG were not consulted prior to the application. Most of the population to be affected by the proposal were unaware of the existence of the project website.
- Developments should not be permitted if proper public consultation has not taken place.

Landscape and Visual

- Reference is made to the Planner's considerations in the report to the planning authority and to observations by third parties.

Noise and Shadow Flicker

- The current Wind Energy Guidelines are obsolete and do not meet the limits published by the World Health Organisation in 2018.
- Reference is made to third party observations made to the planning authority on noise and shadow flicker.
- The mitigation measures to address shadow flicker are not acceptable.

Battery Storage Container Fire Risk

- The planning authority gave no consideration to the detail presented in third party objections. There is compelling evidence on the danger of these installations. The application should have been rejected on grounds of a lack of safety risk analysis and an appropriate mitigation plan for the battery storage containers.

Turbine Fire and Blade Throw Risk

- The EIAR makes no reference to a 2014 incident at the site where there was an incident of turbine self-combustion and flaming blade throw that resulted in a forest fire. There is no safety case for a recurrence of this event for the

bigger and more powerful turbines proposed. The planning authority fails to address this issue.

Ornithology

- The potential impact on birds, in particular the White-tailed Eagle and the Lee valley corridor for migratory birds, constitutes grounds for refusal. Reference is made to observations made to the planning authority, with particular emphasis on the submission by Dr Alan Mee who manages the Irish White-tailed Eagle reintroduction project.

Flora and Fauna

- Reference is made to the Ecologist's report to the planning authority and to third party submissions.
- Concern is raised about the proposals to remove Kerry Slug, a protected species, from its habitat as a mitigation measure.
- The appellant is opposed to the entrance widening at the public road, with the loss of habitat and impact on bats also referenced.

Watercourses

- Reference is made to a number of third party submissions to the planning authority regarding drainage to local watercourses, the experience of impacts on watercourses by other wind farms in the area and the potential for cumulative effects, siltation, and containment of leakage from the turbines and the battery storage containers.
- The issue of containment from accidental pollution leakage from turbines and / or batteries into local watercourses due to malfunction, accident or fires has not been adequately addressed in the application and in the Council's reports.

Need for the Development and Alternatives

- Reference is made to third party submissions to the planning authority, which included alluding to Ireland meeting its emission reduction targets in renewable electricity generation and concerns over back-up power supply.

Red Aviation Lights

- The impact of aviation lights is rarely considered by planning authorities. The 178m high turbines would have a very significant visual impact on the night skies of the area and there would be a cumulative impact with other wind farms. An alternative system is referenced.

Archaeology

- The Council did not thoroughly examine potential impacts on archaeology.
- The proposed turbines are over 100m taller and 9 times the swept area of the previous turbines on the site. The past turbines cannot be used as a guide for suitability.
- Reference is made to a submission to the planning authority relating to the impact on the setting of archaeology in the area.

Cumulative Impact

- The cumulative impact of all the wind farms in the area has not been adequately addressed. Within 20km of Curraglass there are already 17 existing and permitted wind farms.

Tourism

- The appellant is happy that the Council invoked the precautionary principle in relation to tourism and considers the same principle should disqualify the development on more grounds where a safety case has not been made, such as for the battery energy storage system, turbine malfunction, combustion and wing throw.

6.3. Applicant Response to Third Party Appeal

The applicant's response to the third party appeal may be summarised as follows:

Solicitor's Letter

- The Balz judgement does not represent a significant change in direction in relation to the legal consideration of the 2006 Wind Energy Guidelines. It clarified that the Board is required to consider any submissions by third parties, even where they argue against the provisions of any current Section 28 Guidelines.
- Appendix 1 of the response forms a technical consideration of the documents submitted in the third party appeal relating to noise and industry best practice.

Consultation

- Those within 2km were involved in a community consultation effort. Those beyond this were intended to be given the opportunity to be part of a public information event which was then considered to be inappropriate due to Covid-19. The dedicated website was used to display the relevant information to the wider local community.

Landscape and Visual

- A detailed analysis and discussion of the capacity of the landscape to accommodate the proposed development and its suitability at this location was included in the first party grounds of appeal.

Noise

- The planning authority did not find fault with the noise assessment and noise was not cited in the reasons for refusal. The noise assessment is robust and was carried out in line with best practice.
- Appendix 1 of the response forms a technical consideration in response to the third party appeal.

Shadow Flicker

- Mitigation measures are set out in the EIAR. These can be tailored to meet the requirements of any changes to guidance in relation to shadow flicker.
- Shadow flicker is an entirely controllable and predictable phenomenon.

Battery Storage Fire Risk

- The general fire risk from battery storage facilities has been extensively researched, resulting in the development of modern and comprehensive mitigation and preventative measures.
- It is a standard requirement to complete a site-wide fire safety risk assessment prior to the commencement of operations. All plant and equipment will be designed and installed in accordance with required standards and installation, testing and commissioning standards will be adhered to. A site-wide emergency incident response plan will be developed. The fire safety risk assessment and fire certification process are the most appropriate fora to address these matters.

Turbine Fire and Blade Throw Risk

- The proposal caters for modern turbine technology and the applicant has a strong track record in wind farm construction and operation. The turbines would be continuously monitored and any fault would be detected at an early stage. The turbines would be fitted with anti-vibration sensors, detecting any imbalance caused by icing of the blades.
- The spacing of the turbines and the distance from properties limits the potential for health and safety impacts.

Ornithology

- The evaluation of the data collected through a two-year survey period has demonstrated that White-tailed Eagles are not dependent on the site for breeding or wintering.

- Important migratory routes for bird species were not identified in the assessment undertaken. Low impact for any identified key ornithological receptor was identified in the EIAR.

Flora and Fauna

- The applicant's EIAR, NIS and appeal submission address the majority of the concerns raised.
- Widening works will be conducted in the existing road verge at the road entrance and no significant direct or indirect impact on woodland habitat will occur.
- The proposal has been deliberately designed to avoid loss of peatland habitat.
- The potential for impact on the Kerry Slug has been fully addressed in the EIAR and the development is designed to minimise impact.

Watercourses

- The proposal is a standalone development that is not attached to any other construction site.
- Appendix 2 of the response consists of a technical note addressing the third party issues raised.

Need for Development

- On-shore wind generation will remain a central component in meeting 2030's 70% renewable energy target irrespective of advances in new renewable technology. The proposal will contribute towards achieving further decarbonisation of the electricity generation sector.

Aviation Red Lights

- The provision of aviation lighting on permitted turbines is a standard and accepted part of any wind farm development and is a safety requirement of

IAA. IAA has confirmed that only four of the turbines would need to be fitted with aviation lighting.

Archaeology

- Appendix 3 comprises a technical note in response to the third party appeal.
- There are no instances where any archaeological monument is being materially affected by the proposed development. No significant or adverse effects on setting would occur.

Cumulative Assessment

- The EIAR completes an assessment of other wind farm projects where relevant.
- The Zone of Theoretical Visibility shows negligible theoretical visibility along the corridor linking Bantry to the east of Drimoleague.
- When examining the applicant's 12 viewpoints in seven of them no other wind farms will be visible. In relation to the other five, three would have negligible cumulative visibility with Grousemount, one would have no significant visibility of Shehy More, and one would have theoretical views of Grousemount, Derragh, Cleanrath and Shehy More but in reality would be imperceptible due to a combination of screening and distance.
- There would be no theoretical visibility of the turbines from the north bank of Lough Allua And visibility along Inchigeela, through Ballingeary to Curraglass would be very limited. There would be no visibility along any part of the Pass of Keimaneigh.

Tourism

- Section 4.3 of the first party appeal deals with the tourism issues raised.

The response included technical notes on noise, water and archaeology.

6.4. Third Party Response to First Party Appeal

The third party's response to the applicant's appeal may be summarised as follows:

Solicitor's letter

- The third party's legal submission refers to the applicability of the WHO guidance on noise, the prevalence of amplitude modulation, and the implications arising from the lack of SEA for the National Renewable Energy Action Plan and the Wind Energy Guidelines 2006.

Site Location and Development Context

- There was a serious environmental incident at the previous wind farm when a turbine caught fire, with a blade thrown and causing a forest fire. Complaints were made to Cork County Council and to the Health and Safety Authority.
- The planning authority failed to take into account observations on noise impact from people living in the area.
- The fact there was a previous wind farm on the site does not in any way make it a compelling argument for further wind farm use. Condition 4 of Planning Permission 00/6590 is referenced and contravention of this condition should also be a reason for refusal.
- The landscape has not changed since the Board's decision to refuse the increase in hub height of turbines in 2003.

Refusal Reason 1

- The applicant's ZTV maps show that the proposed turbines would be visible from a very large extent of the wider landscape surrounding the proposed development as well as from scenic routes and high value landscape.
- Wind farms in this area are used to justify further developments, with a worrying precedent set for higher and higher turbines.

Refusal Reason 2

- The first party has done nothing to address the tourism impact concerns.
- ‘Open to Consideration’ designation of the lands is not an automatic green light for wind farm approval. The high value landscape of the surrounding area would be degraded and the sustainability of established cultural tourism would be jeopardised.

The response includes responses to the first party’s response to miscellaneous observations that were made in the first party appeal. The third party reiterates its concerns relating to ecology, ornithology, turbine failure, impact on watercourses, archaeology, and cumulative impact. The submission includes letters to the Council and to the HSA relating to the incident of a turbine fire at the previous wind farm and a submission from the owners of the Gougane Barra Hotel relating to tourism concerns.

6.5. Planning Authority Response

I have no record of any response by the planning authority to the appeals received.

6.6. Observations

- 6.6.1. An observation submitted by Tim and Kate Baker raised concerns relating to fire safety with the proposed battery storage facility and the ecological impact.
- 6.6.2. An observation submitted by Brídín Ashe and others raised concerns relating to the incomplete removal of the previous wind farm development on the site, the sensitivity of the site’s context, incompatibility with planning policy and provisions, impact on scenic routes, cumulative impacts, precedent, negative impacts on tourism / cycling / walking trails, and fire safety associated with the battery storage facility. The observation included the Irish Wind Energy Association submission to the planning authority in relation to the Cork County Development Plan review.

- 6.6.3. An observation submitted by Macroom District Environmental Group raised concerns relating to the approach to addressing the reduction in Ireland's carbon footprint, the scale of the proposed turbines, ecological impact, hydrology and hydrogeology, archaeology, and cumulative impact. The observer supports the third party appeal.
- 6.6.4. An observation submitted by Fáilte Ireland noted that, as the Irish landscape is one of the primary reasons for visiting the country, it is essential that the quality, character and distinctiveness of this valuable resource is protected. It was stated that it is the policy of Fáilte Ireland to support sustainable development and the need to provide for and develop renewable energy at appropriate locations is acknowledged. It was further acknowledged that the proposed development would be in a mountainous and highly scenic area of West Cork within the Wild Atlantic Way region. Reference is made to Gougane Barra, its amenities and facilities, to its identification by Fáilte Ireland as a signature visitor experience, and the support given to businesses and communities in this area. It is stated that the pristine natural environment is central to the development and marketing of the tourist experiences in this area and that it is highly valued. It is concluded that the concerns of the planning authority and the local tourism businesses should be given full consideration with respect to the area's tourism amenity and assets.

7.0 Planning Assessment

7.1. Introduction

- 7.1.1. A wide range of issues have been raised in the first and third party submissions to the planning authority and to the Board on appeal and as observations. I will seek to address the principal planning issues arising from these submissions. These include compatibility of the proposal with renewable energy policy, the site's planning history, compliance with wind energy guidelines, public consultation, the landscape character and visual impact, and the impact on tourism, as well as noise and shadow flicker.

7.2. Compatibility with Renewable Energy Policy

7.2.1. I note that wind farm development in principle would be compatible with a wide range of international, EU, national, regional and local policies relating to the reduction in greenhouse gas emissions, the promotion of renewable energy, and the role of onshore wind development. This includes the following:

- The Kyoto Protocol, an international agreement to which Ireland is a party to, which seeks significant reductions in total greenhouse gas emissions to no more than 13% above 1990 levels;
- The Paris Agreement, which provides for a limitation of the global average temperature rise to well below 2 degrees Celsius above pre-industrial levels and to limit the increase to 1.5 degrees Celsius;
- The Renewable Energy Directive, which requires EU Member States to adopt a national renewable energy action plan (NREAP) and therein to set out national targets for the share of energy from renewable resources;
- The Climate Action and Low Carbon Development Act 2015, which provides for the establishment of a national framework with the aim of achieving a low carbon, climate resilient and environmentally sustainable economy by 2050;
- The National Mitigation Plan arising from the above Act, which aims to provide the statutory basis for the transition to a low carbon, climate resilient and environmentally sustainable economy;
- The provisions of the Climate Action Plan 2019 which sets out the actions over the coming years to address the impacts which climate may have on Irelands environment, society, economic and natural resources;
- The National Renewable Energy Action Plan, following on from the Renewable Energy Directive, which sets out the national targets for the share of energy from renewable resources to be consumed in transport, electricity, and heating and cooling;

- The National Planning Framework, which promotes renewable generation and generation at appropriate locations to meet national objectives towards achieving a low carbon economy by 2050 (National Policy Objective 55);
- The Regional Spatial and Economic Strategy for the Southern Region, which recognises the need to safeguard and enhance the environment through sustainable development, transitioning to a low carbon and climate resilient society, and which has supporting Regional Policy Objectives including to reduce greenhouse gas emissions (RPO 87), to support the National Mitigation Plan and the National Adaptation Framework: Planning for a Climate Resilient Ireland (NPO 88), and to support the sustainable development of renewable wind energy (RPO 99); and
- Cork County Development Plan, which supports the sustainable development of renewable energy sources and which has supporting objectives including Objective ED 3-1 requiring development of onshore wind to be designed and developed in line with the ‘Planning Guidelines for Wind Farm Development 2006’ issued by DoELG and any updates of these guidelines.

7.2.2. It is reasonable to conclude from the provisions and objectives of the above that the development of a wind farm would be consistent with the aims of reducing greenhouse gas emissions, improving renewable energy production, and contributing to the aim of achieving a low carbon economy.

7.3. **Planning History**

7.3.1. I note the planning history relating to this site and my considerations on the relevant history are set out as follows:

Under ABP Ref. PL 04.127297 (P.A. Ref. 00/6590), permission was granted by the Board in 2002 for 10 turbines (hub heights 50 metres), a substation, two 40m high

meteorological masts and a site access. The conditions attached with the grant of permission included:

“4. *The structure shall be removed at the expiration of a period of 20 years beginning on the date of commissioning of the development.*

Reason: *A structure of this type is not acceptable in this location on a permanent basis.*

5. *Turbines shall not be replaced without the prior grant of planning permission.*

Reason: *In the interest of orderly development.”*

7.3.2. It is understood from Condition 4 that the structures associated with the development are required to be removed at the expiration of a period of 20 years from commissioning. The wind farm was commissioned in 2006 and, therefore, the expiration date would be in 2026. I note that at this stage the turbines have been removed but that their bases remain, that a meteorological mast is still in place and that the substation remains. To be compliant with the requirements of Condition 4, those structures not removed to date should be removed by 2026. I acknowledge Condition 5 relating to turbine replacement. This has no effect on the obligation to meet with the requirements of Condition 4.

7.3.3. Under ABP Ref. PL 04.209745 (P.A. 03/6910), permission was refused by the Board in 2005 for modifications to the previously permitted wind farm to include increase in hub height from 47m to 65m, increase in blade tip height from 75m to 91m, and the movement of a number of turbines. The reason for refusal was as follows:

“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.”

