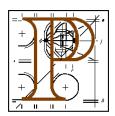
## An Bord Pleanála



# **Inspector's Report**

Ref.:PL03.244095SFIDevelopment:10 year permission for extension to Boolynagleragh windfarm to include 7 turbines and all ancillary works.Location:Boolynagleragh-Boolybrien, Knockatunna, and Rathcroney, County Clare.Applicant:ESB InternationalInspector:Karla Mc BrideSite inspection:18th February 2016

Addendum Report on Response to Request for Further Information

#### 1.0 INTRODUCTION

On 1<sup>st</sup> October 2015, the Board requested further information from the applicant which included a revised EIS to allow the Board to complete an EIA of the overall proposal, including the grid connection for the proposed development, in accordance with the requirements of the EIA Directive. The applicant was advised that the information submitted should include the following in respect of any proposed grid connection:

- General corridor for the proposed connection;
- Nature of connection overground and/or underground;
- Pole/tower type and height(s) if overground;
- Line voltage.

The applicant was also advised that the EIS should consider the cumulative effects of the proposed windfarm, the development permitted by the Board under PL03.236376 and the proposed grid connection(s) on data submitted.

The applicant was also requested to submit a revised Habitats Directive screening, and if necessary a revised NIS, in respect of the overall proposal, including the proposed grid connection(s) from the proposed development.

The Board considered the further information to be significant and revised public notices were required. The further information was circulated to and responses were received from prescribed bodies.

This report should be read in the context of the original report on this application dated 09<sup>th</sup> March 2015.

### 2.0 RELEVANT RECENT PLANNING HISTORY

The proposed windfarm comprises an extension to a previously permitted but not yet constructed windfarm that was granted permission under PL03.236376. This case is summarised in section 1.6 and 5.6 of the original report on this application dated 09<sup>th</sup> March 2015. The previously permitted development did not include details of a physical connection to the grid and this was to be addressed by way of a separate planning application. Condition no. 13 stated that this permission shall not be construed as any form of consent or agreement to a connection to the national grid or to the routing or nature of any such connection.

The applicant applied to the County Council in September 2014 under *Reg. Ref.14/454* for planning permission to construct a new 38kV overhead line connecting the Boolynagleragh wind farm with the existing 110kV substation at Booltiagh. The c.7.1km overhead line would range in height from 10m to 18m and would extend from E to W. The application was accompanied by an NIS and an Ecological Impact Assessment Report. The Council assessed the application and undertook an Appropriate Assessment, and planning permission was granted in April 2015 subject to 6 conditions. Condition no. 4 prohibited works during the hen harrier breeding season.

The applicant applied to the County Council in December 2014 under *Reg. Ref. 14/761* for alterations and extension to the existing Booltiagh 110kV station to incorporate various items of electrical equipment and an additional single storey Control Building. The Council's decision to grant planning permission in July 2015 was appealed under *PL03.245273* and the Board decided to grant permission subject to 9 conditions in December 2015. This application was the subject to AA and EIA screening assessments which concluded that an AA and EIA were not required.

The applicant applied to the County Council in February 2015 under *Reg. Ref.15/60* for planning permission to provide a bypass of the junction of the N68 and the L4230 for supervised temporary use during abnormal loads deliveries of wind turbine components during construction of the permitted Boolynagleragh wind farm.

### 3.0 PROJECT DETAILS

The proposed turbines will be connected by underground cables at a voltage of 20kV to the electrical transformer substation in the permitted Boolynagleragh Windfarm (PL03.236376) and then to the permitted 38kV overhead line grid connection (14/545) to the existing Booltiagh 110kV substation in County Clare. The circuit will consist of c.7.1km of overhead line and a short length of cable at Booltiagh substation. The main details required by the Board are summarised below.

FI request	Applicants response
General corridor	NE to SW over c.7.1km to Booltiagh
Nature of connection	Overhead
Line voltage	38kV
Pole/tower type & height(s)	61 structures – c.10-18m high

2- 59 will be double wood pole sets with 2	
poles c.9.7-17.7m above ground level.	
(Stay wires will be attached at certain	
locations.)	
1 &61 will be lattice steel end masts, c.13.2m	
above ground level.	

