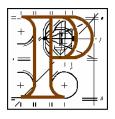
An Bord Pleanála



Inspector's Report

PL16. 241592

Development: The development of a wind farm of 21 No. wind turbines, each turbine with a hub height of 85m and rotor blades of 35.5m in length with a total power output capacity of 48.3 megawatts. The development will also include the upgrading of c. 9.9km of existing site tracks and the construction of c. 350m of new site tracks, hard standing areas, electrical control building, compound, and also to erect 2 No. anemometry masts and install underground cabling. In addition, the development will include the carrying out of temporary site works and ancillary works to serve the development.

Carrowleagh (Kilbride), Bunnyconnellan, Ballina, Co. Mayo.

PLANNING APPLICATION

Ref.:

Planning Authority:	Mayo County Council
Planning Authority Ref.:	11/495
Applicant:	John Duffy, Gerard Judge, Gerard Murray, Jon Reape, Francis Irwin & John Jordon
Type of Application:	Permission
Planning Authority Decision:	Grant subject to conditions

APPEAL

Type of Appeal:	First & Third Party
Appellant(s):	Kevin Deering v. Decision Tom Rouse v. Decision John Duffy & Others v. Conditions
Observers:	Irish Peatland Conservation Council
INSPECTOR:	Robert Speer
Date of Site Inspection:	3 rd May, 2013

1.0 SITE LOCATION AND DESCRIPTION

1.1 The proposed development site is located in the rural townland of Carrowleagh (Kilbride), Co. Mayo, in a broad area of peatland within the north-western foothills of the Ox Mountains, approximately 4km northeast of the village of Bunnyconnellan and 12km east of Ballina town. The surrounding area can be described as remote and is dominated by the Ox Mountains to the east, which rise to a height of over 400 metres and serve to define the border with Co. Sligo, with a gradual transition to lower lying lakeland drumlins and marginal pasture on travelling further west. Housing density in the surrounding area is generally very low with the predominant land use in the immediate environs of the site comprising turf-cutting, forestry plantations and agricultural farmland, however, an existing wind energy development known locally as the Carrowleagh Wind Farm adjoins the site to the immediate east. The subject site has a stated site area of 424 hectares (net area of construction works: 10.92 hectares) and forms part of a wider landholding held in multiple ownerships. It is predominantly characterised by degraded / working bog with a long history of having been exploited for peat extraction as evidenced by the extensive turbary rights in the area and the extent of cutover bog. It is accessed from the local road network via a gridiron of existing turbary tracks which were used to provide access to turf cutting activities whilst a large number of small streams and drainage channels serve to drain the lands towards the Moy and Easkey River catchments. The site itself is not subject to any national or European designations, although it adjoins the Ox Mountains Bog Special Area of Conservation to the immediate south which also extends to a point c. 500m west of the site.

2.0 DESCRIPTION OF PROPOSED DEVELOPMENT

2.1 The proposed development consists of the construction of a 48.3 Megawatt (MW) wind farm comprising the erection of 21 No. wind turbines with a hub height of 85m, a rotor diameter of 71m, and a base to blade-tip height of 120.5m. Associated site development works include:

- A grid control building (floor area: 50.1m²) within a fenced compound containing electrical equipment;
- The upgrading of c. 9.9km of existing site tracks and the construction of c. 350m of new site tracks;
- The provision of hard standing areas;
- The erection of 2 No. anemometry masts 85m in height;
- Underground electrical cables linking the turbines with the substation compound;
- Undergrounded communication cables;
- Drainage works;
- All other associated site works and related ancillary development.

2.2 In respect of a connection to the national grid, the applicants have confirmed that whilst an application for same was made on 28th May, 2009 this was not included within 'Gate 3' and as such is dependent on the release of subsequent Gate offers or an extension / re-opening of Gate 3. However, it is contended that due to the relatively low

uptake to date (i.e. 700MW of 3,900MW) of connection offers made under Gate 3 that even with a reduced projection of 1,500MW being required to meet the 40% of renewables integration target by 2020 there is a significant amount of uncertainty concerning where this 800MW will be specifically located. Therefore, it is anticipated that appropriately located projects holding full planning permission with robust financial capability are likely to feature in the Commission for Energy Regulation's consideration of the shortfall in the uptake of Gate 3 connection offers where this arises.