7.3.4. I submit to the Board that there have been no material or physical changes that merit reconsideration of this previous decision by the Board. The physical environment within which it is now proposed to erect seven turbines, each with an overall blade tip height of up to 178.5 metres, remains highly sensitive in that the site is set within a landscape that may reasonably be described as being scenic, relatively unspoilt and of high amenity value. Furthermore, it is proximate to Gougane Barra, a renowned landscape and tourist area of repute nationally and, indeed, internationally. (Fáilte Ireland's submission is noted.) It must be recognised that the extent of the visual envelope that would be influenced by a development of this nature would be large, extending south beyond Bantry and north and east well beyond Ballingearry and the Múscraí Gaeltacht area, and west and north-west into County Kerry. It must also clearly be understood that the proposed turbines would be almost twice the height of those previously refused by the Board and they would be physically larger structures in scale and area. It would be somewhat of a complete reversal of the Board's previous decision if it was decided that the proposed turbines with blade tips up to 178.5 metres would now be acceptable in terms of environmental impact. In the context of the Board's previous decision, I cannot come up with any rational, reasonable conclusion as to why the proposed turbines could be accepted.

7.4. **The Development in the Context of the Wind Energy Guidelines and Department Circular PL5/2017**

7.4.1. *Wind Energy Development Guidelines – Guidelines for Planning Authorities*

These Guidelines were published in June 2006 and remain the Guidelines that are in place for planning authorities and the Board when assessing wind farm developments. I acknowledge that the revised Wind Energy Development Guidelines have not been adopted to date and that such guidance is expected to address a wide range of issues, including matters pertaining to noise, visual amenity setback, shadow flicker, consultation obligations, community dividend and grid connections.

At this stage, it appears reasonable to consider the proposal against the provisions set out in the 2006 guidance.

Chapter 3 relates to wind energy and the development plan. I submit the following:

- Section 3.8 refers to 'Amenity Designations' and notes that the visibility of a proposed wind energy development from designated views or prospects would not automatically preclude an area from future wind energy development. It is noted, however, that the inclusion of such objectives in a development plan is a material factor to be taken into consideration in the assessment of a planning application. I note the scenic routes listed in Cork and Kerry County Development Plans in the vicinity of the wind farm site and the highly visible nature of the development that would arise from parts of these routes, impacting on the appreciation and amenity value of the views to be gained of the natural environment. The visual impact is assessed in some detail in another section of this assessment. Suffice to indicate that a significant adverse impact would result and this is reflected in the concerns raised by the planning authority in its reasons for refusal pertaining to effects on scenic routes.
- Section 3.9 refers to 'Tourism and Recreation' and notes that the effect of wind energy development on tourism and recreational activities must be assessed. It is stated that it is desirable that the relevant regional tourist authority should be consulted. The Guidelines acknowledge that wind energy developments are not incompatible with tourism and leisure interests but that care needs to be taken to ensure that insensitively sited wind energy developments do not negatively impact on tourism potential. In response to this, I note the submission from Fáilte Ireland, the national tourist authority. This authority acknowledged that the proposed development would be in a mountainous and highly scenic area of West Cork within the Wild Atlantic Way region and made particular reference to Gougane Barra, its amenities and facilities and to its identification by Fáilte Ireland as a signature visitor experience. Fáilte Ireland submit that the pristine natural environment is

central to the development and marketing of the tourist experiences in this area and that it is highly valued. It requests that the concerns of the planning authority and the local tourism businesses be given full consideration with respect to the area's tourism amenity and assets. It is apparent from this submission that there is an understanding that the proposed wind farm would negatively impact on the visual character of the wider area in which the wind farm development would be set, that it would have a distinct adverse impact on the signature visitor experience that is Gougane Barra, and that the concerns of the planning authority and tourism businesses of this area are well placed. It is apparent that it is determined that the wind farm development would have significant adverse impacts on the tourism product in this area.

Chapter 4 of the Guidelines addresses planning applications and Environmental Impact Assessment. The issues of access to the electricity grid, public consultation, and general considerations in an assessment (including ground conditions, impact on natural heritage, landscape and visual issues, noise, shadow flicker, etc.) are addressed in detail elsewhere in this assessment. It is noted that EIA is mandatory for the proposed development.

Chapters 5 and 6 address environmental implications and aesthetic considerations in siting and design. The significant planning matters relating to each of these are addressed elsewhere in my assessment and appropriate reference is made to the Guidelines where relevant.

7.4.2. *Circular PL5/2017*

I note reference to Circular PL5/2017 in correspondence in the application and appeals. This Circular relates to the *Interim Guidelines for Planning Authorities on Statutory Plans, Renewable Energy and Climate Change* published in July 2017. These form an update on the review of wind energy and renewable policies in development plans. The Circular notes that the Interim Guidelines do not replace or amend the existing Wind Energy Development Guidelines 2006 and that it is intended that the administrative provisions contained therein will be incorporated into

the revisions to the 2006 Guidelines when finalised. The Circular relates to the development plan process and to adoption of policies that reflect the overall national policy position on renewable energy. The lapse in time in the review of the 2006 Guidelines is acknowledged.

7.5. **Public Consultation**

- 7.5.1. I acknowledge the provisions set out in the Department of the Environment's "*Wind Energy Development Guidelines*" under Section 4.4 titled 'Public Consultation with the Local Community' which refers as follows:

"Planning authorities should encourage developers to engage in public consultation with the local community. While it is not a mandatory requirement, it is strongly recommended that the developer of a wind energy project should engage in active consultation and dialogue with the local community at an early stage in the planning process, ideally prior to submitting a planning application."

- 7.5.2. The Guidelines also outline how the consultation process could be developed. Best practice guidance on the pre-application public consultation is set out in Appendix 2. The Appendix notes that providing the public with a good flow of information about a proposed development can avoid conflict in the future. It also refers to it being helpful to circulate information pertaining to a wind farm proposal to community groups, churches and clubs within approximately 10km radius in the form of a formal letter, project information leaflet, posters and advertising, and providing a pre-paid response form.

- 7.5.3. I acknowledge the extent of consultation with a wide range of bodies undertaken by the applicant through scoping from Section 2.5 of the submitted EIAR and the engagement with the planning authority and the community from Section 2.6 of the EIAR. The latter included door-to-door consultation with residents within 2km of the site by a Community Liaison Officer. I submit to the Board that the extent of community consultation was extremely limited given the restricted geographical area selected, while the impacts of the proposed turbines could reasonably be understood

to be far reaching and well beyond 2km of the site. I must, however, acknowledge the impact of Covid 19 and the impracticality of meeting with the public in organised fora. The potential for alternative approaches, including newsletters or other forms of communication with the wider public, without direct engagement, could have been undertaken due to the constraints but were not done so in any meaningful manner.

7.5.4. It is apparent from the extent of public engagement in the planning application process to date that there is significant concern about the environmental effects of the proposed development. There was somewhat of a minimalistic approach by the developer in my opinion when it came to consultation with those likely to be affected by the wind farm development and such an approach was likely to have heightened public concerns due to the low level of information that was made available prior to the making of the planning application. This is most unsatisfactory. However, I must also highlight that the applicant is not obligated under the Planning Act or any guidance to engage further with the local community and has not contravened any legal requirements. I submit that alternative approaches to pre-application public consultation and provision of ongoing liaison would have assisted in a manner that at least would have improved an understanding of the applicant's proposal and potentially would have addressed fears for some. Such an approach would have been more desirable.

7.6. **Landscape Character and Visual Impact**

7.6.1. *Introduction*

The impact on landscape character and the overall visual impact of the development on this area is the most significant issue associated with this proposal. The physical extent of the visual influence of the turbines, their impact on the natural landscape character, the effects on the key tourism products of the area, and their prominence from designated routes considered to be of scenic amenity value represent the principal issues of concern.

7.6.2. Landscape Character

Cork County Development Plan recognises that the coastal and countryside landscapes of the county are a key green infrastructure asset not only for their intrinsic value as places of natural beauty but also because of their importance in terms of recreation, tourism and other uses (Section 13.5.1). The Plan states:

“The challenge we face is to manage our landscapes so that change is positive in its effects, so that the landscapes which we value are protected and those which have been degraded are enhanced. Meeting this challenge is a key element in achieving sustainable development.” (Section 13.5.2).

Such considerations form laudable aims. In the context of a proposed development with potentially an extensive impact on the landscape and how its character is understood, they should form a principal determining factor in the acceptability or otherwise of the proposed development.

I note that the planning authority prepared a Draft Landscape Strategy in 2007 based on the Government’s Draft Guidelines for Landscape and Landscape Assessment (2000) and that the wind farm site falls within the Landscape Character Type ‘LCT 15a Rugged and Peaked Upland’. This area includes the Shehy Mountains, the distinctive mountainous landscape of the area on which the turbines would be sited. The LCTs with a very high or high landscape value and high or very high landscape sensitivity and of county or national importance are considered to be the most valuable landscapes and are designated as High Value Landscapes in the County Development Plan. I note from Figure 13.2 of the Plan that the site of the proposed development is located between two such designated High Value Landscapes, immediately adjoining one such area to the north and north-west, with a further area a short distance to the south-west which incorporates the town of Bantry and its hinterland. The Plan notes that the capacity of each landscape character type to absorb new development will largely depend on the sensitivity of the landscape type and that developments which are likely to create a significant environmental, and particularly visual, impact will best be absorbed in areas where the landscape is robust, i.e. has the capacity to absorb development without significantly changing its character (Section 13.6.11). It is apparent from the scale and location of the

proposed development that it would influence the context and interpretation of the designated higher value landscapes in the vicinity due to its high visibility.

I acknowledge that the planning authority's Landscape Strategy remains in draft form and that the Plan states that the Council considers that it would be prudent to await publication of the National Landscape Strategy before embarking on a comprehensive review of the current Draft Cork County Landscape Strategy (Section 13.5.5).

Acknowledging that there is some degree of limitation on the consideration of landscape character in the County Development Plan given the draft nature of the provisions, I note the Wind Energy Guidelines considerations on landscape character. The Guidelines refer to six landscape character types to represent most situations as a basis for the Guidelines. They note that it is common that a wind energy development could be located in one landscape character type but would be visible from another. Importantly in the context of the proposed development, the Guidelines state that the entire visual unit should be taken into consideration. The site of the proposed development aligns mainly with the Guidelines' landscape character type 'Mountain moorland'. The key characteristics of this landscape character type are stated to be:

- Peaked, ridged or rolling mountains and upland with steep sides or gently formed valleys;
- Generally unenclosed;
- Landcover comprising blanket bog, a mottling of heather, wild grasses and some rush in wet flushes; and
- A landscape type of relative remoteness and often comprising pristine, unspoilt and remote landscapes.

The appeal site comprises peaked and ridged mountain terrain on which the turbines would be sited. It is primarily unenclosed. Much of the landcover would naturally be blanket bog and wild grasses. There is extensive natural rock outcrop. It is understood that much of the character of the site has been distorted somewhat in recent times by evergreen forestry, some of which has been felled, and by the

previous wind farm development with its structures and access tracks. Where the structures associated with the development are proposed to be constructed these areas are definitively remote. I again recognise that the land area has in recent times been subject to substantial man-made interference. In its present form, when viewed from the public realm, however, it presents as being somewhat of unspoilt character or of natural character due to the removal of the former turbines and the lack of visibility of the other associated wind farm structures from beyond the site.

The Guidelines note the exposure of mountains and that the preference for wind energy developments to be located at high elevations results in high visibility. It is further noted from the Guidelines that this landscape may be inappropriate for wind energy development for reasons of natural heritage and the fact that some of these landscapes are of rare scenic quality and/or support some of the last wilderness areas of relatively pristine, unspoilt and remote landscapes. It is also acknowledged that the Guidelines state that many examples of these landscapes should be open for consideration subject to appropriate design and landscape siting to minimise adverse impact and to optimise aesthetic effect.

I again note that the Guidelines state that a wind energy development may be located in one landscape character type but may be visible from another and that, in such an instance, the entire visual unit should be taken into consideration. It is evident from the scale of the proposed development that its visibility extends over a very wide area that encapsulates a number of other Landscape Character Types, which include 'Hilly and flat farmland', 'Transitional marginal land', and the 'Urban Landscape Type'. Having regard to this observation, one cannot readily determine that the appeal site falls neatly within the *Mountain Moorland* landscape character and then proceed to assess it in isolation. Thus, it may reasonably be determined that the impact of the proposed development on landscape character is particularly complex in this instance.

My considerations are as follows:

- Overall, the proposed development, in terms of effect on landscape character, would produce a very significant impact due to the scale and consequent visibility of the proposed turbines. I am of the opinion that this high visibility impact could not be construed as being positive on the understanding and reading of the landscape character of this area of West Cork. It would reduce the quality of the landscape character types over which it would have influence due to the physical prominence such structures would evoke and the clear structural, man-made impacts viewed over a vast area in proximity to highly sensitive landscapes. These landscapes cannot be subdivided for assessment purposes. They are each wholly integrated and inter-related when one is discussing how a physical development of this scale may affect a location and its context. This area forming Bantry, its coastline and its hinterland and up into the Gaeltacht area of the County is understood to be of distinctive character in terms of amenity value and tourism product. The distortion of the rural hinterland, of which most of its sensitivity and amenity value derive from its mountain moorland, is what would be most affected by the proposed development. One cannot isolate the impact or confine it due primarily to the sheer scale of the turbines proposed.
- In the context of the *Mountain Moorland*, the proposed development would be developed on a highly exposed site, much of which is proposed to be sited on elevated and prominent ridgelines. I note and accept that this site has previously been developed as a wind farm. However, the scale and height of the proposed development are somewhat incomparable and would produce structures of vastly greater visibility over an extensively greater geographical area. The remote nature of this site and the potential effects on the natural heritage value of the wider area remain to be difficulties for protecting the character of the landscape. The context of the site must be accepted as sensitive given its proximity to and prominence from some of the county's most valued landscapes, such as Gougane Barra, and the extent of its visual influence beyond Bantry and its hinterland.

- The other landscape character types proximate to this wind farm site would be dominated by the proposed development, eroding amenity value and distorting sensitivity. The adverse impact on the understanding of the context of the landscape within which Gougane Barra is located, for example, cannot be avoided.
- The inter-visibility between the proposed development and the town of Bantry and its hinterland is also critical, in my opinion, when considering the landscape impact. The context and setting of the town are inherent to its visual quality. Many of its functions are dependent upon its natural setting and heretofore uninterrupted influence by development of the nature proposed to be placed in a prominent area which forms part of the framing of the town. The mountains to the north and north-west are an integral part of the definition of the town. They frame it. Separating the visibility of the town from the visibility of its bordering hills and mountains is unattainable. The imposition of the proposed turbines would have a very significant impact on the understanding of the landscape in which Bantry is set. I submit to the Board that the proposed development would have a prominent physical influence on the landscape character setting of the town and its hinterland due to its inability to visually integrate.

In conclusion, I am firmly of the opinion that the development of the scale proposed would have a significant negative landscape impact. The proposed turbines would not be framed or partially contained. They would be highly exposed over a vast area. They would have an influence over other particularly sensitive landscapes. They would be placed within a setting that would be somewhat understood as indistinguishable from these landscapes. Their impact on the natural heritage of the area could not reasonably be seen to be localised. The proposed development could not be viewed as sitting comfortably with the Wind Energy Guidelines in terms of impacts on landscape character as a result of the influence it would have on the amenity value of the area and the tourism and recreational value of that area. Further to this, it is determined that the proposed development would fail to achieve

the aims of the provisions of Cork County Development Plan because allowing for and managing a development of this nature and scale within this landscape and this landscape context would not result in change which could be construed as positive in its landscape effects. It would not protect valued landscapes and it would not produce positive change for the recently degraded nature of this site. I do not see how the adverse impacts on the landscape could be aligned with sustainable development in this instance.