### 4.0 ENVIRONMENTAL IMPACT STATEMENT

### 4.1 Revisions to the submitted EIS

The revisions to the submitted EIS take account of the potential cumulative effects on the environment arising from the recently permitted installation of the grid connection cable and the recently permitted alterations to the existing Booltiagh 110kV sub-station, in-combination with the windfarm development permitted by the Board under PL03.236376 and the currently proposed windfarm extension project.

A full description of the proposed works, construction methodology and mitigation measures are now available in Section 2 of the revised EIS. All sections of the submitted EIS have been revised accordingly and the main changes are summarised below. Appendix A has been revised by the omission the High Street windfarm planning permissions, Appendix B to F have not been altered and Appendix G (Cultural heritage) has been omitted. The revised EIS also contains several new figures.

The revised EIS refers to the temporary diversion of the Mid Clare Way footpath during construction. It contains more information in relation to alternatives, grid capacity, health and safety, community benefit, decommissioning, site preparation construction traffic, emissions targets, spoil disposal, crane size and forestry and tourism whist the section that deals with noise sources noise has been shortened. The revised EIS now refers to Lough Naminna Bog NHA and the Cragnashingaun Bogs NHA to the SW of the grid connection route. Additional information has been provided in relation to bats and hen harriers along the route and a new section deals with the potential collision risk with overhead lines. A radar assessment has been included. More detailed mitigation measures for geology and soils, hydrology and hydrogeology, roads and traffic, noise and the smooth newt have been added. Several of the tables have been amended to take account of the amalgamation of the existing permitted windfarm and proposed extension.

Chapter 3.9 of the revised EIS states that construction of the overhead grid connection will entail both civil and electrical works and that c.8ha of forestry will be felled along the route to create a 20m wide corridor over a c.4km distance. Access routes were determined following a geotechnical and ecological survey and materials will be transported via tracked machinery and sleepers and bog mats where necessary. Poles and stay wires will be will be buried to a depth of c.2.5m and 1.8m respectively. Tower foundations, with an average size for each leg of c.3m x 3m will be buried to a depth of 2.5m and sheet piles supported by hydraulic frames to prevent collapse in the excavated areas will be used where necessary. End Mast 1 is the only areas where significant excavations will take place and where concrete foundations will be used. All works will be supervised by the Project Ecologist and the works will take approximately 6-8 weeks to complete.

The revised EIS assessed the additional environmental impacts of the grid connection and the potential cumulative environmental impacts of the grid connection in-combination with the existing permitted windfarm, the currently proposed windfarm and recently permitted amendments to the Booltiagh 110kV substation. The revised EIS stated that there would be no additional or cumulative impacts for human beings, noise, shadow flicker, terrestrial or aquatic ecology, landscape, geology and soils, hydrology and hydrogeology, road and traffic, air and climate, material assets or cultural heritage.

### Conclusion:

The revised EIS concludes that the works will not give rise to any significant impacts on the environment, whether in-combination or cumulatively with the windfarm extension project, the permitted windfarm or the recently permitted amendments to the Booltiagh 110kV substation arising from the installation of the new grid connection cable.

### 5.0 SCREENING FOR AA AND NIS

## 5.1 Revisions to the submitted AA Screening report

The applicant submitted a revised Screening for AA and NIS which take account of the potential cumulative effects on European sites arising from the recently permitted 38kV overhead grid connection cable and the recently permitted alterations to the existing Booltiagh 110kV sub-station, incombination with the windfarm development permitted by the Board under PL03.236376 and the proposed windfarm extension.

The zone of potential impact was widened from 10km to 15km. It also takes account two SPAs that are located over 20km from the site as they are designated for breeding hen harrier and this species is known to use the windfarm site. The revised AA Screening report contains a Natura Impact Statement in section 5.

The revised report summarises the ecological studies that were used to inform the previous report and the ecology sections of the EIS. No new surveys have been undertaken. A description of the proposed works, regulatory context and ecological assessment methodology are available in Sections 1, 2 and 3 of the revised report. Section 4 outlines the screening exercise for Appropriate Assessment which describes the project and European sites, it outlines potential effects, assesses the likely effects, and identifies the potential for in-combination effects. Section 5 contains the Natura Impact Statement which includes subsections on impact prediction, incombination effects, mitigation measures and an AA conclusion.