3.0 ENVIRONMENTAL IMPACT STATEMENT

3.1 An Environmental Impact Statement has accompanied the subject application and this provides a generally satisfactory description of the receiving environment, the proposed development, its impacts and proposed mitigation measures. It has been accompanied by a non-technical summary and includes the information required by Schedule 6 of the Planning and Development Regulations, 2001, as amended, and complies with Section 172 of the Planning and Development Act, 2000 and Article 94 of the Regulations. In this respect I would advise the Board that Paragraph 3(i) of Part 2 of Schedule 5 of the Planning and Development Regulations, 2001, as amended, prescribes '*Installations for the harnessing of wind power for energy production (wind farm) with more than 5 turbines or having a total output greater than 5 megawatts*' for the purposes of Part X of the Act.

4.0 RELEVANT PLANNING HISTORY

<u>4.1 On Site:</u> None.

4.2 On Adjacent Sites:

PA Ref. No. 02/141. Was granted on 27th March, 2002 permitting Joseph, Martin & Michael Loftus permission to erect a 40m high anemometer mast at Carrowleagh, Ballina, Co. Mayo.

PA Ref. 03/2440 / ABP Ref. No. PL16.206076. Was refused on appeal on 21st June, 2004 refusing Martin, Joseph and Michael Loftus permission for the construction of 15 No. wind turbines, 60m hub height and 66m rotor diameter, access trackways 4.5m in width, a 38kV substation building, a stone quarry of 0.1 hectares and associated site development works at Carrowleagh, Bunnyconnellan, Co. Mayo, for the following reason:

• The Environmental Impact Statement accompanying the application, which was lodged with the planning authority on the 12th day of September, 2003, does not comply with the requirements of article 94 and Schedule 6 of the Planning and Development Regulations, 2001 due to the lack of details of material significance and substance with regard to considerations on impacts on flora, fauna, soil and water and the inter-relationship between these factors, with particular regard to:

- (a) impacts and mitigation measures on blanket bog on the site and on the adjoining candidate Special Area of Conservation by the wind farm development and the proposed quarry,
- (b) impacts and mitigation measures on protected bird species on the site and adjoining lands,
- (c) geological, hydrological, hydrogeological and soil testing and substantive consideration of measures necessary to avoid, reduce or remedy significant adverse effects, and
- (d) the proposed grid connection.

Furthermore, the plans and documents accompanying the planning application which were lodged with the planning authority on the 12th day of September, 2003 do not comply with the requirements of articles 22 and 23 of the Planning and Development Regulations, 2001 due to the absence of the following details:

- a) a site location map to a scale not less than 1:1250,
- b) a composite site layout plan,
- c) sections, plans, and elevations of the proposed turbines and the substation, and
- d) sections and relevant plans for the proposed quarry.

The Board is, therefore, precluded from considering a grant of planning permission in this case.

PA Ref. 06/3861. Was granted on 14th November, 2007 permitting Joseph, Martin and Michael Loftus permission to construct a 29.9MW wind farm consisting of 13 No. Enercon E-70 2.3MW turbines with a 64m hub height, rotor diameter of 71m, 4.5m access roads to each turbine in addition to upgrade of existing roads, hardstandings at 20kV substation building and temporary contractors compound, all at Carrowleagh (Kilbride), Bunnyconnellan, Ballina, Co. Mayo.

PA Ref. No. 10/235 (Sligo County Council). Was granted on 2nd December, 2010 permitting Powercon Wind Energy Ltd. permission for the erection of up to 3 No. wind turbines with 64 metre hub heights, rotor diameter 71m, 4.5m access roads, upgrading of existing roads, hard standings and all associated infrastructure forming an extension to the permitted Carrowleagh Wind Farm, at Cloonkeelaun, Enniscrone, Co. Sligo.