7.6.3. *Visual Impact*

Zone of Theoretical Visibility (ZTV)

As part of the applicant's assessment of visual impact of the proposed wind farm development, the generation of a Zone of Theoretical Visibility, with a radius of 25km centred on the appeal site, was undertaken. The ZTV represents the area over which the development would theoretically be seen. It indicates broad areas where the visibility of the development is most likely to occur, how much is most likely to be visible, and the extent and pattern of visibility. It presents a 'bare ground' scenario, i.e. without screening structures or vegetation. I note that the applicant's ZTV shows the visibility of the proposed wind farm using the half blade height of the wind turbines as a point of reference and not the visibility of the hubs or blade tips of the turbines. The ZTV also indicates the number of turbines that would potentially be visible to half blade. Figure 12.2 and Appendix 12-4 of the EIAR show the half blade ZTV.

Before considering the ZTV undertaken by the applicant and acknowledging the value of the modelling and derivation of a ZTV for the proposed development, it must first be noted that the proposed turbines would be very large, very high vertical structures and, as a result, they would be visible, recognisable and distinctive over a vast geographical area. Wind turbines up to 178.5m high to blade tip placed on mountain and ridges would have a very significant degree of visibility over a very wide geographical area in the context of this location. It is not a question of from

where they are hidden or from where they would be screened. A development of this scale would have direct impacts on the interpretation of the natural landscape because of its form, scale and degree of visibility. These direct impacts cannot be graded readily by alluding to intermittency or piecemeal reading of impacts in a landscape of this nature as a result of vegetation in a defined location, a bend on a road, the location of a hill, or some other minor intrusion on visibility over a short distance. I suggest that it may be somewhat futile in the context of the proposed development to be painstakingly analysing the degree to which this development is visible inside or outside of designated high value landscapes. A development of this scale should, in my opinion, always be read with regard to a true sense of impact, which is in the context of a location. Accepting its visibility in its context, one may then determine whether this visibility in this location is acceptable or not. These large turbines would be seen. They would be prominent. They would come into views from near and far. They would impact on the setting of mountain and bay. This is the reality of a development of this scale at this location. The decision resulting from this application must determine whether these impacts are acceptable or not.

Returning to the ZTV, it is unsurprising to note that the applicant's own modelling shows that the visibility of the turbines would be very expansive. Critically, with regard to the visibility in the *context* and *setting* of Gougan Barra, the proposed development would have a distinct visual influence. It is reasonable to ascertain that when standing at St. Finbarr's Oratory the mountains immediately framing the lake would prohibit views of the proposed turbines. However, take a short walk northwards and the impact radically alters as Foilastookeen comes more prominent into view. Once again, I reiterate that it is the context that truly merits assessment. This strong visual influence clearly continues north-eastwards into the heartland of the West Cork Gaeltacht setting. I note the existence of wind farm development further out beyond Ballingeary and the villages of this area. However, I note the distinct lack of wind farm development on the approach southwards to Bantry Bay. This of course was not always the case with the previous wind farm development on

the site. In response, I would again express my concern about the effects of the proposed development, with turbines greater than three times the height of the previous turbines and the reduced visual impact of the latter on the context of the setting of Gougane Barra and its hinterland.

The other distinctive visual influence of the proposed development would be to the south and south-west. Some clarity is required on the applicant's illustrations when referring to this. I note that Figure 12-1 of the EIAR shows the degree of visibility of the proposed turbines and the number of turbines that would be visible in different locations. Appendix 12-4 is less clear in its colouring and the Board should note that the mauve-type colour overlapping the 'High Value Landscapes' represents areas from which 5-7 of the turbines (i.e. most) would be seen. It is evident that the proposed development would be highly visible from Bantry, Bantry Bay and its wider hinterland, along coastline and beyond Ballylickey. This reinforces my concern raised earlier about the visual prominence of the development on the setting of the town and influences the reading of the upland landscape from coastal locations.

I note the strong visual influence on the immediate environs of the site itself, which would be expected. This has strong influences on visibility along the road network and the public realm, affecting the context of the Pass of Keimaneigh, the Shehy Mountain range, and the foothills and farmlands in the vicinity. The significant impact of turbines 178.5m in height to blade tip could not be avoided locally and would produce a very dominant physical presence.

Finally, I note from the ZTV the limited degree of visibility of the proposed development from County Kerry. I acknowledge that Foilastookeen, Conigar, and Knockboy (the highest peak in the Shehy Mountains) lie west of the site and significantly curtail views in the direction of the site from the west. I accept that there would theoretically be visibility from the upland locations west of the site with County Kerry and from distant locations beyond these closer upland areas. The prominence

of the impact would be somewhat less from the public realm when compared to the development's likely visibility within County Cork.

In conclusion, I submit that the applicant's ZTV ably demonstrates the prominence of a development at the scale proposed from Bantry and sensitive coastal and upland areas. This prominence suggests a contribution to the landscape which is an interference or a distortion that imposes upon the highly valuable natural qualities of the landscape in this area and the visual experience of it. This is a distinct detrimental impact. This impact is reinforced by the height, scale, and number of turbines placed on elevated mountain and ridgelines and where often they would fail to retain mountainous backdrop and would frequently produce highly prominent development on the skyline.

Photomontages and Visibility from the Public Realm

I propose to offer considerations on the twelve photomontages presented as part of the applicant's EIAR which formed Volume 2. From the outset, I wish to state that the representation of the likely visual impact arising from views selected by the applicant form a reasonable illustration of the visibility of the turbines when viewed from the specific points presented. These views have been confirmed. The views presented may reasonably be determined to be location-specific and it is evident that viewpoints could have been selected elsewhere to indicate a varying degree of visibility.

Photomontage 1

View 1 is taken from the southern approach into the town of Bantry in the immediate vicinity of the N71, the principal road entry into the town. This view is a fine representation of how Bantry relates to the bay, its mountainous backdrop and the foothills of these mountains.

The final montage of the series on this view best demonstrates the likely visual impact from this location. All of the proposed turbines would be clearly visible in this view despite being over 17km from this location south of the town. The skyline development resulting from the scale, height and siting of the turbines is best illustrated here. The view is otherwise not interrupted by manmade skyline development. The mountains framing the town and bay define the unspoilt character of the hinterland.

It is my submission to the Board that the approach into the town of Bantry from its principal road entry would be greatly impacted. It is evident that views from approaches in the bay, from Whiddy Island, etc. would be affected by the prominence of the group of turbines which would break the skyline.

Photomontage 2

View 2 is one which the applicant appears to seek to demonstrate the impact on the Wild Atlantic Way. It is taken from a remote location further south of Bantry from a public parking area / viewing area with panoramic views north and north-west towards Bantry, the bay and beyond.

This view is again taken at a distance of over 17km from the site. The final photomontage in the series on this view again demonstrates the visibility of the group of turbines and the distinct skyline development that would result. The isolation of the development, its prominence when compared to other wind farm developments within the wider context, demonstrates a distinct physical presence arising.

This is a public viewing area to which visitors are guided to and from which the character of the view would be significantly altered by the proposal in my opinion. I am satisfied to conclude that the turbines would become a prominent component of the panoramic views gained from this location. I do not consider that the proposed

development would contribute to the amenity and/or tourist value of this viewing area and could not be regarded as positively contributing to the natural amenity sought to be gained from the Wild Atlantic Way.

Photomontage 3

View 3 is taken east of the town of Bantry. This is from a rural location from which can be seen the agricultural lands forming the foothills of the Shehy Mountains and which shows the sporadic nature of housing, farmland and farm developments. As with the previous views, the framing of the foreground by the mountains behind pervade as a key component in the view. The eye is drawn beyond the agricultural lands to the higher mountainous terrain.

This a view taken at a distance of almost 15km to the site. Accepting that it may be indicative of views from some of the local roads in the vicinity of Bantry, similar concerns arise. The skyline nature of the development results again and the distinctive presence of the elevated high structures distort the focus of the view beyond the agricultural lands in the foreground.

I accept that this view may be seen to be somewhat representative of views from local roads in the area. The experience of the road user, whether by vehicle or as a pedestrian or cyclist, is clearly affected by the prominence of the turbines. It must be understood that such views cannot readily be determined to be intermittent when there is a regularity to the visibility along the minor road network.

Photomontage 4

This view is taken from the regional road a short distance east of the village of Kealkill. This is a view from which can be gauged how the topography of this area intervenes in the visibility of the proposed development.

This view is taken at a distance of just over 6km from the site. The lower foothills restrict the view of the proposed turbines. What is of note is that, despite the significant presence of the foothills in the foreground, the rotating blades of the turbines would remain visible, demonstrating the significant height of the proposed structures.

It is apparent that the turbines would form part of the view and the action of the turbines would draw the viewer in that direction, albeit that most of the towers would be masked.

Photomontage 5

This view is taken further east along Regional Road R585 close to Cousane. There are panoramic views north and north-westwards from this road when travelling from the east in particular as one descends towards Kealkill. The agricultural lands form the foreground but the foothills and the Shehy Mountain range are the prominent features in the view and are expansive from the regional road.

This view is taken at a distance of just over 5km from the site. Not all of the turbines would be visible in the view and substantial lower sections of some of the towers would be masked by the foothills from this location. From this view there is some degree of a mountainous backdrop although the height and scale of the structures ensure the rotating blades would protrude above the backdrop and break the skyline.

What must be impressed upon the Board when considering such a photomontage is that it is indicative of that location. It captures a view from a specific point. What may reasonably be deduced from my site visit and assessment of this location is that the proposed turbines would be highly visible from extensive sections along the R585, particularly on the approach to Kealkill from the east. Such visual intrusion distorts the relatively unspoilt nature of views from this road beyond the valley in the foreground and it is reasonable to anticipate that the grouping of turbines would

dominate the views along this section of road. Their prominence at such a distance can still be gauged from the photomontages.

Photomontage 6

This view is taken south-west of the site from the foothills of Foilastookeen from a minor local road. There is extensive forestry in the foreground and the eye is drawn to the mountainous terrain behind.

This view is taken at a distance of 2.5km to the nearest turbine. The scale of the turbines and their localised visual impact are well understood. The continued lack of backdrop and presentation as skyline development when viewed south of the site pervades. The structures are evidently the dominant feature in the view.

This view is representative of how the dominance of the development would evolve in the vicinity of the site due to the height and scale of the structures and the action of the blades. The road user along the minor roads in the vicinity of the site would encounter a stark change in the landscape character by the development and a distortion of the relatively unspoilt amenity of the area.

Photomontage 7

This view is taken south-east of the site of the proposed development from a minor local road looking north-west towards the Shehy Mountains. It is representative of a view of a landscape in which there is limited sporadic housing and more fertile agricultural holdings in lowlying areas, while the continuity of the ridgelines behind extend over a wide area.

The view is taken at a distance of 3km to the nearest turbine. The structures clearly impinge on the unspoilt continuity of the mountains from this view. Indeed, the scale and height of the structures show up the turbines as commanding features in the

landscape. There is a notable degree of mountainous backdrop to ease the prominence.

As with most of the photomontages submitted, this also is an area where when travelling along the public road one will gain a somewhat regular view of the turbines over extensive lengths. It is reasonable to determine that the turbines would be the dominant features in the view of this landscape. The natural visual amenity value is adversely affected by the scale, height and consequent prominence of the development.

Photomontage 8

This view is taken south-east of the site from Regional Road R584 on the approach to the Pass of Keimaneigh. The view is taken from the lowlying area below the location for the turbines and the foothills of the mountain range dominate the view.

The view is taken at a distance of 1.2km from the nearest turbine. This is a fine example of how the scale and height of the proposed development would distinctly contrast with previous wind farm development on the site. Notwithstanding the lowlying nature of the land from which the view was taken, along with the prominent foothills, most of the rotating blades of the turbines would be visible as they break the skyline. As one progresses effectively alongside the wooded hillsides northwards on the R584 it is expected that there would be less visibility of the structures.

It is striking that, despite the natural topography and the siting of the turbines at a significant distance from the regional road, the turbines and their rotating action would impact at all on such a view in this location. This is indicative of the impact arising from the scale and height of the structures intended for this site.

Photomontage 9

This view was taken from Regional Road R584 north-west of the site. This is an important approach road to the villages within the Múscraí Gaeltacht and to Gougane Barra, a principal tourist destination in this area. It highlights the relative unspoilt natural terrain, the more natural vegetation types prevalent in the vicinity of the site and the rugged nature of the mountain landscape. In the immediate vicinity there is also sporadic housing along the regional road.

This view is taken at a distance of 2.8km from the nearest proposed turbine. As with Photomontage 8, this view demonstrates the sheer scale and height of the structures proposed for this site. In spite of the prominence of the foothills within the view, three of the turbines would break the skyline and would intrude on the naturalness of the view.

I note again that this is an important approach to Gougane Barra from the north-east and it is apparent that views of this nature would be impacted along this route by the rotating turbine blades above the foothills. The notion of protecting the context of an important tourist asset, a distinctive amenity of county and national importance, should not go unmissed in such a sensitive location. The protection of the natural buffer around such important assets should, in my opinion, be upheld and such physical intrusion should be avoided.

Photomontage 10

This view is from the approach road to Gougane Barra linked to Regional Road 584. The rugged mountains form the backdrop, while the natural vegetation is expansive on the approach to the uplands. The natural character of the area is well understood in this view.

This view is taken at a distance of 2.5km from the nearest turbine. It is once again notable that the upper sections of most of the turbines would be visible in the vicinity

of this important route into Gougane Barra. Notwithstanding the uplands of Dereenglass and Foilastookeen, the scale, height and siting of the proposed turbines ensure the skyline is broken and the rotating turbines become prominent in the view.

I cannot but impress upon the Board once again the importance of protecting the context of Gougane Barra. Such development distorts the appreciation of the natural amenity and the setting of this important tourist asset. There is limited backdrop and a regularity to the breaking of the skyline with a development of this scale and height. The development's adverse impact on the amenity value of this area cannot be understated.

Photomontage 11

This view is taken north of the site and north of Gougane Barra. It is from a local road which is one of the important walking routes in the vicinity of Gougane Barra. The panoramic views gauged a short distance from the centre of Gougane Barra are appreciated in this photo. There is a distinct component of evergreen forestry in the view. However, the rugged nature of the landscape remains understood and the view is all about the mountain range.

This view is taken at a distance of 3.4km from the nearest turbine. Nearly all of the upper sections of the turbines would be visible in this view in spite of the mountainous terrain which at present dominates the view. Yet again the turbines break the skyline. The scale and height of the proposed structures cannot be masked and they would become prominent features in the view.

The proposed development would erode the natural quality of the landscape when viewed from such a walking route and public road. Such views would continue over substantial sections of this road on the approach down into Gougane Barra. It is necessary to repeat yet again that the proposal would have a significant adverse impact on the context of Gougane Barra.

Photomontage 12

This view is from a road junction to the north of Ballingearry immediately forward of an existing wind farm development. There is expansive rolling countryside and foothills in the view and the Shehy Mountains frame the view to the rear. A couple of turbines associated with Grousemount Wind Farm come into view.

This view is taken at a distance of over 9km from the nearest proposed turbine. The contrast between the visibility due to the scale and height of the proposed turbines and that of the other established turbines is acknowledged. Each of the turbines would break the skyline and would be prominent in the view. There would be no true integration with the landscape.

Such a view, similar to those taken south of the site at significant distances from the site, demonstrates the high visibility associated with turbines of this scale and height. The development of turbines of this height and scale on this site would ensure prominence in views and frequently dominance. The distortion of the natural character of the mountainous terrain by imposing such large structures pervades.