The previously submitted Screening for AA report identified the following European sites within a 10km radius of the proposed windfarm extension:

European site	Relevant QI	Distance
The Lower Shannon SAC (002165)	Priority & Annex 1 habitats (alluvial forests & floating river vegetation) Annex 11 species (FWPM, salmon & lamprey species)	c.7km to S
River Shannon & River Fergus Estuaries SPA (004077)	Winter birds	c.7km to S
Newall & Edenvale Complex SAC (002091)	Lesser horseshoe bat	c.8km to NE

This Report concluded that the proposed windfarm extension would have no significant impact (direct, indirect, ex situ or cumulative) on the Qualifying Interests of the European Sites because of the substantial separation distances between the windfarm site and the European sites, and that progression to a Stage 2 Natura Impact Statement is not necessary. The Inspector concurred with this conclusion.

The new AA Screening report identified the following additional European sites within a 15km radius of the windfarm and grid connection route:

European site	Relevant QI	Distance
Knockanira House cSAC (002318)	Lesser horseshoe bat	c.5.2km to E
Pouldatig Cave cSAC (000037)	Lesser horseshoe bat	c.8km to NE
Ballyallia Lake cSAC (000014)	Natural eutrophic lakes	c.11.8km to NE
Ballyallia Lake SPA (004041)	Birds & wetlands	c.11.8km to NE
Ballycullinan Lake cSAC (000016)	Calcareous fens	c.13.5km to NE
Ballycullinan, Old Domestic Building SAC (002246)	Lesser horseshoe bat	c.14.5km to N

The revised AA Screening report also identified the following two additional European sites which are designated for breeding hen harrier and are located over 20km from the proposed windfarm extension and grid connection route:

European site	Relevant QI	Distance
Slieve Aughty Mountains	Hen harrier	20km to NE
SPA (004168)		
Stack's to Mullaghareirk	Hen harrier	20km to NE
Mountains, West Limerick		
Hills SPA (004161)		

## **5.2** Screening for Appropriate Assessment

The potential additional effects of the grid connection and the potential cumulative environmental impacts of the grid connection in-combination with the existing permitted windfarm, the currently proposed windfarm, the recently permitted amendments to the Booltiagh 110kV substation and other developments in the area are summarised below.

#### Potential effects

- Loss of habitat for bats and birds
- Disturbance/displacement of bats and birds
- Pollution of watercourses
- Indirect pollution impacts on aquatic species

## Other developments in the area:

- Permitted Boolynagleragh windfarm (9 turbines)
- Booltiagh windfarm (21 turbines)
- Glenmore windfarm (11 turbines)
- Letteragh windfarm (6 turbines)
- Kiltumper windfarm (2 wind turbines)
- Slievecallan windfarm (29 turbines)
- Cossmore windfarm (7 turbines)
- Cahermurphy windfarm (6 turbines)

### Conclusion:

The revised AA Screening report concludes that the only developments considered to have the potential to have an in-combination effects with the proposed windfarm extension are, the permitted windfarm, amended substation and the 38kV overhead grid connection. These developments are also partially or fully within the catchment of the Cahermore and Lismorris streams, which are within the catchment of the Lower River Shannon SAC. The Cahermore River drains into the River Shannon SAC at Ennis c.14km downstream of the site and the Lismorris River drains into the SAC at Ballcorick c.10km downstream of the site.

European site	Relevant Qualifying Interests	Additional predicted impacts	Predicted cumulative impacts
Lower Shannon SAC (002165)	Priority & Annex 1 habitats (alluvial forests & floating river vegetation) Annex 11 species (FWPM, salmon, sea, brook & river lamprey & otter)	Yes - In the absence of mitigation contamination with suspended solids could affect water quality and salmon lamprey species – an NIS is required	Yes - In the absence of mitigation measures - an NIS is required

This is the only European site considered to be at risk of significant negative effects as a result of the windfarm extension. In the absence of mitigation measures, contamination of watercourses with suspended solids, with the resultant potential impact on salmon and lamprey species, could have potentially significant negative effects on the Lower River Shannon SAC. Therefore a Stage 2 Appropriate Assessment is required.

## 5.3 The Natura Impact Statement

The NIS reiterates the contents of the Screening for AA and lists a series of the mitigation measures for works located in close proximity to watercourses. These mitigation measures are the same as those listed in Chapter 19 of the revised EIS as summarised in section 4.1 of this report, and the measures are itemised under the following headings:

- Clear felling
- Management of excavations
- Water crossings
- General pollution control measures
- Temporary facilities
- Procedures for contractors
- Monitoring

The NIS concludes that the proposed windfarm extension development, including the prescribed mitigation measures described above, wither alone or in-combination with other plans and projects, will not have adverse effects on the integrity of the Lower Shannon SAC, or any other Natura 2000 site, as defined by the conservation objectives of the site(s).