4.3 On Sites in the Immediate Vicinity:

PA Ref. No. 04/3416 / ABP Ref. No. PL16.216299. Was refused by Mayo County Council on 17th January, 2006 refusing Bunnyconnellan Wind Farm permission for the development of a 28 megawatt (MW) wind farm comprising of 14 no. 2 megawatt wind turbines, with steel towers and composite fibre rotor blades, of hub height up to 70m, a rotor diameter of up to 80m and base to blade-tip height of up to 110m; and for a 40m high anemometer (wind measuring mast. The proposed wind farm will also include internal wind turbines transformers; turbine hardstands; new access tracks; strengthening and widening of existing turbary tracks on the site; drainage works, including drainage channels and silt traps, along access tracks and hardstands; two optional sites for a

substation control building with fenced compound containing electrical equipment; undergrounded electrical cables linking the turbines with a substation compound; undergrounded communication cables; excavation and expansion of existing on site borrow pit for road making materials for new access tracks and hardstands; all further associated site works and related ancillary development; all at Bunnyconnellan East, Drumsheen, Kilgarvan, Carrownaglogh, Co. Mayo. The reasons for refusal are as follows:

- The development at this location would contravene materially Development Objective EH-LC1 of the Mayo County Development Plan, 2003-2009 in relation to ensuring that development will not have a disproportionate effect on the existing or future character of a landscape in terms of location, design and visual prominence, that development will have regard to the effects of developments from the public realm towards sensitive or vulnerable features and areas. It is considered that the proposed development would interfere with the character of the landscape of which is necessary to preserve. Therefore the proposed development would be contrary to the proper planning and sustainable development of the area.
- The development at this location would contravene materially development objective EH-LC2 of the Mayo County Development Plan, 2003-2009 which states that all development in the county shall be considered in the context of the policies set out for the four Principal Policy Areas defined in the Landscape appraisal of County Mayo, which in this case is Policy Area 3, Uplands, moors, heaths or bogs. It is considered that the proposed development would interfere with the character of the landscape of which it is necessary to preserve. Therefore the proposed development would be contrary to the proper planning and sustainable development of the area.
- The development at this location would contravene materially development objective EH-VP1 of the Mayo County Development Plan, 2003-2009 in relation to ensuring that development does not adversely interfere with views or prospects worthy of preservation and protection (Map 12 of the Mayo County Development Plan, 2003-2009). It is considered that the proposed development would interfere with the character of the landscape of which is it necessary to preserve. Therefore, the proposed development would be contrary to the proper planning and sustainable development of the area.

N.B. A first party appeal lodged against the foregoing refusal under ABP Ref. No. PL16.216299 was subsequently withdrawn.

PA Ref. No. 08/617 / ABP Ref. No. PL16.231189. Was refused on appeal on 19th February, 2009 refusing Michael Mullarkey & others permission for the development of a 27.6 megawatt (MW) wind farm comprising 12 number 2.3 megawatt (MW) wind turbines, with steel towers and composite fibre rotor blades, of hub height up to 80 metres, a rotor diameter of up to 82 metres and base to blade-tip height of up to 121 metres. The proposed wind farm will also include: a substation control building with fenced compound containing electrical equipment; wind turbine transformers; turbine

hardstands; new access tracks; strengthening and widening of existing turbury tracks on the site; drainage works, including drainage channels and silt traps, along access tracks and hardstands; undergrounded electrical cables linking the turbines with the substation compound; undergrounded communication cables; excavation and expansion of existing on site borrow pit for road making materials for new access tracks and hardstands; all further associated site works and related ancillary development; all within the townlands of Bunnyconnellan East and Drumsheen, Bunnyconnellan, Ballina, Co. Mayo. The reason for refusal is as follows:

The proposed development immediately adjoins Lough Hoe Bog candidate Special Area of Conservation and is located up gradient of the River Moy candidate Special Area of Conservation. It is policy of the planning authority as set out in Policy EHNH1 of the Mayo County Council Development Plan 2008 -2014 to protect, enhance and conserve areas designated as candidate Special Areas of Conservation, Special Protection Areas and proposed Natural Heritage Areas listed in Appendix V of the plan. It is also a policy of the planning authority to implement Article 6 (3) of the EU Habitats Directive and to subject developments likely to impact on Natura 2000 or European Sites (Special Areas of Conservation and Special Protection Areas) to appropriate assessment. The Board is not satisfied on the basis of the information contained in the planning application, Environmental Impact Statement and appeal response that an appropriate or adequate assessment of the effects of the development on the environment has been carried out in accordance with Article 6 (3) of the EU Habitats Directive or that the integrity of Special Areas of Conservation and Special Protection Areas would not be adversely affected by the proposed development, in particular, the hydrological impacts of the construction of the proposed development on blanket bog. In these circumstances, the proposed development would contravene Policy EH-NH1 and Policy EH-NH4 of the development plan and would, therefore, be contrary to the proper planning and sustainable development of the area.