In conclusion on the presented photomontages, I submit that the scale and height of the proposed turbines ably demonstrate that the proposed development would be highly prominent in a sensitive landscape which is renowned for its scenic qualities and high amenity value. The photomontages produced show that this development would fail to provide a backdrop to enable some degree of integration with the landscape. The extent of intrusion on the skyline is stark. Notwithstanding hills and extensive forestry, woodland and other vegetation, the proposed turbines would present as significant features sited on ridgelines which interrupt the form and presentation of the natural unspoilt mountains that are critical to framing the foothills and lower agricultural areas. It is very clear that a development of this height and scale at this location would produce a dominant visual impact that fails to protect the

amenity of the area and that this impact is over an expansive area. The adverse impacts on the setting and context of Bantry, Bantry Bay and Gougane Barra are distinct. The development, due to its scale and height, becomes the focus of the view in nearly all instances. I can confirm for the Board that the selected views are indicative of the likely impact and the impacts on views can easily be replicated throughout many other locations in the vicinity of this site. If one was to accept the proposed development in its form, scale, height and siting then one would be accepting a notable degradation of the visual qualities of this landscape in my opinion. It is apparent that the proposed development would have an overbearing visual influence on the natural character of this landscape.

7.6.4. Cumulative Visual Impact

I submit to the Board that this is an important issue in the context of the landscape and visual amenity impacts. The reason for this is the very limited degree of cumulative impact the proposed development would have with other established wind farms north of this site. The applicant's photomontages, capturing Bantry, the local road network, walking routes, viewing areas, etc., ably demonstrate the distinct lack of cumulative impact generally. This, in my view, indicates how this area has to date been well protected from significant intrusive development and how the proposed development of this scale and height would have such distinct impacts for the setting of the town of Bantry, views from Bantry Bay to the mountainous backdrop, the approaches and context of Gougane Barra, and views from the wider road network understood to form part of the Wild Atlantic Way. The proposed development would be a stark, prominent intrusion on the natural amenity of this area. The cumulative impact with other wind farms is not a significant issue. The prominence of the isolated wind farm, with turbines of the height and scale proposed in a highly scenic setting, is the issue and the resulting adverse impact this development would have on the visual and landscape sensitivities of this highly scenic and valued area.

7.6.5. *Impact on Scenic Routes and Walking Routes*

I note the planning authority's specific concerns in its reasons for refusal that relate to the visual impacts the proposed development would have when viewed from several designated scenic routes, the Wild Atlantic Way, and walking and cycling routes in the area. In assessing this proposal it has been possible to determine the degree of impact of the proposed development on landscape and in terms of its visual impact derived from the applicant's ZTV and photomontages in addition to my site visit, which included the inspection of the relevant routes. The applicant's ZTV shows the visibility of the proposed development notably to the north, south, north-west and south-west in particular. The photomontages have clearly demonstrated the visibility of the high turbines proposed for the site despite the natural hilly topography in the foreground of many views and the existing forestry, woodland and other vegetation. It may reasonably be determined from this ZTV that the proposed development would be highly visible from many of the designated scenic routes, including those forming part of the Wild Atlantic Way, those forming parts of the regional road network, and the important approach to Gougane Barra. My inspection would support such an observation. The proposed development would clearly impact on views gained from important walking routes within the Shehy Mountains and in the vicinity of Gougane Barra. The impact on these routes and trails demonstrates the inability of the proposed development to integrate with the natural landscape character which one gains at present in these areas. Such comment of course should not seek to avoid the acknowledgement of the previous existence of a wind farm on this site. However, the scale and height of the turbines now proposed do not allow for any reasonable degree of integration and the forming of substantial backdrops to these structures. With due regard to this, I consider that I can reasonably conclude that the proposed development would have a visually detrimental impact on the quality of views from scenic routes and from walking and cycling trails in this area and it would adversely impact on the enjoyment of the natural amenity of the area.

7.6.6. *Conclusions on Landscape and Visual Impact*

I am satisfied to inform the Board that there would be no doubt that the proposed development would have a very significant landscape and visual impact, both locally and over greater distances from roads, the coastline and mountains in this area of West Cork. The height and scale of the proposed turbines would ensure the development would be highly visible. The applicant's photomontages demonstrate how substantial the landscape and visual impacts would be. The applicant's submission clearly shows the prominence of a development of this scale set within a sensitive landscape and emphasises the exposed nature of the landscape and how there are expansive views throughout much of this area. The prominence and skyline nature of a development of this scale is evident. The result of the impact of this development would be to change the understanding of the landscape. There would be damage caused to the landscape and visual qualities of this area. The incongruity with the natural landscape could not be avoided.

It is reasonable to ascertain that a development of such significant impacts arising from its height and scale in such a sensitive location would have adverse impacts on the quality of the tourism resource of this area. The impacts for Gougane Barra, Bantry, the coastal setting, etc. have already been alluded to and should not be underestimated. As a critical component of the economy of this area, due care is ultimately required in the management of the principal tourism asset, namely the landscape. I consider the planning authority's concerns relating to impacts on scenic routes and the tourism infrastructure of this area to be well-founded. It is reasonable to determine that the proposed development would not sit comfortably with the provisions of the Cork County Development Plan as they relate to such routes and to the development of the tourism industry in the county.

Finally, I submit that the location for a proposed development of this height, scale and siting does not have the capacity to significantly reduce or mitigate the adverse landscape and visual impact that would arise.

7.7. **Shadow Flicker**

- 7.7.1. The casting of shadows by turbines and the rotation of blades can occur with wind farm development in certain defined circumstances. As a result, this can cause potential nuisance, in particular to residential properties in the vicinity. For this to occur the sun is required to be shining and to shine at a low angle, notably after dawn and before sunset. Along with this, a turbine is required to be between the sun and the affected property and there must be enough energy to make the turbine blades move. Where shadow flicker can potentially occur the Wind Energy Guidelines recommend that it should not exceed 30 hours per year or 30 minutes per day for dwellings within 500 metres. The Guidelines also note that, at distances greater than 10 rotor diameters from a turbine, the potential for shadow flicker is very low.
- 7.7.2. For the assessment of impact from shadow flicker, I note that turbines with a rotor diameter of 150m and a hub height of 103.5m are those that were modelled by the applicant. The applicant considered all dwellings within 1.5km in its assessment, which totalled 23 dwellings and these are shown in Figure 5-5 of the EIAR. The predicted shadow flicker estimated to occur is presented in Table 5-9 of the EIAR. This identified that a mitigation strategy was required for potential day exceedance for six residential properties, five to the west and south-west and one to the east. This is based upon worst-case conditions and the absence of mitigation. The applicant notes that, when the regional sunshine average is applied, the Wind Energy Guideline limit would not be exceeded at any of the modelled properties.
- 7.7.3. In considering this issue, I note that there are no occupied dwellings within 760 metres of any proposed wind turbines. I further note the findings of the applicant's modelling results for properties within 1.5km of the turbines. I am very much aware of the range of necessary conditions to be in place for shadow flicker to result. It is apparent that shadow flicker would not occur frequently in this area as appropriate weather conditions coinciding with direction of shadow would not likely converge for each day shadow flicker could potentially result. With due regard to these observations, the potential for the proposed development to have an adverse impact through shadow flicker is, therefore, considered to be highly unlikely.

Notwithstanding this, in the event that any nuisance could potentially arise, I note that technology is available to prevent shadow flicker from affecting neighbouring properties. A simple and effective measure to address concerns is to turn off offending turbines during periods when they are most likely to potentially create shadow flicker. A turbine can be appropriately programmed for this to occur. Automatic controllers can be employed to stop those turbines which could give rise to shadow flicker for the hours in any year that the phenomenon could potentially occur. These can be incorporated into the controls of the turbines and can be programmed to continually monitor sunshine intensity and wind direction and can automatically take the turbines out of operation to prevent moving shadows affecting houses. With such mitigation available, I do not consider that shadow flicker could be considered to be a potentially significant issue impacting on the amenity of residents in the vicinity of this wind farm development.

7.8. **Noise Impact**

7.8.1. I note the many third party submissions to the planning authority and the third party appeal which have raised concerns about the potential noise impact arising from the proposed development. I propose to address this issue under a number of sub-headings as follows.

7.8.2. *Noise Sources and the Existing Environment*

When considering the issue of noise emissions, I must acknowledge both mechanical noise and aerodynamic noise. The former is derived from moving parts contained within the proposed turbines, such as from the gearbox or generator. I note that noise derived from this source may have tonal components and this may also be dependent on wind speed and the consequent rotation of the blades. I do not intend to focus on this noise type in this assessment as modern turbines generally provide for insulation that prevents the transmission of mechanical noise. It is aerodynamic noise that merits consideration as the likely potential noise source for the wider community.

I acknowledge that aerodynamic noise could be significant from large turbines. The aerodynamic noise derived from turbines increases with wind speed and rotational speed. As distance increases from a noise source the noise spectrum becomes more biased towards the low frequencies. This wind turbine noise fluctuates at a rate depending on the speed of rotation. This is referred to as 'blade swish'. As distance from a turbine increases this effect generally reduces. I note that the response to wind turbine noise would be dependent on an array of factors and that individuals respond differently to similar noise. In this context, it is reasonable to conclude that different people have differing degrees of hearing sensitivity. What is of particular relevance in determining the noise impact of the proposed development on the residents in the vicinity of the appeal site is that one can reasonably state that the residents in this remote area generally experience an environment where there are low background noise levels at present. I must acknowledge, however, that there was a wind farm previously on this site and that wind farm-related activities comprised a source that influenced the noise environment in recent times. I also note that at night-time one would expect that significant regular noise sources, such as road traffic and farming and forestry-related activities which impact on the local area would be substantially reduced and low background noise would generally prevail as the extent of man-made noise sources decline. The impact at night-time from the proposed development by the swishing of blades from the large turbines proposed could potentially affect sleep patterns and could potentially generate stress where turbine noise is audible, particularly where windows may be left open in houses in the vicinity. The distinctive difference with blade swishing, when compared with other types of noise experienced within a rural environment, should be acknowledged as relevant in assessing noise impact. This type of noise could be perceived to change the character of the noise environment.

Wind turbine noise evidently can only occur when turbines are rotating. Noise levels are found to be greatest when the wind is blowing from the turbines in the direction of a sensitive receptor. I acknowledge that turbine noise may be masked by

vegetation. I note the exposed, elevated nature of the site and the proposed height of the turbines. I also note the low density of housing in the vicinity. Another important issue is the potential difference in wind speeds at the upper levels of a turbine of the height proposed and those experienced at ground level. With the tall structures proposed at this site it is perceivable that wind speed could be sufficient to rotate the proposed turbines while at lower levels the wind experience is not notable or is less detectable. The applicant's background noise assessment becomes an important feature to determine potential consequences in this scenario.

Finally, I am aware of the extensive public concerns relating to infrasound, amplitude modulation causing periodic thumping at low frequencies, and the negative health effects seen to arise from wind farm development on some people exposed to such development. There is extensive conflicting research on these issues. The assessment of this planning appeal cannot provide the context for the making of decisions on public policy relating to such health matters.

7.8.3. *Wind Energy Guidelines*

I note the third party appeal submission in relation to noise, the request to effectively reject the provisions of the Wind Energy Guidelines in assessing the impact of the proposed development when considering the issue of operational noise, and the criticism directed at the Board in its deliberations on the issue of noise. I acknowledge the WHO *Environmental Noise Guidelines for the European Region*. Such guidance may influence the review of the existing Wind Energy Guidelines. However, at present I must determine that the prevailing guidance on noise is that set out in the current national Wind Energy Guidelines. I accept that this is a particularly complex issue, with extensive conflicting research and a wide range of international guidance and standards. Evidently much can be learned from international best practice but the guidance to which the Board would ultimately be required to have due regard to at this time is set out in the Wind Energy Guidelines.

Section 5.6 of the Guidelines refers to 'Noise'. The Guidelines acknowledge much of what has been referred to above in discussing noise in general. It is noted that good acoustical design and carefully considered siting of turbines is essential to ensure that there is no significant increase in ambient noise levels at nearby sensitive receptors. It is also noted that sound output from modern turbines can be regulated to mitigate problems. The Guidelines require that noise impact should be assessed by reference to the nature and character of noise sensitive locations. They require noise limits to be applied to external locations and that such limits should reflect the variation in both turbine source noise and background noise with wind speed. The following is particularly noted:

"In general, a lower fixed limit of 45 dB(A) or a maximum increase of 5 dB(A) above background noise at nearby noise sensitive locations is considered appropriate to provide protection to wind energy development neighbours. However, in very quiet areas, the use of a margin of 5 dB(A) above background noise at nearby noise sensitive properties is not necessary to offer a reasonable degree of protection and may unduly restrict wind energy developments which should be recognised as having wider national and global benefits. Instead, in low noise environments where background noise is less than 30 dB(A), it is recommended that the daytime level of the LA90, 10min of the wind energy development noise be limited to an absolute level within the range of 35-40 dB(A)

Separate noise limits should apply for day-time and for night-time. During the night the protection of external amenity becomes less important and the emphasis should be on preventing sleep disturbance. A fixed limit of 43 dB(A) will protect sleep inside properties during the night.

In general, noise is unlikely to be a significant problem where the distance from the nearest turbine to any noise sensitive property is more than 500 metres."

A reasonable interpretation of the limits recommended above would be:

- A fixed limit of 43 dB(A) at a noise sensitive location for night-time hours,
- 45 dB(A) or up to 5 dB(A) above background noise, whichever is the greater, at a noise sensitive location for daytime hours, and
- 35-40 dB(A) at a noise sensitive location for daytime hours where background noise is less than 30 dB(A).

I note that noise conditions attached with a grant of planning permission for wind farm development in Ireland frequently reflect the above provisions.

I observe that none of the existing houses in the vicinity of the site are within 500 metres from any proposed turbine.

7.8.4. The Applicant's Submission

I note the applicant's submission forming Chapter 11 of the EIAR and the supporting Appendices 11-1 to 11-5. This submission noted that there are 83 noise sensitive locations (NSLs) within 3.5km of the proposed turbine locations, with the nearest being 760m from proposed Turbine 7. The applicant's assessment considered the construction, operational and decommissioning phases of the development.

Background noise levels were measured at four representative NSLs. Noise levels were calculated for the NSLs within 3.5km of the proposed turbines and predicted levels were compared against adopted noise criteria curves. The results for all houses are presented in Appendix 11-5. The findings estimate that there would be no potential day or night time exceedances and that the development would meet relevant guidance or planning permission conditions. The applicant acknowledges that noise levels at low wind speeds would increase due to the development and that

a new source of noise would be introduced into the soundscape, but that predicted noise levels would remain low.

I note the EIAR also assessed noise with regard to the operation of site roads and the proposed substation. I acknowledge the significant separation distances between the site and established NSLs and consider the use and operation of these infrastructural components would have no notable adverse noise impact on the wider community.

Overall, I submit that there is no information to refute or counter the applicant's methodologies applied in assessing the likely operational noise impacts arising from the proposed development and the conclusions drawn that the proposed development would not have significant adverse environmental impacts relating to noise. I particularly note the separation distances from proposed turbine locations to the nearest sensitive receptors, the current guidance, and the predictions that the proposed development would not exceed standard guidance limits for day and night-time.

7.8.5. Construction Noise

I note the range of activities associated with the construction phase, including the development of two borrow pits, as well as the short-term nature of the construction period for the proposed development. While no national limits are set for construction noise, I am satisfied that the development would not be untypical of similar infrastructure projects and that the nuisance caused by construction activities related to the development would be short-term. Appropriate site management, guided by a Construction Environmental Management Plan and a Traffic Management Plan, would be pivotal in reducing nuisance and disturbance to the general public. Furthermore, construction periods could be controllable by way of attaching a condition with a grant of permission to limit days and times of construction, thus

reducing potential adverse impact to residents nearby. Overall, construction noise impact would not be significant in my opinion.