#### 6.0 SUBMISSIONS

The further information submission was circulated to the Department of Arts, Heritage and The Gaeltacht and An Taisce. The Department of Arts, Heritage and The Gaeltacht submission raised no new issues and there was no further submission from An Taisce. No further submissions from the planning authority or the public

### 7.0 ASSESSMENT

### 7.1 Context

The applicant has submitted revisions to the EIS and the Screening for Appropriate Assessment report which accompanied the original planning application for the windfarm extension project along with a Natura Impact Statement. The revisions to the EIS and AA Screening Report, and the Natura Impact Statement relate to the 38Kv grid connection which was permitted by the County Council under Reg. Ref.14/454 to connect the Boolynagleragh wind farm with the existing 110kV substation at Booltiagh, and the alterations and extension to the existing Booltiagh 110kV station which was permitted by the Board under PL03.245273 in 2015.

The further information provided by the applicant addresses the issues raised by the Board in the request for further information.

The Prescribed Bodies submissions on the applicant's response are noted. Many of the issues raised have been considered in the original report on the application dated 09<sup>th</sup> March 2015 and it is not therefore considered necessary to discuss these matters further.

### 7.2 Environmental Impact Assessment

### Environmental Impact Statement:

The revised EIS describes the works required to install the 38kV overhead grid connection that will extend from the W section of the Boolynagleragh wind farm to the existing 110kV substation at Booltiagh. Sections 3 and 4 above contain a detailed description of the proposed works.

The revised EIS identifies the potential impacts arising from the works required to install the overhead 38kV grid connection which are not considered likely to give rise to significant impacts in terms of ecology, geology, traffic, visual, amenities, noise, water or air quality.

Cumulative impacts are identified and described in the revised EIS. The applicant concluded, on the basis of the further information provided, that the proposed development would not give rise to significant additional cumulative impacts in-combination with other plans and projects in the area.

### **Environmental Impact Assessment:**

The potential additional environmental impacts of the grid connection and the potential cumulative environmental impacts of the grid connection incombination with the existing permitted windfarm, the currently proposed windfarm and recently permitted amendments to the Booltiagh 110kV substation are assessed below.

Area of Impact	Additional impacts	Additional Mitigation	Cumulative impacts
Human beings	None predicted	None required	None predicted
Noise	Not applicable	Not applicable	Not applicable
Shadow flicker	Not applicable	Not applicable	Not applicable
Terrestrial ecology	The structure is mainly located within a forestry plantation and cutover bog; it skirts the Lough Naminna and Cragnashingaun Bogs NHAs; there are no known bat roosts or records of hen harriers foraging along the route; no risk of birds or bats colliding with overhead power lines; Killarney fern is not present - no additional impacts predicted.	None required	None predicted

Aquatic	The structure will not affect	None	None
ecology	any new watercourses - no	required	predicted
,	additional impacts predicted.	10 40	
Landscape	The pole and wire structure will	None	None
	run through a forestry	required	predicted
	plantation and along a local		
	road where there are existing		
	similar structure – <i>no</i>		
	additional impacts predicted		
Geology &	None predicted	None	None
soils		required	predicted
Hydrology &	None predicted	None	None
hydrogeology		required	predicted
Roads &	Impacts may arise in the	None	None
traffic	context of traffic management	required	predicted
	during construction works		
	rather than traffic volumes		
	generated - no additional		
	impacts predicted.		
Air & climate	Not applicable	Not	Not applicable
		applicable	
Material	Additional loss of forestry but	None	None
assets	no additional significant	required	predicted
433013	impacts predicted	roquireu	prodicted
Cultural	None predicted	None	None
heritage		required	predicted

### **Conclusion:**

Having regard to the above and to the conclusions of the Environmental Impact Assessment contained in the report of 09<sup>th</sup> March 2015 I am satisfied that there is now sufficient information to enable the Board to complete its Environmental Impact Assessment the windfarm project.