PA Ref. No. 08/875. Was granted on 2nd September, 2008 permitting Micheal Mullarkey & others permission to construct a 65m high wind measurement anemometer mast.

PA Ref. No. 09/160. Was granted on 22nd October, 2009 permitting the Electricity Supply Board permission for the construction of a new 110kV to 38kV transformer station and associated diversion of the existing Moy-Cunghill 110kV transmission line entailing the placement of 4 No. 110kV lattice steel towers of maximum height 18m. This station development is required to facilitate the connection of 3 new local wind farm electricity generation plants and will consist of the placement of 1 No. 110kV power transformer, with associated 110kV circuit breakers, 1 No. 38kV power transformer and 1 No. arc suppression coil with bund walls and associated oil interceptor. 1 No. control building with battery room, MV switch room, 38kV (GIS) switch room and WC with associated Bio-cycle unit. ESB radio antennae (SCADA) mounted on timber pole and new hard core access road with concrete post and rail fencing to access road and station outer boundary, palisade fencing to inner station boundary and associated site works. All at Bunnyconnellan East, Bunnyconnellan, Co. Mayo.

PA Ref. No. 10/81. Was granted on 18th August, 2010 permitting the Electricity Supply Board permission to build a 5km 38kV overhead electricity line from approved new 110kV station at Bunnyconnellan East to approved wind farm at Carrowleagh crossing the townlands of Bunnyconnellan East, Drumsheen, Carrownaclough and Carrowleagh.

PA Ref. No. 10/514 / ABP Ref. No. PL16. 241506. On 19th December, 2012 Mayo County Council issued Claire Durcan, Michael Grehan, P.J. Greavy, Gerry Hennigan, Bosco Kelly, Sean Loftus, Noel McGowan, John Mullarkey and Michael Mullarkey with a notification of a decision to grant permission for the development of a 27.6 megawatt (MW) wind farm comprising 12 no. 2.3 megawatt (MW) wind turbines, with steel towers and composite fibre rotor blades, of hub height of up to 64 metres, a rotor diameter of up to 71 metres and base to blade-tip height of up to 99.5 metres. The proposed wind farm will also include: a substation control building with fenced compound containing electrical equipment; wind turbine transformers; turbine hardstands; new access tracks; strengthening and widening of existing turbury tracks on the site; drainage works, including drainage channels and silt traps, along access tracks and hardstands; new entrance with realignment improvements for site access from the Regional Road No. 294; underground electrical cables linking the turbines with the substation compound; undergrounded communication cables; all further associated site works and related ancillary development. All in the townlands of Bunnyconnellan East and Drumsheen, Bunnyconnellan, Ballina, Co. Mayo. This decision has since been appealed and a decision is pending with the Board.

5.0 PLANNING AUTHORITY CONSIDERATIONS AND DECISION

5.1 Decision:

Following the receipt of responses to requests for further information and subsequent clarification, on 15th January, 2013 the Planning Authority issued a notification of a decision to grant permission for the proposed development subject to 52 No. conditions. Many of these conditions are generally of a standardised format and relate to issues including the undergrounding of cables, lighting, best practice construction, site development works, emission monitoring and development contributions, however, the following conditions are of note:

Condition No. 2 – States that the duration of the grant of permission is for a period of 25 years after which time the structures are to be removed unless permission has been granted for their retention for a further period. detailed reinstatement programme for Condition No. 4 – Requires а the decommissioning of the wind farm to be agreed with the Planning Authority prior to the commencement of development. Clarifies that the grant of permission is not to be construed as any Condition No. 5 – form of consent or agreement to a connection to the national grid

or the routing / nature of any such connection.