7.8.6. *Decommissioning Phase*

I consider that it is reasonable to draw similar conclusions for the decommissioning phase as those drawn for the construction phase. This impact would be short-term and would not be significant in my opinion.

7.9. **Traffic Impact**

7.9.1. I note that a number of third party submissions during the course of the planning application process to date have raised concerns about the potential impact of the proposed development on the established road network serving the area associated with the delivery of turbines to the site and to the impacts arising from necessary works at the access onto the regional road.

7.9.2. The applicant's EIAR assessed the effects of the proposed development at the construction, operational and decommissioning phases on roads and traffic (Chapter 14). I note that at the operational stage the development would be unmanned and would be monitored remotely. Traffic volumes at that stage would be minimal. For the construction phase, there would be substantial increases in traffic volumes arising from the delivery of concrete, site preparation and ground works, delivery of large equipment, and worker traffic. Route assessment and junction adequacy for accommodating the movement of abnormal sized loads were examined and autotracks were completed. Two haul routes were considered as options for route delivery, with the preferred route to the site being from the N22 National Secondary Road, the R585 and the R584. Works would be required at the site access onto the R584 to accommodate the abnormal loads. A range of mitigation measures are proposed. Large turbine components would be transported at night, specific traffic management measures would be employed, pre- and post-road condition surveys would be undertaken, on-site borrow pits would be developed, and the development

would be subject to a Construction Environmental Management Plan (CEMP) and a Traffic Management Plan.

7.9.3. It is my submission to the Board that the proposed transportation of abnormal loads associated with turbine delivery would have potential effects on the existing road network, requiring short sections of road widening, hedgerow works, oversailing of structures and property, removal of some obstacles, etc. However, I am satisfied that the applicant has comprehensively assessed the proposed route, has identified where the potential impacts would likely result, and has drawn up a range of mitigation measures to reduce the significance of the potential impacts. With the implementation of such mitigation measures, I do not envisage there would be any substantial long-term adverse impact for the road network affected. I acknowledge that there would be some short-term inconvenience to local road users during deliveries. I note that the national and regional roads affected would be regularly used by HGV type traffic. A security or special contribution relating to protecting the road network affected by the turbine delivery routing could be applied to address any adverse physical impact on the roads or bridge structures in the immediate term after any such impact. I consider that traffic management within settlements could likely facilitate delivery in an efficient manner to minimise local inconvenience. I do not accept that the delivery of abnormal loads would in general result in any significant environmental damage to established hedgerows, tree lines, etc. However, I do accept that there would be a removal of natural woodland in the vicinity of the access from the site onto the regional road to accommodate deliveries. This is woodland of important ecological and amenity value within the Pass of Keimaneigh, an important tourist route. These works would constitute a further degradation of the amenity value of the area.

7.10. **Fire Risk**

7.10.1. The third party appeal has raised concerns about the fire risk associated with the proposed battery storage container and about turbine fire and blade throw risk. The applicant notes the mitigation and preventative measures available to address fire risk from battery storage facilities, the risk assessment that would be completed,

modern turbine technology, continuous monitoring of turbines, and their spacing and separation from other properties. I also note that the third party has shown information relating to a turbine fire and that the applicant's EIAR refers to the removal of the previous turbines on the site due to issues arising from the nature of the turbine technology deployed on the site (see for example Section 7.1.1 of the EIAR).

7.10.2. With regard to the proposed four battery storage containers, it is apparent that this would form part of, and would be ancillary to, the wind farm development. It is understood that the purpose of such a storage facility would be to support the electricity grid by charging when there is surplus electricity on the grid and by discharging at peak hours when there is high demand for electricity or when the grid needs added support. I note the Board's recent decision under ABP-306263-19 for battery storage units on the site. It is apparent that this decision to refuse permission was substantially grounded in the finding that the battery storage units proposed in that application were not being linked to a renewable energy development. It is clear that the proposed development now before the Board would form an integral part of the overall wind farm development on the site.

7.10.3. With regard to fire risk relating to wind farm development, I first note that it is not uncommon for wind farm development to be provided in upland areas where the primary land use can be commercial forestry and turbines and other infrastructure are located in the vicinity of this forestry. I must also acknowledge the significant separation distances between the locations for the proposed turbines and other infrastructure and the location of existing residential properties in the wider area. The nearest house to a turbine is approximately 760 metres.

7.10.4. Further to the above, I note the provisions of the *Wind Energy Development Guidelines*. Section 5.7 relates to 'Safety Aspects' and it is stated that there are no specific safety considerations in relation to the operation of wind turbines. It is also stated that there is a very remote possibility of injury to people or animals from flying fragments of ice or from a damaged blade. I understand that turbines would generally accommodate sensors which would detect imbalances in blades. This technology and continuous monitoring of the wind farm development would provide

substantial mitigation along with the separation distances from neighbouring properties.

7.10.5. I am aware that there would be a role for the Fire Authority in assessing a development of this nature to address fire safety considerations. Evidently, these considerations would lie outside of requirements under the Planning Acts. Clearly, consideration would have to be given to fire break corridors in forestry, while the assessment of the infrastructure would include considering the vulnerability of turbines, the substation, the battery storage containers, and other infrastructure on the site to potential fire hazard arising from a range of potential catalysts, inclusive of the combustibility of materials being used and the nature of the land use in the vicinity.

7.10.6. Finally, while not wishing to avoid a definitive response to this issue given the incident that arose with the previous wind farm on this site, at present I submit that the requirements in relation to fire safety appear to lie largely outside of the planning permission process for wind farm development. However, it is apparent that other legislative and approval processes are required to consider the likely potential fire hazard resulting from a development of this nature.

7.11. **Impact on Biodiversity**

7.11.1. I note the third party concerns relating to impact on birds, in particular on the White-tailed Eagle and on the Lee valley corridor for migratory birds. The appeal also refers to the Ecologist's report to the planning authority and to third party submissions, to the management of the Kerry Slug, and the loss of woodland by the works at the entrance onto the regional road. The applicant submits that White-tailed Eagles are not dependent on the site for breeding or wintering and that important migratory routes for bird species were not identified in the applicant's assessment. It was also submitted that the EIAR and NIS address most of the concerns raised relating to flora and fauna, that the development is designed to minimise impact on the Kerry Slug and the loss of peatland habitat, and that no significant direct impact would occur on woodland.

- 7.11.2. In response to the issues raised, I first must acknowledge the previous wind farm development on this site and the nature and extent of remaining associated infrastructure within the site, including access roads, a substation, a meteorological mast, etc., as well as the works which would have supported such previous and existing infrastructure including land clearance, earthworks, filling, drainage, etc. Therefore, it can reasonably be determined that the site has undergone substantial changes to natural habitat in the provision of the previous wind farm.
- 7.11.3. Regarding woodland impacts, I have previously accepted that the proposals to improve access onto Regional Road R584 would result in clearance of some natural woodland in the vicinity of the existing access. This comprises Oak-Birch-Holly woodland and, while not part of any European site or Natural Heritage Area, it is of ecological importance at a county level as it is of high biodiversity and it has a high amenity value within the Pass of Keimaneigh, which is an important tourist route. Clearly such works would degrade the amenity value of that area.
- 7.11.4. I note Chapter 6 of the EIAR relating to flora and fauna and Chapter 7 relating to ornithology. There was an extensive range of field surveys undertaken by the applicant. A wide range of Annex I species, Red and Amber-listed bird species and raptors were recorded during surveys. I acknowledge the third party appeal and the submission from Dr Allan Mee who has managed the Irish White-tailed Eagle reintroduction project to Ireland. His submission includes:
- * White-tailed eagles are one of the most vulnerable bird species in Ireland to collision risk.
 - * White-tailed eagles regularly use the upper Lee valley for foraging and roosting, especially Lough Allua and the Gougane Barra area.
 - * Satellite tracking has shown a high level use of the uplands between Kilgarvan, Co. Kerry and the Gougane to Douce Mountain area. The footprint of the proposed development falls within this zone of use. Birds roosting in the Gougane Barra forest park area are likely to be most at risk from collision.
 - * White-tailed eagles are now breeding at two sites within 20km of the wind farm site.

- * There are now several large wind farms in the upper Lee valley. The cumulative collision risk, as well as disturbance/displacement during construction and post-construction needs to be considered in any future development in the upper Lee valley.

7.11.5. The applicant's EIAR acknowledges that this species was recorded along the margins of the site boundary on two occasions. I accept that the commercial forestry plantation within which the wind farm development would be constructed would not comprise optimal habitat for this species. I note the applicant estimates the collision risk for this species to be one bird every 16.7 years based on its modelling. Based on the submission by Dr Mee, I consider that it is reasonable to determine that the development of the wind turbines at the height, scale and siting proposed would likely pose a significant risk of collision for White-tailed Eagles.

7.11.6. Given the sensitivity of this general location for birds of significant conservation value, it is reasonable to determine that the height and scale of turbines at this location would pose a significant risk of collision for many of the other Annex I and raptor species. Clearly, loss of habitat and displacement for raptors prevalent at this location would also result. It is my submission to the Board that a development of this height and scale would have significant potential to adversely impact on the sensitivity of this area for many protected bird species.

7.11.7. Further to the above, I note from Table 7-21 of the applicant's EIAR that there are a total of 170 wind turbines within 25km of the proposed site and the total proposed within 25km is 204. The cumulative impact of wind turbines in this location must be significantly encroaching on the habitat of many birds of significant conservation value. It is rapidly becoming a choice being made in this area between wind farm development and habitat loss, displacement and increasing mortality from collision for many of these bird species. The cumulative impact must be substantially eroding the quality of the environment for these sensitive bird species, distorting migratory routes, eroding habitat, encroaching on foraging areas, affecting roosting and breeding sites, etc.

7.11.8. Finally, I note that Kerry Slug was detected within the study area. I acknowledge the siting of the development primarily in areas impacted by the previous wind farm development. Given the presence of this species and the extent of suitable habitat, there is significant potential for direct impact. The applicant's mitigation measures include a pre-commencement survey and trapping exercise and translocation of any Kerry Slug encountered to an alternative area beyond the development footprint. I accept, given the previous wind farm use at this location, that such measures are appropriate and suitable to address direct impacts.

7.12. **Impact on Water**

7.12.1. I note the third party concerns relating to drainage to local watercourses, the experience of impacts on watercourses by other wind farms in the area and the potential for cumulative effects, siltation, and containment of leakage from the turbines and the battery storage containers. The applicant's response, forming Appendix 2 of the response to the appeal, refers to the proposed drainage management system, the development of only one turbine within the River Lee catchment, proposals to address the release of hydrocarbons, and a range of other mitigation measures.

7.12.2. I acknowledge the previous wind farm use of the site and the experience gained from this. There is no understanding of any serious impacts arising previously on ground and surface waters. The range of mitigation measures set out in Chapter 9 of the EIAR is also noted. The third party concerns relating to cumulative drainage concerns for the River Lee must be tempered by an understanding that one turbine only (Turbine 2) would be sited within this river's catchment and that there is extensive internal access road already in place. Most of the infrastructure relating to this proposal would be within the Owvane River catchment. I do not consider that, with the implementation of the drainage management plan and a construction environmental management plan, together with the range of associated mitigation measures, the proposed development would pose a significant risk to surface and ground waters on and in the vicinity of this site.

7.13. **Archaeological Impact**

- 7.13.1. I note the third party appeal in which it is submitted that the Council did not thoroughly examine potential impacts on archaeology and that the past turbines cannot be used as a guide for suitability, with reference made also to a submission to the planning authority relating to the impact on the setting of archaeology in the area.
- 7.13.2. The Board will note my conclusions set out in my environmental impact assessment as it relates to cultural heritage. I acknowledge the cultural heritage significance of the area in which the site is located, with particular reference to archaeology and the Múscraí Gaeltacht. I also note the previous existence of a wind farm on this site and the extent of archaeological monitoring that was undertaken previously. The applicant undertook a comprehensive assessment in the current application of the likely impact on archaeology on and in the vicinity of the site, inclusive of an assessment on the setting of known archaeological monuments in the area. The applicant has proposed a range of mitigation measures considered suitable to address impacts on known archaeological heritage. I do not consider that it has been adequately demonstrated that the setting of any monument beyond the site would be significantly adversely impacted by the proposed development. I, therefore, consider that it is reasonable to conclude that the proposed development is not likely to have a significant environmental impact on cultural heritage.

7.14. **Grid Connection**

- 7.14.1. The site of the proposed development was previously an operational wind farm. There is an existing on-site substation which is linked via an overhead line to Ballylickey substation some 12km to the south-west of the site. The proposed development provides for internal underground cabling amalgamating the electricity generated at the new on-site substation and then connecting to the existing overhead line via an underground cabling connection in Curraglass townland. The proposed grid connection would not cause any particular environmental concerns given the nature and extent of the existing infrastructure available to serve the proposed development.

8.0 **Appropriate Assessment**

8.1. **Screening for Appropriate Assessment**

8.1.1. **Background**

The applicant submitted an Appropriate Assessment Screening Report as Appendix 1 of the Natura Impact Statement (NIS) submitted to the planning authority with the planning application. This Stage 1 AA Screening Report was prepared in line with current best practice guidance. It provides a description of the proposed development, identifies European Sites within a possible zone of influence of the development, identifies potential impacts, and assesses the significance of potential impacts. The conclusion of the applicant's AA Screening Report is as follows:

“It cannot be excluded beyond reasonable scientific doubt, in view of best scientific knowledge, on the basis of objective information and in light of the conservation objectives of the relevant European sites, that the proposed development, individually or in combination with other plans and projects, would be likely to have a significant effect on the following sites:

- *The Gearagh SAC*
- *The Gearagh SPA*

As a result, an Appropriate Assessment is required, and a Natura Impact Statement shall be prepared in respect of the proposed development.

No potential for likely significant effects on any other European Site exists.”

Having reviewed the screening document and additional submissions to the planning authority, I am satisfied that the information allows for a complete examination and identification of any potential significant effects of the development, alone or in combination with other plans and projects, on European sites.

8.1.2. *Description of Development*

The applicant provides a description of the project and the characteristics of the project on pages 4 and 5 of the AA Screening Report. In summary, the development comprises:

- 7 turbines with an overall blade tip height of up to 178.5 metres and all associated foundations and hardstanding areas;
- 2 no. borrow pits;
- A permanent meteorological mast to a maximum height of 112 metres;
- Upgrade of approximately 5km of existing access roads and provision of 2.5km of new site access roads;
- Upgrade to existing access junction;
- A 38kV electricity substation, including 4 no. battery storage containers, a control building with welfare facilities, associated electrical plant and equipment, security fencing, and waste water holding tank;
- Forestry felling;
- A temporary construction compound;
- Site drainage;
- All associated internal underground cabling, including underground grid connection cabling to the existing overhead line; and
- All associated site development and ancillary works.

8.1.3. *European Sites*

I note that the applicant identified and examined eight European sites within 15km of the proposed site. There would be no direct effects and there is no connectivity between the site and the following European sites:

Derryclogher Bog SAC

Glanlough Woods SAC

Kilgarvan Ice House SAC

Bandon River SAC

Glengarriff Harbour and Woodland SAC

Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC

Having regard to the above, further assessment of the likely effects on these six European sites is not required.

The Gearagh SAC (Site Code: 000108) is located 24km hydrologically from the site and The Gearagh SPA (Site Code: 004109) is located 26km hydrologically from the site.

The qualifying features of conservation interest and conservation objectives for these sites are as follows:

The Gearagh SAC

Qualifying Features

Water courses of plain to montane levels with the *Ranunculus fluitans* and Callitriche-Batrachion vegetation

Rivers with muddy banks with *Chenopodium rubri* p.p. and *Bidentium* p.p. vegetation

Old sessile oak woods with *Ilex* and *Blechnum* in the British Isles

Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (Alno-Padion, Alnion incanae, Salicion albae)

Lutra lutra (Otter)

Conservation Objectives

To maintain the favourable conservation condition of each of these qualifying features.