## 7.3 Screening for Appropriate Assessment

The revised Screening for AA describes the works required to install the 38kV overhead grid connection that will extend from the W section of the Boolynagleragh wind farm to the existing 110kV substation at Booltiagh. Sections 2 and 3 above contain a detailed description of the proposed works.

The revised Screening for Appropriate Assessment report considered the potential effects of the 38kV overhead grid connection works on several additional European sites located within 15km of the proposed development, and two sites that are located over 20km from the site. The details are set out in section 5.1 above.

The overall conservation objectives for these European sites are to maintain and/or restore the favourable conservation condition of Annex 1 habitats and Annex 11 species for which the sites were selected. The relevant qualifying interests for these additional sites mainly relate to the Lesser horseshoe bat and hen harriers that may use the windfarm site and grid connection route.

The revised report screened out two of the three originally assessed European sites and all of the additional European sites because of the separation distances between the sites and the proposed development or the absence of a direct connection between them.

However, in relation to cumulative impacts, the revised report did not identify any pathways for additional significant effects in-combination with other plans and projects in the area. However, it concluded that the grid connection works could adversely affect the conservation objectives of The Lower Shannon SAC (site code: 002165) and that an NIS was required.

The original Screening for Appropriate Assessment report considered the potential effects of the proposed windfarm extension on three European sites located within 10km of the proposed development. The details are set out in section 5.1 above. The relevant qualifying interests for these sites mainly relate to the presence of Annex 11 species (including freshwater pearl mussel, Atlantic salmon and lamprey species) in the Lower Shannon SAC; wintering birds in the River Shannon & River Fergus Estuaries SPA; and the lesser horseshoe bat in the Newall & Edenvale Complex SAC. The original report screened out all three of the European sites, mainly because of the absence of a direct aquatic link or the extent of the separation distances between the sites and the proposed development.

Although the windfarm would be located within the catchment of the Cahermore and Lismorris streams which are within the catchment of the Lower River Shannon SAC, the Cahermore River drains into the River Shannon SAC at Ennis c.14km downstream of the site and the Lismorris River drains into the SAC at Ballcorick c.10km downstream of the site. Given the substantial length of the separation distances and having regard to the mitigation measures contained in the EIS is relation to protecting water quality from contamination resulting from the site excavations, the applicant concluded that a Stage 2 Appropriate Assessment was not required. The Inspector concurred with conclusion in the report dated 09<sup>th</sup> March 2015.

The revised AA Screening report concludes that the only developments considered as having the potential for in-combination effects with the proposed windfarm extension are, the permitted windfarm, amended Booltiagh substation and the 38kV overhead grid connection. The report concluded that in the absence of mitigation measures, contamination of watercourses with suspended solids, with the resultant potential impact on salmon and lamprey species, could have an adverse effect on the Lower Shannon SAC and its conservation objectives. The report also concluded that a Stage 2 Appropriate Assessment is required and the applicant submitted a Natura Impact Statement in section 5 of the revised AA Screening Report. The NIS is summarised in section 5.3 above.

The NIS concludes that the proposed windfarm extension development, including the mitigation measures listed in the NIS and section 19 of the EIS, whether alone or in-combination with other plans and projects will not have adverse effects on the integrity of the Lower Shannon SAC, or any other Natura 2000 site, as defined by the conservation objectives of the site(s).

This is different to the conclusion reached in the previously submitted AA Screening report although there has been no significant change in circumstances, other than the inclusion of the 38kV overhead grid connection works and the alterations to the Booltiagh substation.

It is noted that the County Council granted planning permission under Reg. Ref.14/454 to the applicant to construct a new 38kV overhead line connecting the Boolynagleragh wind farm with the existing 110kV substation at Booltiagh. The application for the grid connection was accompanied by an NIS and an Ecological Impact Assessment Report. The Council assessed the application and undertook a Stage 2 Appropriate Assessment, and planning permission was granted in April 2015. This application was lodged with the planning

authority and determined by the County Council during the lifetime of the current appeal to the Board.

Notwithstanding this decision and the AA undertaken by the planning authority in relation to the grid connection, I am satisfied, having regard to the substantial separation distances between the windfarm site and grid connection route, and the discharge points for the watercourses to the Lower Shannon SAC, and subject to the implementation of best practice methodologies during the construction phase, that a Stage 2 Appropriate Assessment is not required in this instance, having regard to the Conservation Objectives for this European site and it's Qualifying Interests.