- Condition No. 9 Requires a Construction Traffic Management Plan to be agreed with the Planning Authority prior to the commencement of development.
- Condition No. 12 Requires a map showing enlarged junction details along the public road network where upgrading works are required for visibility purposes to be submitted to the Planning Authority prior to the commencement of development.
- Condition No. 13 Requires the developer to carry out a 'Road and Bridge Survey' before and after construction works with the details of same to be agreed with the Planning Authority.
- Condition No. 14 Confirms that the developer will be responsible for the full cost of any maintenance and repair works arising to the public road consequent on the proposed development as identified in the 'Road and Bridge Survey'.
- Condition No. 15 Requires details of the proposed haul sites / permitted fill sites to be submitted to the Planning Authority prior to the commencement of development.
- Condition No. 16 States that any traffic control measures are to be carried out with the agreement and under the supervision of the Planning Authority.
- Condition No. 20 Requires details of road improvement measures and associated agreements with Sligo County Council to be forwarded to the Planning Authority prior to the commencement of development.
- Condition No. 21 Refers to the implementation of the mitigation measures set out in the EIS and NIS etc.
- Condition No. 22 Refers to an Environmental Monitoring Plan to include an agreed regime for the monitoring of surface water, groundwater, dust and noise.
- Condition No. 23 Requires the establishment of an Environmental Monitoring Committee, prior to the commencement of development, to include representatives of the developer, the Planning Authority, Inland Fisheries Ireland, and the local community, to assess and monitor surface water runoff, drainage control, traffic management, road maintenance, dust control, noise monitoring and other environmental issues during the construction phase.
- Condition No. 30 Requires the developer to appoint a suitably qualified and experienced Environmental Scientist / Environmental Engineer, during the construction phase to liaise with the Planning Authority in relation to the implementation of the required environmental monitoring and the recording / reporting of any occurrences of environmental pollution, system malfunction etc.
- Condition No. 43 Prohibits works / site preparation during the bird-nesting season in the first year of construction with no re-commencement of works to be permitted during the bird-nesting season in subsequent years after any significant periods of inactivity. Construction works are only to be carried out outside of the breeding season of local sensitive bird species. In addition, an annual bird monitoring

programme is to be agreed with the Planning Authority prior to the commencement of development.

- Condition No. 44 Requires a detailed conservation plan for the rehabilitation of the site following completion of construction works to be agreed with the Planning Authority.
- Condition No. 45 Specifies noise levels during the operational phase of the development.
- Condition No. 47 States that the turbine base and hardstand area at Turbine No. 16 shall be stripped of topsoil under archaeological supervision with any archaeological features uncovered during the pre-development testing to be excavated and recorded under license from the Department of Arts, Heritage and the Gaeltacht.
- Condition No. 48 Requires the establishment of a permanent exclusion / buffer zone of 20m around Recorded Monument No. MA031-034 inside which no groundworks are to take place.
- Condition No. 49 Prohibits the use of heavy machinery or the deposition of materials within the exclusion / buffer zone referenced in Condition No. 48.

5.2 Objections / Observations

A total of 3 No. submissions were received from interested parties (N.B. It should be noted that the original submission made by one of the appellants, Mr. Tom Rouse, was subsequently withdrawn) and the principle grounds of objection contained therein can be summarised as follows:

- Detrimental impact on wildlife and / or protected habitats including salmon, the freshwater pearl mussel, and areas of 'cutover' and 'blanket bog' (an Annex I habitat).
- The inadequacy of the submitted bird surveys.
- Hydrological impact on the Ox Mountains Bog Special Area of Conservation.
- Concerns with regard to peat stability.
- The potential for water pollution / contamination of the Easkey and Moy River systems.
- Windtake from the adjoining wind farm
- Detrimental visual impact and the overall 'industrialisation' / change of use of the surrounding landscape.
- The likely negative impact on tourism in the area.
- Increased noise levels.
- Potential impact on items of archaeological significance.

5.3 Internal Reports:

Senior Archaeologist: An initial report recommended that a programme of predevelopment archaeological testing be undertaken prior to any decision being made on the subject application. Subsequently, following consideration of the 'Archaeological Pre-Development Testing Report' submitted in response to a request for further information, a further report was prepared which recommended the inclusion of a series of conditions in any grant of permission with regard to the monitoring of the stripping of topsoil at the location of Turbine No. 16 and the establishment of an exclusion / buffer zone around Recorded Monument No. MA031-034.

Area Office: Recommends a grant of permission subject to conditions.

Road Design: An initial report recommended that further information should be sought in respect of the sightlines available from the proposed access arrangement, the monitoring and control of loads delivered to the site, the identification of the proposed haul routes, an initial structural assessment of the roads and bridges located along the proposed haul routes, proposals for the provision of wheel washing facilities at the site entrance, and details of any proposed alterations / diversions to existing roadside drainage.