The Gearagh SPA

Qualifying Features

Wigeon (*Anas penelope*)

Teal (*Anas crecca*)

Mallard (*Anas platyrhynchos*)

Coot (*Fulica atra*)

Wetland and Waterbirds

Conservation Objectives

To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA.

To maintain or restore the favourable conservation condition of the wetland habitat at The Gearagh SPA as a resource for the regularly occurring migratory waterbirds that utilise it.

8.1.4. Identification of Likely Effects

It is first acknowledged that the proposed development is not connected with or necessary for the conservation management of any Natura 2000 site. I further note that the site and all works associated with the proposed development are intended to take place outside of the SAC and SPA. As a result, there would be no direct loss of habitat within these European sites. I also acknowledge that there would be no pathway to the SAC which would have potential effects on the woodland habitat and, due to separation distance, there is no potential for disturbance to otter or the birds of special conservation interest in the SPA.

It is acknowledged that there would be hydrological connectivity with these European sites. I note that the applicant has submitted that the hydrological distance from the site to the SAC would be approximately 24km and 26km to the SPA. Given this connectivity, the potential for construction-related activities and the operational phase to indirectly impact on surface water quality by way of pollution is accepted. Therefore, significant effects on the surface water dependent qualifying interests of the SAC and the Wetland and Waterbird qualifying interest of the SPA cannot be excluded beyond reasonable scientific doubt.

8.1.5. *In-combination Effects*

Cumulative in-combination effects could potentially result with forestry felling and further forestry plantation at this location and with other existing and proposed wind farm development in the wider area. Thus, it is accepted that there is potential for significant cumulative effects with other potential sources of pollution in the area.

8.1.6. *Mitigation Measures*

No measures designed or intended to avoid or reduce any harmful effects of the proposed alterations on a European site have been relied upon in this screening exercise.

8.1.7. *Screening Determination*

The proposed development has been considered in light of the requirements of Section 177U of the Planning and Development Act 2000 as amended. Having carried out Screening for Appropriate Assessment of the project, it has been concluded that the project individually or in combination with other plans or projects would be likely to give rise to significant effects on The Gearagh SAC (Site Code: 000108) and The Gearagh SPA (Site Code: 004109), in view of their Conservation Objectives, and Appropriate Assessment is therefore required.

This determination is based on the following:

- The nature and extent of the proposed works associated with the proposed development and the operation of the wind farm, and

- The known pathways between the site and the European sites.

8.2. **Appropriate Assessment**

8.2.1. **Background**

The proposed development is not directly connected to or necessary for the management of any European site. It is therefore subject to the provisions of Article 6(3) of the EU Habitats Directive. Following the screening process above, it has been determined that appropriate assessment is required as it cannot be excluded on the basis of objective information that the proposed development individually or in-combination with other plans or projects will have a significant effect on The Gearagh SAC (Site Code: 000108) and The Gearagh SPA (Site Code: 004109). The possibility of significant effects on other European sites has been excluded on the basis of objective information. Measures intended to reduce or avoid significant effects were not considered in the screening process.

8.2.2. **Natura Impact Statement**

The application included a document entitled *Natura Impact Statement: Proposed Curraglass Renewable Energy Development, Co. Cork*. The NIS summarises the AA Screening Report, gives a description of the project, identifies characteristics of the receiving environment and the relevant Natura 2000 sites, discusses potential direct and indirect effects on European sites, and considers residual adverse effects and cumulative effects. The NIS had due regard to the array of studies, field surveys and consultations undertaken as part of the application. The NIS was prepared in line with current best practice and provides an assessment of all potential effects on the SAC and the SPA arising from the proposed development.

The NIS concluding statement was as follows:

“This NIS provides an assessment of all potential direct or indirect adverse effects on European Sites as a result of the proposed development.

Where the potential for any adverse effect on any European Site has been identified, the pathway by which any such effect may occur has been robustly blocked through the use of avoidance, appropriate design and mitigation measures as set out within

this report and its appendices. The measures ensure that the construction, operation and decommissioning of the Proposed Development does not adversely affect the integrity of European sites.

Following an examination, evaluation and analysis, in light of best scientific knowledge and the conservation objectives of the site, and, on the basis of objective information, having taken into account the relevant mitigation measures, it can be concluded that the Proposed Development will not have an adverse impact on any European Sites, either alone or in combination with other plans or projects.”

I note the submission received from Inland Fisheries Ireland on this application, the considerations of the planning authority’s Ecologist and the Environment Section, the applicant’s consultation with prescribed bodies and other interested bodies and agencies, and the third party submissions.

Having reviewed the documents, submissions, reports and consultations, I am satisfied that the information allows for a complete assessment of any adverse effects of the development on the conservation objectives of The Gearagh SAC and The Gearagh SPA alone, or in combination with other plans and projects.

8.2.3. Appropriate Assessment

Introduction

This assessment considers all aspects of the proposal which could result in significant effects and mitigation measures designed to avoid or reduce any adverse effects are considered and assessed. The assessment has had due regard to the applicant’s submitted Natura Impact Statement, the Environmental Impact Assessment Report, the reports received by the planning authority and the Board, and third party submissions.

The following guidance is adhered to in the assessment:

DoEHLG (2009) Appropriate Assessment of Plans and Projects in Ireland: Guidance for Planning Authorities.

EC (2002) Assessment of plans and projects significantly affecting Natura 2002 sites. Methodological guidance on the provisions of Articles 6(3) and 6(4) of the Habitats Directive 92/43/EC.

EC (2018) Managing Natura 2000 sites.

European Sites

The following sites are subject to appropriate assessment:

- The Gearagh SAC (Site Code: 000108)
- The Gearagh SPA (Site Code: 004109)

A description of these sites and their Conservation and Qualifying Interests / Special Conservation Interests, including any relevant attributes and targets for these sites, are set out in the NIS. Details of these European sites' Conservation and Qualifying Interests / Special Conservation Interests are set out in the Screening undertaken earlier in this report.

Relevant Aspects of the Proposed Development

I note that the site of the proposed development is located across two surface water catchments – the Lee-Cork Harbour-Youghal Bay catchment and the Dunmanus-Bantry-Kenmare catchment. The north-eastern section of the site is located within the former catchment and is drained by a number of unnamed waterbodies that drain to the River Lee. The River Lee flows in an eastward direction through The Gearagh SAC and SPA. The watercourses within and directly adjacent to the site within the Dunmanus-Bantry-Kenmare catchment do not provide any connectivity with any European site.

Section 3 of the applicant's NIS details the characteristics of the proposed works associated with the project and Section 7 identifies other plans, projects and activities relating to potential in-combination effects. I once again acknowledge that the site is outside of and significantly beyond the boundaries of any European site and, as a result, there would be no direct effects on the qualifying interests of any European site.

The main aspects of the proposed development that could adversely affect the conservation objectives of The Gearagh SAC and The Gearagh SPA include construction-related silt-laden waters, use of hydrocarbons, and the replacement of vegetated surfaces with impermeable surfaces.

The potential effects would include:

- A reduction in water quality by way of silt runoff, hydrocarbons, cementitious material and other pollutants during construction, operation and decommissioning which could affect the aquatic habitats and species in the SAC, and
- Deterioration in surface water quality by way of silt runoff, hydrocarbons, cementitious material and other pollutants during construction, operation and decommissioning which could affect the supporting wetland habitat of SCI species, 'Wetland and Waterbirds' in the SPA.

The Gearagh SAC

Section 6.1 of the applicant's NIS provides an assessment of residual adverse effects on The Gearagh SAC. The following is accepted:

- The site of the proposed development lies approximately 24km upstream of the SAC.
- The proposed works have the potential to cause deterioration in surface water quality through runoff of silt, hydrocarbons, cementitious material and other pollutants during the construction, operational and decommissioning phases potentially affecting:
 - Water courses of plain to montane levels with the Ranunculion fluitantis and Callitriche-Batrachion vegetation,
 - Rivers with muddy banks with Chenopodium rubri p.p. and Bidens p.p. vegetation,
 - Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae), and

- *Lutra lutra* (Otter).
- Having regard to the preventative measures proposed to be employed (see mitigation below), the development would not result in any impacts which would adversely affect the extent of these habitats and pathways to these habitats would be robustly blocked. Furthermore, there would be no reduction in the distribution or habitat area of otter within this SAC and the preventative measures proposed would result in no decline in availability of fish biomass.

It is reasonable to conclude that the proposed development would not adversely affect the integrity of this SAC.

The Gearagh SPA

Section 6.2 of the applicant's NIS provides an assessment of residual adverse effects on The Gearagh SPA. The following is accepted:

- The site of the proposed development lies approximately 26km upstream of the SAC.
- There is no potential for disturbance, displacement or collision risks for the SCI species Wigeon, Teal, Mallard, and Coot.
- The proposed development has the potential to cause deterioration in surface water quality and therefore habitat quality through runoff of silt, hydrocarbons, cementitious material and other pollutants during the construction, operational and decommissioning phases potentially affecting the SCI 'Wetland and Waterbirds'.
- Having regard to the mitigation measures proposed to be employed (see mitigation below), the development would not result in any impacts which would adversely affect the extent of the downstream wetland habitat.

It is reasonable to conclude that the proposed development would not adversely affect the integrity of this SPA.

8.2.4. Potentially Significant Cumulative Effects

I note Section 7 of the applicant's NIS wherein a review of plans and projects with the potential to result in cumulative and/or in-combination effects was undertaken.

This included a review of the relevant provisions of Cork County Development Plan, forestry felling and replanting, and other existing and proposed wind farm developments in the wider area. It is acknowledged that, individually, the proposed development would not adversely affect the integrity of the distant SAC or SPA. Thus, it is not anticipated that cumulative or in-combination effects would result.

8.2.5. Mitigation

Section 5 of the applicant's NIS details the range of mitigation measures intended to be employed as part of the proposed development. The measures include:

- Maximising the use of existing infrastructure;
- Avoidance of sensitive aquatic areas and application of buffer zones to watercourses and drains;
- Control measures on refuelling, cement products, hazardous material storage, and ecological supervision; and
- Drainage management for construction, operational and decommissioning phases.

In my opinion, these constitute suitable, robust, comprehensive and necessary measures to avoid any potential adverse impacts on the integrity of The Gearagh SAC and The Gearagh SPA.

8.2.6. Residual Impacts

I concur with the applicant's findings that, if the proposed mitigation measures are implemented in full, it is expected that significant effects would not result for the qualifying features of The Gearagh SAC or the species of conservation interest of The Gearagh SPA and its wetlands.

Following my appropriate assessment of the proposed development and, with due regard to consideration of the proposed mitigation measures, I am able to ascertain with confidence that the proposed development would not adversely affect the integrity of The Gearagh SAC and The Gearagh SPA in view of the Conservation Objectives of these sites. This conclusion is drawn on a complete assessment of all implications of the proposed development alone and in combination with other plans and projects.

8.2.7. **Appropriate Assessment Conclusion**

The proposed development has been considered in light of the assessment requirements of the Planning and Development Act 2000 as amended.

Having carried out screening for appropriate assessment of the project, it was concluded that it may have a significant effect on The Gearagh SAC and The Gearagh SPA. Consequently, an appropriate assessment was required of the implications of the project on the qualifying features of those sites in light of their conservation objectives.

Following an appropriate assessment, it has been ascertained that the proposed development, individually or in combination with other plans or projects, would not adversely affect the integrity of The Gearagh SAC (Site Code: 000108) and The Gearagh SPA (Site Code: 004109), or any other European site, in view of the sites' Conservation Objectives.

This conclusion is based on a complete assessment of all aspects of the proposed project and there is no reasonable doubt as to the absence of adverse effects.

This conclusion is based on:

- A full and detailed assessment of all aspects of the proposed project including proposed mitigation measures in relation to the Conservation Objectives of The Gearagh SAC and The Gearagh SPA.
- Detailed assessment of in-combination effects with other plans and projects including historical projects and current proposals and plans.
- No reasonable scientific doubt as to the absence of adverse effects on the integrity of The Gearagh SAC and The Gearagh SPA.

9.0 **Environmental Impact Assessment**

9.1. **Introduction**

- 9.1.1. This application falls under Directive 2014/52/EU on the assessment of the effects of certain public and private projects on the environment (i.e. the 2014 EIA Directive). I

have examined the information presented by the applicant, including the EIAR, and the submissions made during the course of the appeal. I have considered whether the information contained in the EIAR and the supplementary information provided by the applicant to date in the application process adequately identifies and describes the direct and indirect effects of the proposed development on the environment and complies with relevant legislative provisions.

9.1.2. Third party submissions have been received and the issues raised are addressed in detail in my planning assessment.

9.1.3. I am satisfied that the EIAR has been prepared by competent experts to ensure its completeness and quality to allow consideration as to whether the information contained in the EIAR and any supplementary information provided by the applicant adequately identifies and describes the direct, indirect and cumulative effects of the proposed development and complies with article 94 of the Planning and Development Regulations 2000, as amended.

9.2. **Alternatives**

9.2.1. The applicant provided details on the site selection criteria and examined a 'Do Nothing' alternative, alternative locations, alternative layouts and designs, and alternative mitigation measures.

9.2.2. It is noted that the site had been used previously for wind turbines and that this informed the selection of the site. It is further noted that a grid connection is in place to Ballylickey 110kV substation, which is approximately 12km south-west of the site.

9.2.3. I am satisfied that an extensive examination of alternatives was reviewed in this application and that the applicant's assessment and reasons for the selection of the site for a wind farm development are reasonable.

9.3. **Population and Human Health**

9.3.1. The applicant examined population, human health, employment and economic activity, land use, residential amenity, community facilities and services, tourism, property values, shadow flicker, noise, and health and safety. I note that extensive consideration was given over to reports on public opinion on wind farms and on research into the impacts on human health from wind turbines. I have examined the issues relating to shadow flicker, noise, health and safety, pollution, traffic, and tourism in my main planning assessment and do not propose to repeat my considerations on these issues.

9.3.2. My general considerations otherwise are as follows:

- The site of the proposed development is located in a remote, rural, upland area. Residential development is sparse in the immediate vicinity of the site – the closest house is approximately 760 metres to proposed Turbine 7 and there are 23 residential properties within 1.5km of the proposed turbines. The site is separate from established village settlements in this area, with Kealkill located 5.6km to the south-west and Ballingearry 5.5km to the north-east. Bantry is some 15km to the south.
- The site was previously used as a wind farm. Its land use at present is primarily commercial forestry. Land uses in the vicinity include natural woodland, commercial forestry, marginal agricultural use for sheep grazing in the upland areas, and farmland for grazing and pasture below this.
- With regard to amenities, there are several walking trails and opportunities for cycling in the vicinity. Other amenities include Gougane Barra Forest Park located a kilometre to the north of the site.
- Tourism is a major contributor to the local economy and is an important source of full-time and seasonal employment in the area. Significant tourist attractions in this area include Gougane Barra to the north of the site, the walking routes in the area, the historical structures and features of the area, and the Gaeltacht infrastructure,

while the town of Bantry is a key provider of accommodation, services and other facilities.