#### 8.0 Conclusions

It is considered that the applicant's response has adequately addressed the issues raised by the Board in its further information request.

The revisions to the EIS adequately address the impacts of the 38kV overhead grid connection (and the alterations to the Booltiagh substation) on the environment. Potential in-combination effects with relevant projects and plans within wider area are identified and assessed. It is not considered that the overall proposed development, either individually or in combination with other plans or projects, would have any significant adverse impacts on the environment.

The revised Screening for Appropriate Assessment Report adequately addresses the effects of the 38kV overhead grid connection (and the alterations to the Booltiagh substation) on the European sites in the wider area. Potential in-combination effects with relevant projects and plans in the surrounding area are identified and assessed. It is reasonable to conclude that on the basis of the information on the file, which I consider adequate in order to issue a screening determination, that the proposed development, individually or in combination with other plans or projects would not be likely to have a significant effect on The River Shannon SAC (Site code: 002165) or any other European site, in view of the site's Conservation Objectives, and a Stage 2 Appropriate Assessment (and submission of a NIS) is not therefore required.

Having regard to the foregoing, I am satisfied that there would be no significant additional environmental or ecological impacts as a result of the further information submission.

#### 9.0 Recommendation

Based on the above, I recommend that planning permission be granted for the proposed windfarm for the reasons and considerations set out below and subject to the following conditions.

### 10.0 REASONS AND CONSIDERATIONS

Having regard to:

- a. the national targets for renewable energy contribution of 40% gross electricity consumption by 2020,
- b. the "Wind Energy Development Guidelines Guidelines for Planning Authorities", issued by the Department of the Environment, Heritage and Local Government in June, 2006,
- c. the policies of the planning authority as set out in the Clare County Development Plan (2011-2017), as varied,
- d. the proximity and availability of a grid connection to serve the proposed development,
- e. the distance to dwellings or other sensitive receptors from the proposed development,
- f. the good transport access, and
- g. the submissions made in connection with the planning application and the appeal,

it is considered that, subject to compliance with the conditions set out below, the proposed development, individually or in combination with other plans or projects would not have any significant adverse impacts on the environment; be likely to have a significant effect on any European sites, in view of the site's Conservation Objectives; would not have an unacceptable impact on the landscape; would not seriously injure the visual or residential amenities of the area or of property in the vicinity; and would be acceptable in terms of traffic safety and convenience. The proposed development would, therefore, be in accordance with the proper planning and sustainable development of the area.

#### CONDITIONS

1. The development shall be carried out and completed in accordance with the plans and particulars lodged with the application, as amended by the as amended by the further plans and particulars submitted on the 18<sup>th</sup> day of August, 2014, and the further particulars received by An Bord Pleanála on the 7<sup>th</sup> day of October 2015, except as may otherwise be required in order to comply with the following conditions. Where such conditions require details to be agreed with the planning authority, the developer shall agree such details in writing with the planning authority prior to commencement of development and the development shall be carried out and completed in accordance with the agreed particulars.

**Reason**: In the interest of clarity.

2. The period during which the development hereby permitted may be carried out shall be 10 years from the date of this order.

**Reason**: In the interests of clarity.

3. This permission shall be for a period of 25 years from the date of commissioning of the wind farm.

**Reason**: To enable the planning authority to review its operation in the light of the circumstances then prevailing.

4. The developer shall ensure that all construction methods and environmental mitigation measures set out in the Environmental Impact Statement and associated documentation are implemented in full, save as may be required by conditions set out below.

**Reason:** In the interest of protection of the environment.

- 5. The following requirements shall be complied with:
  - (a) The wind turbines including masts and blades, and the wind monitoring mast, shall be finished externally in a light grey colour.
  - (b) Cables within the site shall be laid underground.
  - (c) The wind turbines shall be geared to ensure that the blades rotate in the same direction.
  - (d) No advertising material shall be placed on or otherwise be affixed to any structure on the site without a prior grant of planning permission.

Reason: In the interest of visual amenity.

- 6. (a) Cumulative shadow flicker arising from the proposed development shall not exceed 30 minutes in any day or 30 hours in any year at any dwelling.
  - (b) The proposed turbines shall be fitted with appropriate equipment and software to control shadow flicker at dwellings.
  - (c) Prior to commencement of construction, a wind farm shadow flicker monitoring programme shall be prepared by a consultant with experience of similar monitoring work, in accordance with details to be submitted to the planning authority for written agreement. Details of monitoring programme shall include the proposed monitoring equipment and methodology to be used, and the reporting schedule to the planning authority.