Following the receipt of a response to a request for further information, a further report was prepared which indicated that Road Design had no objection to the proposed development subject to conditions.

Environment: (Senior Executive Technician): An initial report recommended that permission be refused on the basis that the construction of the proposed development could impact on water quality in the area as the surrounding lands fall in a westerly direction towards tributaries of the Moy River, which has been designated as a candidate Special Area of Conservation, approximately 5km west of the site. The report subsequently details a series of conditions to be attached to any grant of permission with regard to issues including noise control, loss of habitat, ecological considerations, protection of water quality and pollution control. The report then concludes by acknowledging the potential for adverse impacts, most notably on the hydrology of the blanket bog in the nearby cSAC arising from the drawdown of water levels emanating from roads and excavations etc. In this respect the Environment Section disagrees with the findings of the Natura Impact Statement that no direct impacts will arise and is instead of the view that the ecological integrity of the localised area will be affected by the development. It is also of the opinion that any alteration of the drainage pattern at this location and the generation of high pore-water pressures along already stressed surfaces will have an adverse impact thereby affecting peat integrity in the local area.

Following the receipt of a response to a request for further information, a further report was prepared which raised some concerns in respect of the submitted proposals for peatland management, erosion and sediment control, and surface water management, however, it subsequently concluded that the submitted Peatland Management Plan was acceptable in principle provided it was implemented in full on site. It was also recommended that a Project Monitoring Committee should be set up to include various interest groups such as the applicant, construction contractors, a site environmentalist, a site ecologist, personnel from Mayo County Council, peatland conservation groups, Inland Fisheries Ireland & local representatives etc.

Environment: (Senior Executive Scientist): Following the receipt of a response to a request for further information, a report was prepared which recommended that clarification should be sought in respect of the system for the monitoring of turbidity and

the emission limits set out in the submitted Peatland Management Plan and whether these would be sufficient to protect / maintain the status of the following water bodies:

- The Owencam, Tributary of the River Moy, WE_34_2927 (Good Status)
- The Cloonta, Tributary of the River Moy, WE_34_2952, (High Status)
- The Carrownaglogh, Tributary of the River Moy, WE_34_2936 (High Status)

In addition, it was noted that peat excavation could impact on water quality through the release of nutrients, particularly phosphorous, thereby contributing to eutrophication and also through peat silt entering river systems and impacting on aquatic life. Therefore, it was recommended that clarification should be sought with regard to the details of the specific measures to be employed to protect the aforementioned water bodies from the release of phosphorous and other nutrients consequent on the proposed development.

A further report prepared following the receipt of a response to a request for further clarification concluded that it was clear that some environmental impacts would occur during the construction phase of the proposed development, although these impacts were considered to be transient and of a temporary to short-term nature. It also stated that where environmental impacts have been identified during the construction and operation phases, the EIS and the further information submitted have outlined mitigation measures that, when implemented, will minimise the potential impacts. Accordingly, it recommended a grant of permission subject to conditions.

5.4 Prescribed Bodies / Other Consultees:

Department of the Environment, Heritage and Local Government (Archaeological Considerations): States that it concurs with the recommendations of the Senior Archaeologist with Mayo County Council.

Department of the Environment, Heritage and Local Government (Nature Conservation): States that there is no mention in the response to the request for further information to mitigation measures for Merlin. In this respect it is recommended that a breeding Merlin survey be carried out prior to the commencement of development due to the presence of same (an Annex I species) in 2009 within 1km of Proposed Turbine No. T20 and that if Merlin are found to be holding territory during the breeding season then appropriate mitigation must be implemented and works restricted until breeding is complete. In addition, the results of these bird surveys are to be provided to the National Parks and Wildlife Service.

An Taisce: An initial submission states that whilst An Taisce is very much supportive of the development of renewable energy sources such as wind as a means of allowing Ireland to reduce its carbon emissions and to achieve its RES-e target of 40% by 2020, it stresses the need to ensure that all such developments, with particular reference to wind energy, are carried out with high regard for and adherence to EU natural environmental directives. In this respect it is noted that Ireland is presently in contravention of a number of aspects of the Habitats Directive with regard to wind energy projects and, therefore, it

is important to ensure that comprehensive Environmental Impact Assessments are conducted in order to compile equally comprehensive Environmental Impact Statements.