- The construction phase of the proposed development is not likely to have significant adverse impacts on the amenity of residents or the functioning of farms in the area. This stage would be subject to well-defined management and work practices, including delivery timing, working hours restrictions, traffic management, dust and noise controls, etc., and this stage of the development would have temporary, short-term impacts in terms of any disturbance or nuisance arising.
- Given the distinct separation distances between residential properties and settlements, along with the lack of any information or studies to the contrary, I consider that it is reasonable to determine that the development of this wind farm would not likely have any significant impact on property values in the wider area.
- Health and safety concerns should not arise at the construction phase when appropriate site controls and appropriate work practices are put in place.
- The proposed development would provide up to 70 construction-related jobs over a period of 12 to 18 months and some of the materials used would be sourced locally.
- At the operational phase, the applicant proposes a wide range of mitigation, including measures relating to maintenance of the development, shadow flicker, and interference with communication systems.

9.3.3. It is reasonable to determine that the principal environmental impacts applicable to population and human health are those relating to shadow flicker, noise, health and safety, pollution, traffic, and tourism. These have been assessed earlier in this report.

9.4. **Biodiversity**

9.4.1. Chapter 6 of the applicant's EIAR considered the impact of the proposed development on biodiversity, flora and fauna. Chapter 7 considered impacts on avian receptors. The EIAR addressed the baseline ecological conditions and receptor evaluation, an assessment of the effects at the different stages of the development, proposed mitigation, and an assessment of residual effects.

9.4.2. My considerations on biodiversity, flora and fauna are as follows:

- The existing site was previously in use as a wind farm. Much of the infrastructure remains in place, including the substation, overhead grid connection line, turbine bases, a meteorological mast, and access tracks. It is proposed to use existing site infrastructure, including access tracks and hard stand locations. Turbines 1 and 3 would be sited at former turbine locations, while Turbines 4 and 6 would be close to former turbine locations. The locations for each of the turbines would avoid natural watercourses on the site and buffers would be provided between infrastructure and significant watercourses. The new substation would adjoin the existing substation in an area in which there is a conifer plantation at present and the temporary compound for the construction stage would use an existing hard stand area. The borrow pits and meteorological mast would adjoin existing access roads and new sections of internal road would be provided across cleared or existing conifer plantation.
- The site is not on, in or in immediate proximity to any European site. I refer the Board to the section of my assessment on Appropriate Assessment.
- The nearest Natural Heritage Area, Conigar Bog, is located 5 metres from the north-west of the site. It is almost a kilometre from the nearest infrastructure associated with the development and it is upgradient of the proposed development, with no potential for drainage impacts on the NHA.
- Lough Allua pNHA is located 5.5km east of the site and there are a number of tributaries on the site with hydrological connectivity with the River Lee which discharges into Lough Allua. The applicant seeks to mitigate impacts at the

construction and operational stages by appropriate design and hydrology-related mitigation measures.

- No botanical species protected under the Flora (Protection) Order was recorded on the site during site surveys.
- The proposed development is sited to avoid areas of intact peatland habitat to the north, east and south and Alpine and Boreal Heath to the north of Turbine 1.
- I acknowledge that dedicated surveys were undertaken by the applicant for the Kerry Slug, bats, otter and badger.
- The presence of Kerry Slug was detected within the study area. I note the siting of the development primarily in areas impacted by the previous wind farm development. Given the presence of this species and the extent of suitable habitat, there is clear potential for direct impact. The applicant's mitigation measures include a pre-commencement survey and trapping exercise and translocation of any Kerry Slug encountered to an alternative area beyond the development footprint. I accept, given the previous wind farm use at this location, that such measures are appropriate and suitable to address direct impacts.
- A review of bat roosts for the area by the applicant did not identify any roosts within or adjacent to the proposed development site. As expected at this location, there were notable numbers of bat passes recorded. The proposed development would be sited in a location where a wind farm previously existed. An extensive range of mitigation measures are proposed and are set out in Appendix 6-3 of the EIAR.
- Otter and badger were not recorded with the study area. Both are anticipated to occur in the area. I accept the likely effects on these species to be negligible.
- The applicant's mitigation measures are noted, including a drainage maintenance plan, a Construction and Environmental Management Plan, and other measures to mitigate impacts on water quality to reduce effects on the aquatic habitats and species.

9.4.3. My considerations on ornithology are as follows:

- The applicant undertook an extensive range of field surveys, as set out in Section 7.2.4 of the EIAR. Section 7.4 identifies the wide range of Annex I species, Red and Amber-listed species and raptors recorded during surveys. These included Golden Plover, Hen Harrier, Short-eared Owl, Chough, Peregrine, White-tailed Eagle, Barn Owl, Red Grouse, Buzzard, Kestral and Sparrowhawk.
- It is evident that habitat loss, displacement and collision risk arising from a development of this scale, height and location pose concerns for many of these bird species.
- The cumulative impact of wind farm development in this area must be substantially eroding the quality of the environment for sensitive bird species of conservation value by distorting migratory routes, eroding habitat, encroaching on foraging areas, affecting roosting and breeding sites, etc. The proposed development would add to this impact.

9.5. **Lands, Soils and Geology**

9.5.1. The applicant's EIAR addressed a baseline assessment, site surveying, baseline monitoring and site investigations, including geotechnical ground investigations and a peat stability assessment (Appendix 8-1 of EIAR).

9.5.2. I note the following:

- The site is dominated by shallow peaty soils over shallow bedrock.
- The bedrock comprises Devonian Old Red Sandstones.
- The average peat depths at the locations of the proposed turbines vary between 0m (Turbine 1) and 0.87m (turbine 5).
- 25,500 cubic metres of peat would be excavated as part of the development.

- The borrow pits would excavate an estimated 69,600 cubic metres of rock.
- Peat would be temporarily stored during construction.
- 11,200 cubic metres of peat is estimated to be used in reinstatement of access roads and 16,300 cubic metres of peat is estimated to be used in reinstatement of the worked out borrow pits.

9.5.3. My considerations are as follows:

- The proposed development would be sited in an area in which a wind farm had previously been developed.
- The applicant's peat stability assessment showed that the site has an acceptable margin of safety and is suitable for the proposed development.
- There were no known peat slippages or ground instability issues associated with the previous wind farm development on the site.
- The Pass of Keimaneigh is a geological heritage site – a glacial spillway. The proposed development would not physically impact on this site.
- The applicant proposes an extensive range of mitigation measures as set out in the Peat and Spoil Management Plan (Appendix 4-4 of the EIAR) and in Section 8.4. of the EIAR.
- The location, handling, storage and reuse in reinstatement works of excavated peat at the volumes proposed to be excavated for this development would require to be managed in accordance with an updated Peat and Spoil Management Plan to be agreed with the planning authority prior to any construction works. This would be pending further investigation and refinement of mitigation measures relating to proposed locations for Turbines 4 and 6. Ponding, water management, and containment of stored peat are significant issues in such management, as well as the determination of the nature and extent of safety buffers which would restrict construction activities and avoid peat storage areas.
- I acknowledge the significant separation between the proposed wind farm infrastructure and established residential and farm properties. However, the

potential impact on watercourses from peat handling and storage cannot be ignored. Peat management would be a critical consideration in the development of this wind farm.

9.6. **Water**

- 9.6.1. A key feature of note with the development of the proposed wind farm relates to the impact on peat. This issue has been acknowledged under soils and geology above. Further to this, the Board will note my considerations on appropriate assessment and the likely effects on European sites arising from the development. This part of my assessment will focus on ground and surface waters.
- 9.6.2. The applicant's EIAR described the existing water environment, identified likely effects and mitigation measures, and considered residual and cumulative effects.
- 9.6.3. My considerations are as follows:
- It is noted from the EIAR that:
 - The hydrology of the site is characterised by very high surface water runoff rates and very low groundwater recharge rates.
 - The southern section of the site, proposed to accommodate 6 of the turbines, is located in the Owvane River surface water catchment, while the northern section is located in the River Lee surface water catchment. The eastern half of the site within the Owvane catchment drains directly to the Owvane River, while the western half drains towards the Lackavane River which flows southerly along a section of the western boundary of the site. The northern section of the site drains directly via a small stream network into the River Lee upstream of Lough Allua.
 - There are numerous man-made drains in place within the site to drain existing forestry.
 - The majority of the groundwater flow paths in the areas proposed for development are expected to flow westerly towards the Lackavane River.

- Due to the low permeability nature of the bedrock aquifer underlying the site, groundwater flow paths are likely to be short, with recharge emerging close by at seeps and surface streams.
- The site of the proposed development was previously in use as a wind farm. There is no information provided which would reasonably determine that this previous development had significant adverse impacts on the ground and surface water resources of this area.
- The potential risk to surface water at the construction stage arises from accidental spillages and from siltation. The risk to groundwater would be from spillages and leakages, piling and the development of underpasses at water crossings. The applicant proposes to implement a 50m buffer from streams. I am conscious of the proposed removal of forestry also to accommodate the proposed development and the potential impacts arising for surface waters.
- A new stream crossing along the access track to Turbine 6 would be suitably culverted.
- The applicant proposes an extensive range of mitigation measures at the construction and operational phases, including express measures relating to the felling of forestry, management and treatment of groundwater seepages, management of runoff from peat, etc. The runoff control measures, avoiding disturbance to existing drainage features, attenuating and treating water from works areas, and construction and drainage management plans are intended to ensure that a high quality of surface water runoff and groundwater protection results to maintain the status of surface water and groundwater bodies in the vicinity of the site.
- There is no flood risk associated with the proposed development.

9.7. **Air Quality and Climate**

- 9.7.1. The applicant's EIAR identified, described and assessed potential effects on air quality and climate arising from the construction, operation and decommissioning of the proposed development.

9.7.2. My considerations are as follows:

- I have acknowledged earlier in my assessment that the development of a wind farm would be consistent with the aims of reducing greenhouse gas emissions, improving renewable energy production, and contributing to the aim of achieving a low carbon economy.
- The principal air emissions that would arise would be at the construction phase and would relate to transport emissions and dust generation.
- There would be substantial separation distances between the proposed infrastructure associated with the wind farm development and established residential and farm developments in the area.
- The development would be subject to a Construction Environmental Management Plan and the applicant has an extensive range of mitigation measures aligned with good construction management to address impacts on air quality.

9.8. **Material Assets**

9.8.1. The material assets examined by the applicant were transportation infrastructure and telecommunications and aviation. The Board will note my assessment on traffic impact and I do not propose to repeat the conclusions drawn in that assessment. Suffice to indicate that the applicant has comprehensively assessed the proposed delivery access route, has identified where the potential impacts would likely result, and has drawn up a range of mitigation measures to reduce the significance of the potential impacts. With the proposed mitigation measures, I do not envisage there would be any substantial long-term adverse impact for the road network affected.

9.8.2. On matters relating to telecommunications and aviation, I submit the following:

- I note that the applicant was in consultation with national and regional broadcasters, fixed and mobile telephone operators, aviation authorities, and other relevant service providers.

- A protocol agreement with broadcasters has been provided in Appendix 14-1 of the EIAR.
- There would be no impacts on telephone and broadband operators generally and where an issue arose with ESB Networks this was resolved by agreement.
- The Irish Aviation Authority required an aeronautical obstacle warning light scheme to be agreed for the development. I note that third party concerns have been raised about the impact of such lights on night skies. If a development of this height and scope is permitted, it is evident that an aeronautical obstacle warning light scheme would be required for reasons of public safety.

The environmental impacts of the proposed development at the construction and operational phases on telecommunications and aviation would not be significant in my opinion.

9.9. **Cultural Heritage**

9.9.1. The applicant's EIAR examined the potential impacts of the proposed development on recorded archaeology and the cultural heritage of the site and area in which it is proposed to be located.

9.9.2. My considerations are as follows:

- The site of the proposed development comprises upland coniferous forestry mainly. The principal features of cultural heritage relevant to the site relate to archaeology. I acknowledge that the northern end of the site lies within the designated Múscaí Gaeltacht and that there are no specific features of cultural heritage within the site relating to the Gaeltacht. There are no features of architectural heritage or other known features of cultural heritage on the site.

- The EIAR states that there are 207 recorded monuments within 5m of the nearest proposed turbines. Many are screened from view due to natural topography and vegetation.
- The site was previously in use as a wind farm and that previous development was subject to archaeological monitoring under licence. No sub-surface archaeological finds, features or deposits were uncovered.
- The applicant's cultural heritage assessment set out in Chapter 13 of the EIAR included an archaeological impact assessment. There was a detailed assessment of the visual effect of the proposed development on monuments and sites of archaeological significance, which included viewshed analysis to assess the effects on the setting of archaeological monuments beyond the site.
- Three national monuments beyond the site consisting of stone circles and located to the south-west were examined. They are located at distances greater than 5.5km from the nearest turbines. The applicant's analysis shows that turbines would be visible from these monuments. I accept that the significant separation distances between turbines and these sites would result in impact on the setting of these monuments being such that it could not reasonably be construed as significant.
- The site contains five recorded monuments – two hut sites and three redundant records. A newly recorded hut site was also recorded within the site boundary also. The proposed development would not physically impact on any of these monuments – the two recorded monuments are sited close to the western edge of the site boundary and the new monument would be a short distance from existing track which is proposed to be bypassed by new access track at the north-eastern end of the site.
- I acknowledge that the assessment of the setting of archaeological sites beyond the site of the proposed development can be subjective but again note the extent of assessment of this issue within the EIAR. This has demonstrated the likely impacts on the wide range of monuments would range from no impact to slight impact mainly. There is no setting of any monument

beyond the site which one could reasonably conclude as being significantly adversely impacted by the proposed development.

- The applicant has provided a wide range of mitigation measures, which include the avoidance of monuments within the site, the provision of buffer zones, archaeological monitoring of groundworks, and measures to address protected structures along the delivery route to the site.

9.9.3. Overall, I conclude that the proposed development is not likely to have a significant environmental impact on cultural heritage.

9.10. **Landscape and Visual**

9.10.1. The Board will note my comprehensive assessment of the environmental effects of the proposed development in terms of landscape and visual impacts. I do not propose to repeat that assessment here. Suffice to indicate the following:

- The proposed development would have a very significant adverse landscape and visual impact, both locally and over greater distances from roads, the coastline and mountains in this area of West Cork.
- The height and scale of the proposed turbines would result in the development being highly visible.
- The applicant's EIAR clearly shows the prominence of a development of this scale set within a sensitive landscape and emphasises the exposed nature of the landscape and how there would be expansive views of proposed turbines throughout much of this area.
- The prominence and skyline nature of a development of this scale is evident.
- The result of the impact of this development would be to change the understanding of the landscape.
- There would be damage caused to the landscape and visual qualities of this area.

- Incongruity with the natural landscape could not be avoided.
- A development of such significant impacts, arising from its height and scale in such a sensitive location, would have adverse impacts on the quality of the tourism resource of this area, including Gougane Barra, Bantry, and the coastal setting.
- The planning authority's concerns relating to impacts on scenic routes and the tourism infrastructure of this area are well-founded and would conflict with the provisions of the Cork County Development Plan as they relate to such routes and to the development of the tourism industry in the county.
- The location for a proposed development of this height, scale and siting does not have the capacity to significantly reduce or mitigate the adverse landscape and visual impact that would arise.

9.11. **Noise and Vibration**

9.11.1. The applicant's EIAR considered the proposed development with due regard to sensitive receptors in the vicinity and examined existing noise sources and noise and vibration sources derived from the proposed development.

9.11.2. My planning assessment has examined the noise impact of the proposed development at the construction, operational and decommissioning phases. I do not consider that there would be significant adverse environmental impacts relating to noise. My considerations on vibration are as follows:

- The site is remote from sensitive receptors, with the nearest residential property being 760m from proposed Turbine 7.
- The likely significant vibration impacts would arise at the construction phase of the proposed development. Such impacts would be short-term.
- It is not anticipated that the construction of the turbine bases, the erection of the turbines, the development of access roads, the provision of borrow pits, or the construction traffic would result in guidance limits relating to vibration being exceeded at any of the nearest sensitive receptors.