**Reason:** In the interest of residential amenity.

7. In the event that the proposed development causes interference with telecommunications signals, effective measures shall be introduced to minimise interference with telecommunications signals in the area. Details of these measures, which shall be at the developer's expense, shall be submitted to, and agreed in writing with, the planning authority prior to commissioning of the turbines and following consultation with the relevant authorities.

**Reason**: In the interest of protecting telecommunications signals and of residential amenity.

8. Details of aeronautical requirements shall be submitted to, and agreed in writing with, the planning authority prior to commencement of development. Prior to commissioning of the turbines, the developer shall inform the planning authority and the Irish Aviation Authority of the as constructed tip heights and co-ordinates of the turbines and wind monitoring masts.

**Reason**: In the interest of air traffic safety.

9. Prior to commencement of development, a transport management plan for the construction stage shall be submitted to, and agreed in writing with, the planning authority. The traffic management plan shall incorporate details of the road network to be used by construction traffic, including over-sized loads, and detailed arrangements for the protection of bridges, culverts or other structures to be traversed, as may be required.

**Reason**: In the interest of traffic safety.

- 10. The following requirements shall be complied with:
  - (a) Prior to commencement of development, a detailed environmental, health and safety management plan for the construction stage shall be submitted. generally in accordance with the Environmental Impact Statement and the submissions made in accordance with the planning application and with the appeal, for the written agreement of the planning authority.
  - (b) The environmental, health and safety management plan shall incorporate the following:
    - (i) a detailed construction programme,
    - (ii) a detailed method statement for construction,
    - (iii) a programme for the on-going monitoring of water quality during the construction period, and
    - (iv) an emergency response plan.

**Reason:** In the interest of public health and safety, protection of the environment and sustainable waste management.

11. The developer shall retain the services of a suitably qualified and experienced bird specialist to undertake appropriate annual breeding and wintering bird surveys of this site. Details of the surveys to be undertaken and associated reporting requirements shall be developed following consultation with the Department of Arts, Heritage and the Gaeltacht, and shall be submitted to, and agreed in writing with, the planning authority prior to commencement of development. These reports shall be submitted on an agreed date annually for five years, save with the prior written agreement of the planning authority. Copies of the reports shall be sent to the Department of Arts, Heritage and the Gaeltacht.

**Reason**: To ensure appropriate monitoring of the impact of the development on the avifauna of the area.

12. On full or partial decommissioning of the wind farm, or if the wind farm ceases operation for a period of more than one year, the wind monitoring mast, the turbines concerned and all decommissioned structures shall be removed, and foundations covered with soil to facilitate re-vegetation, all to be complete to the written satisfaction of the planning authority within three months of decommissioning or cessation of operation.

**Reason**: To ensure satisfactory reinstatement of the site upon full or partial cessation of the project.

- 13. Prior to commencement of development, the developer shall lodge with the planning authority a cash deposit, a bond of an insurance company, or such other security as may be acceptable to the planning authority, to secure the satisfactory reinstatement of the site upon cessation of the project, coupled with an agreement empowering the planning authority to apply such security or part thereof to such reinstatement. The form and amount of the security shall be as agreed between the planning authority and the developer or, in default of agreement, shall be referred to An Bord Pleanála for determination. **Reason**: To ensure satisfactory reinstatement of the site.
- 14. The developer shall pay to the planning authority a financial contribution in respect of public infrastructure and facilities benefiting development in the area of the planning authority that is provided or intended to be provided by or on behalf of the authority in accordance with the terms of the Development Contribution Scheme made under section 48 of the Planning and Development Act 2000. The contribution shall be paid prior to the commencement of development or in such phased payments as the planning authority may facilitate and shall be subject to any applicable indexation provisions of the Scheme at the time of payment. Details of the application of the terms of the Scheme shall be agreed between the planning authority and the developer or, in default of such agreement, the matter shall be referred to the Board to determine the proper application of the terms of the Scheme. Reason: It is a requirement of the Planning and Development Act 2000 that a condition requiring a contribution in accordance with the Development Contribution Scheme made under section 48 of the Act be applied to the permission.

Karla McBride Senior Planning Inspector 2<sup>nd</sup> March 2016