9.12. **Cumulative Impacts**

9.12.1. I note that the applicant in each section of the EIAR comprehensively considered the cumulative impacts of the proposal with other land uses, plans and projects in the wider area. I further note the distinctly isolated location of the proposed development in a remote upland location, separated from settlements, European sites, and at a location where a wind farm previously existed. With the exception of impacts on ornithology and birds of conservation interest in particular, I am satisfied that there are no plans or projects which could reasonably be determined to constitute development that would derive significant cumulative environmental impacts with the proposed development. This includes the visual impact where there would be substantial separation distances between the proposed site and other existing and proposed wind farm development. I do not accept that there would be any significant cumulative impacts arising for water, flora, air, cultural heritage, or material assets.

9.13. **Interaction of Impacts**

9.13.1. Chapter 15 of the EIAR examined the interactions of the potential impacts arising. These are identified under each of the headings set out in the EIAR. Where potential interactions may occur these are identified. I have considered the interrelationships between factors and whether these might affect the environment, even though the effects may be acceptable on an individual basis. In conclusion, I am satisfied that there are significant adverse effects arising, particularly in landscape and visual terms and ornithological impacts, which cannot be avoided, managed or mitigated by the measures which form part of the proposed development or by planning conditions. My assessment details the extent of adverse impacts arising.

9.14. **Major Accidents**

9.14.1. I note that the applicant's EIAR did not expressly deal with the issue of major accidents. I acknowledge the fire safety concerns raised by third parties to the planning authority and to the Board. While I accept that fire risk is a potential hazard, I consider that it is reasonable to observe that the remote siting of the development

and the application of modern technologies, combined with continued monitoring of infrastructure, would aid in reducing significant risks to the wider community. The other major potential accident that could result from the proposed development would relate to peat slippage from stored peat. The previous use of this site as a wind farm, the locations for the proposed turbines and other infrastructure, the use of existing access roads, the maintenance and enhancement of the existing drainage system, and the mitigation measures proposed to contain extracted peat should eliminate the potential for a major accident arising from the management and handling of peat on this site. Finally, I consider that the various plans relating to health and safety and managing construction works and traffic management should adequately address concerns for workers relating to major accident risk.

9.15. **Reasoned Conclusion**

9.15.1. Having regard to the examination of environmental information contained above, and in particular to the EIAR and supplementary information provided by the developer, and the submissions from the planning authority, prescribed bodies and third parties in the course of the application, it is considered that the main significant direct and indirect effects of the proposed development on the environment are as follows:

- Significant adverse landscape and visual impacts arising from the siting, scale and height of the proposed turbines, which would be highly prominent over an extensive geographical area, would have a dominant, obtrusive, skyline impact on visually and environmentally sensitive landscapes, and would impact on the amenity and tourism value of the area, inclusive of Gougane Barra, Bantry and its coastal setting, tourist walking routes, and designated scenic routes. The incongruity with the natural landscape and adverse visual impact would not be mitigated by design, the separation from settlements or its setting within commercial forestry.
- The Kerry Slug, an Annex II and IV species, is present on the site and there is potential for direct impact. It is acknowledged that there was a wind farm previously on this site. The impact is likely to be mitigated by way of a pre-

commencement survey, trapping and translocation of any Kerry Slug encountered to an alternative area beyond the development footprint.

- Habitat loss, displacement and collision risk arising from a development of this scale, height and location are significant concerns for many of birds of conservation value in this location. Due to the scale, height and siting of the proposed turbines, mitigation cannot address these likely adverse impacts. The cumulative impact of wind farm development in this area in the vicinity of the Shehy Mountains would substantially erode the quality of the environment for sensitive bird species of conservation value by distorting migratory routes, eroding habitat, encroaching on foraging areas, and affecting opportunities for roosting and breeding sites.
- Construction works would potentially impact on water quality, soils, air and the public road network. These potential impacts would be appropriately addressed through the implementation of management plans which would be agreed with the planning authority and the array of related mitigation measures to be employed.

9.15.2. The submitted EIAR has been considered with regard to the guidance provided in the EPA documents 'Guidelines for Planning Authorities and An Bord Pleanála on Carrying our Environmental Impact Assessment' (2018), 'Guidelines on the Information to be Contained in Environmental Impact Assessment Reports' (draft August 2017), and 'Advice Notes for Preparing Environmental Impact Statements' (draft September 2015). It is noted that Article 3 (2) of Directive 2014/52/EU requires that:

'The effects referred to in paragraph 1 on the factors set out therein shall include the expected effects deriving from the vulnerability of the project to risks of major accidents and / or disasters that are relevant to the project concerned'.

9.15.3. The submitted EIAR did not include a specific chapter on the issue of major accidents or natural disasters. However, reference was made in relevant chapters to the potential for major accidents where applicable. Specifically, I would refer the

Board to the chapters on Population and Human Health, Land, Soil and Geology, Water, and Material Assets. I also note that the submitted Construction Environmental Management Plan provides an environmental management framework to be adhered to during the construction phase. The site is not located in proximity to any major public transport terminus or any settlement. Having regard to this, I consider that the document presented to the Board adequately addresses this issue.

9.15.4. In conclusion, the likely significant environmental impacts arising as a consequence of the proposed development have been satisfactorily identified, described and assessed. I am satisfied that there would be significant adverse residual impacts relating to landscape and visual effects and impacts on birds of conservation value and, therefore, the proposed development is determined to have unacceptable direct and cumulative impacts on the environment.

10.0 Conclusion

10.1. The following conclusions are drawn from my overall planning assessment above:

- The proposed development of a wind farm on the site would be compatible with the aims of reducing greenhouse gas emissions, improving renewable energy production, and contributing to the aim of achieving a low carbon economy as set out in international, EU, national, regional and local policy.
- Under ABP Ref. PL 04.209745, permission was refused by the Board for modifications to the previously permitted wind farm to include increase in hub height from 47m to 65m, increase in blade tip height from 75m to 91m, and the movement of a number of turbines. The reason for refusal related to the consequent greater visibility and the serious injury to the visual amenities of the sensitive, scenic area. The proposed turbines would be almost twice the height of those previously refused by the Board. The physical landscape and visual context within which the proposed development would be sited has not altered. There are no changed conditions or rational reasons to warrant a reversal of the Board's previous decision.

- The landscape and visual impacts associated with the proposed development are not compatible with the provisions of the *Wind Energy Development Guidelines – Guidelines for Planning Authorities* as they relate to ‘Amenity Designations’ and ‘Tourism and Recreation’.
- The extent of public engagement in the planning application process was minimalistic and was likely to have heightened public concerns.
- The physical extent of the visual influence of the turbines, their impact on the natural landscape character, the effects on the key tourism products of the area, and their prominence from designated routes considered to be of scenic amenity value constitute significant adverse landscape and visual impacts. Incongruity with the natural landscape cannot be avoided by a development of this height, scale and siting. The proposed development would conflict with the provisions of the Cork County Development Plan as they relate to designated scenic routes and the tourism industry in the county. The location proposed for a development of this height and scale does not have the capacity to significantly reduce or mitigate the adverse landscape and visual impacts that would arise.
- With available technological preventative measures, shadow flicker would not be a potentially significant issue impacting on the amenity of residents in the vicinity of the wind farm development.
- There is no information to counter the applicant’s methodologies applied in assessing the likely operational noise impacts arising from the proposed development and the conclusions drawn that the proposed development would not have significant adverse environmental impacts relating to noise. The separation distances between proposed turbine locations and the nearest sensitive receptors, the guidance in the current Wind Energy Guidelines, and the predictions that the proposed development would not exceed standard guidance limits for day and night-time are further acknowledged.
- There would be no substantial long-term adverse impact for the road network affected by deliveries to the site at the construction phase. A security or special contribution relating to upgrading the road network affected by the turbine delivery routing could be applied to address any adverse physical

impact on the roads or bridge structures. The removal of natural woodland at the access to the site from the regional road would constitute a further degradation of the amenity value of the area.

- The requirements in relation to fire safety appear to lie largely outside of the planning permission process for wind farm development. Other legislative and approval processes are required to consider the likely potential fire hazard resulting from a development of this nature.
- Development of wind turbines at the height, scale and siting proposed would likely pose a significant risk of collision for Annex I bird species, inclusive of White-tailed Eagles, as well as loss of habitat and displacement for raptors prevalent at this location. Furthermore, the cumulative impact of wind turbines in this area, inclusive of the proposed development, would be substantially eroding the quality of the environment for these sensitive bird species, including distorting migratory routes, eroding habitat, encroaching on foraging areas, and affecting roosting and breeding sites.
- With the implementation of the drainage management plan and a construction environmental management plan, together with the range of associated mitigation measures, the proposed development would not pose a significant risk to surface and ground waters on and in the vicinity of this site.
- It has not been adequately demonstrated that the setting of any archaeological monument beyond the site would be significantly adversely impacted by the proposed development. It is reasonable to conclude that the proposed development is not likely to have a significant environmental impact on archaeological heritage.
- The proposed grid connection would not cause any particular environmental concerns given the nature and extent of the existing infrastructure available to serve the proposed development.

11.0 Recommendation

Appropriate Assessment

The Board agreed with the screening assessment, appropriate assessment and conclusion contained in the Inspector's report that The Gearagh Special Area of Conservation (Site Code: 000108) and The Gearagh Special Protection Area (Site Code: 004109) are the European sites for which there is a likelihood of significant effects.

The Board considered the submitted Screening Report for Appropriate Assessment, the Natura Impact Statement and all other relevant submissions and carried out an appropriate assessment in relation to the potential effects of the proposed development on the above referenced European sites. The Board noted that the proposed development is not directly connected with or necessary for the management of a European site and considered the nature, scale and location of the proposed development, as well as the report of the inspector. In completing the appropriate assessment, the Board adopted the report of the inspector and concluded that the proposed development, by itself, or in combination with other plans or projects in the vicinity, would not be likely to have a significant effect on any European site in view of the site's conservation objectives.

Environmental Impact Assessment

The Board completed an environmental impact assessment of the proposed development taking account of:

- (a) The nature, scale, location and extent of the proposed development,
- (b) The Environmental Impact Assessment Report (EIAR) and associated documentation submitted in support of the application,
- (c) The submissions received from the planning authority, prescribed bodies and third parties, and
- (d) The Inspector's report.

The Board considered that the environmental impact assessment report, supported by the documentation submitted by the applicant, adequately considers alternatives to the proposed development and identifies and describes adequately the direct, indirect, secondary and cumulative effects of the proposed on the environment.

The Board agreed with the examination set out in the Inspector's report of the information contained in the environmental impact assessment report and associated documentation submitted by the developer and submissions made in the course of the planning application.

The Board considered that the main significant direct and indirect effects of the proposed development on the environment are as follows:

- Significant adverse landscape and visual impacts arising from the siting, scale and height of the proposed turbines, which would be highly prominent over an extensive geographical area, would have a dominant, obtrusive, skyline impact on visually and environmentally sensitive landscapes, and would impact on the amenity and tourism value of the area, inclusive of Gougane Barra, Bantry and its coastal setting, tourist walking routes, and designated scenic routes. The incongruity with the natural landscape and adverse visual impact would not be mitigated by design, the separation from settlements or its setting within commercial forestry.
- The Kerry Slug, an Annex II and IV species, is present on the site and there is potential for direct impact. It is acknowledged that there was a wind farm previously on this site. The impact is likely to be mitigated by way of a pre-commencement survey, trapping and translocation of any Kerry Slug encountered to an alternative area beyond the development footprint.
- Habitat loss, displacement and collision risk arising from a development of this scale, height and location are significant concerns for many birds of conservation value in this location. Due to the scale, height and siting of the proposed turbines, mitigation cannot address these likely adverse impacts. The cumulative impact of wind farm development in this area in the vicinity of the Shehy Mountains would substantially erode the quality of the environment for sensitive bird species of conservation value by distorting migratory routes,

eroding habitat, encroaching on foraging areas, and affecting opportunities for roosting and breeding sites.

- Construction works would potentially impact on water quality, soils, air and the public road network. These potential impacts would be appropriately addressed through the implementation of management plans which would be agreed with the planning authority and the array of related mitigation measures to be employed.

The Board completed an environmental impact assessment in relation to the proposed development and concluded that the effects of the development on the environment by itself and in combination with other plans and projects in the vicinity would be not be acceptable due to the adverse landscape and visual impacts and the impact on protected bird species. In doing so the Board adopted the report and conclusions of the inspector.

I recommend that permission is refused in accordance with the following reasons, considerations.

Reasons and Considerations

1. The site of the proposed development lies within an area designated 'Open to Consideration' for wind farm development in the Cork County Development Plan. The objectives of the Development Plan include:

- The avoidance by commercial wind energy development within this area of adverse impacts on the visual quality of the landscape and the degree to which impacts are highly visible over wider areas (Objective ED 3-5);
- To protect the visual and scenic amenities of County Cork's natural environment and to protect skylines and ridgelines from development (Objective GI 6-1);
- To preserve the character of 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 and views of natural beauty as recognized in the Draft Landscape Strategy (Objective GI 7-1);

- To protect the character of those views and prospects obtainable from scenic routes and in particular stretches of scenic routes that have very special views and prospects identified in the Plan (Objective GI 7-1); and
- To protect and conserve those natural, built and cultural heritage features that form the resources on which the County's tourist industry is based, including areas of important landscape, coastal scenery, and areas of important wildlife interest. (Objective TO 2-1).

Furthermore, the Plan notes that Gougane Barra to the north of the site is a key tourist attraction of national importance, where the surrounding landscape contributes to the setting of the attraction, which attracts significant visitor numbers to the area and which should be protected from inappropriate development (Section 8.3).

Having regard to:

- The height and scale of the proposed wind turbines,
- The siting on elevated mountain and ridgelines,
- The highly prominent skyline nature of the wind turbines,
- The proximity of the proposed development to Gougane Barra,
- The high level of visibility of the proposed turbines over an expansive area, including the setting of Gougane Barra, the town of Bantry, the coastal areas in the vicinity, and the Múscraí Gaeltacht, and
- The prominence of the proposed turbines from designated scenic routes, walking trails and cycling routes, inclusive of the Wild Atlantic Way, which form an integral part of the tourism resource of the area

it is considered that the proposed development sited at this location would constitute a highly obtrusive development that would detract from the existing natural character of the area, would undermine the setting of Gougane Barra and the framing of the town of Bantry, would erode the landscape and visual quality

of the coastal and designated scenic routes in the vicinity, would adversely impact on the rural character of the area and would compromise the scenic amenities of this visually sensitive and vulnerable area. The proposed wind turbines would, thereby, be excessively dominant features and a visually obtrusive form of development in this landscape, which would contribute to the erosion of the visual and environmental amenity of the area, would materially conflict with the objectives as set out in the Cork County Development Plan, and would seriously injure the landscape and visual amenities of the area. The proposed development would, therefore, be contrary to the proper planning and sustainable development of the area.

2. The site of the proposed development is located within an area of significant ornithological value, as evidenced by the applicant's bird surveys in support of the application. It is considered that the siting, height, scale and operation of the proposed turbines would result in a significant risk of collision for Annex I bird species, inclusive of White-tailed Eagles, as well as loss of habitat and displacement for raptors prevalent at this location. Furthermore, it is considered that the cumulative impact of wind turbines in the area, inclusive of the proposed development, would substantially erode the quality of the environment for these sensitive bird species, including distorting migratory routes, eroding habitat, encroaching on foraging areas, and affecting roosting and breeding sites. The proposed development would, thus, have significant adverse impacts on the ornithological importance of the area by way of disturbance and displacement of protected bird species and potential for bird strikes and would, therefore, be contrary to the proper planning and sustainable development of the area.

Kevin Moore
Senior Planning Inspector

3rd June, 2021