With regard to the specifics of the subject proposal, concerns are raised in respect of a number of ecological issues including the potential impact of the proposed development on the hydrology of surrounding peatlands / bog complexes, the need for a detailed peatland management plan, the impact of the historical and on-going peat extraction (turbary) activities on site, the requirement for the submission of an ecological restoration and management plan, the potential impact on avifauna, and issues pertaining to water quality.

Following the receipt of a response to a request for further information, further correspondence was received which stated that the applicants response had failed to address and mitigate the continued impact of mechanised peat extraction on site thereby undermining the value of the project in terms of carbon reduction and renewable energy provision. In this respect it was submitted that a revised planning application should be put forward which would include for the cessation of peat cutting.

A final submission received from An Taisce following the receipt of a response to a request for further clarification states that the concluding point of the letter provided by the applicant's agent (Ms. Patricia Calleary) reiterates the applicant's lack of control over 600 turbary holders and serves to render the subject proposal untenable as a renewable energy project whilst also undermining the peatland stability measures. It concludes by stating that recent budget announcements have extended the carbon tax to all solid fuels, including peat, and that an integrated proposal, which includes for the cessation of peat extraction and the provision of alternative energy sources for holders of turf cutting rights, should be provided as part of any planning application on site.

Sligo County Council: Notes that the proposed turbines will be 20m taller than those on the adjacent lands and yet will have the same individual output (2.3MW) based on the information supplied with the various planning applications. It is also noted that the proposed haul route for all 9,000 HGV deliveries to the site will include approximately 2km of local roads within Co. Sligo (i.e. from Corballa to the County Boundary) and will necessitate the crossing of a bridge at Emilymoran and a culvert on the County Boundary. In addition, it is noted that the applicants propose to resurface the entire route along the local road network with a structural overlay prior to and post construction works. Accordingly, the Planning Authority is referred to the accompanying reports prepared by the Bridges Section of Sligo County Council and the relevant Area Engineer's Office which specifies their requirements with regard to the traffic and transport implications associated with the construction of the proposed development.

Inland Fisheries Ireland: States that the proposed development site lies within the Brusna River and Easky River catchments. In this respect it is noted that the Brusna River provides spawning and nursery habitats for both salmon and trout, although salmon stocks in the Brusna system are under severe pressure and as a result it is presently closed to salmon angling. Accordingly, it is submitted that this catchment requires additional

protection to allow salmon stocks to recover. With regard to the Easky River it is stated that this is also an important salmon and trout fishery and that its tributaries downstream of the application site provide important spawning grounds and nursery habitats for these species. The Easky River is also noted as containing a population of freshwater pearl mussel downstream of the proposed development site.

This report subsequently details that whilst the section of the Brusna River catchment within the subject proposal has been allocated 'Good' ecological status in the Western River Basin Management Plan, the section within the Easky River catchment has only been allocated 'Moderate' ecological status which must be restored to 'Good' ecological status by 2021 and, therefore, no activity should be permitted within this catchment which could hinder the achievement of that target.

In conclusion, the report recommends that the following should be included as conditions in any decision to grant permission:

- All works which have the potential to impact on site watercourses must be carried out in accordance with IFI approved method statements (these method statements are to be submitted to the IFI one month prior to the commencement of development).
- Site preparation and construction should adhere to best practice and should confirm to the 'Requirements for the Protection of Fisheries Habitat during Construction and Development Works at River Sites' (www.fisheriesireland.i.e).
- Mitigation measures as outlined in Section 6.4.5 of the EIS should be included as conditions of any grant of planning permission.
- Washed stone material should be used for road construction to minimise silt discharges.
- No stream diversions, culvert installations or replacements should be carried out within prior consultation and agreement with IFI.
- An Emergency Response Procedure should be prepared prior to the commencement of works, and brought into operation in the event of a major spill or other pollution incident. IFI Ballina should be included as a notifiable body in this plan.

6.0 GROUNDS OF APPEAL

6.1 Third Party Appeals:

A total of 2 No. third party appeals have been lodged against the decision of the Planning Authority to grant permission for the proposed development and the grounds of appeal contained in each of these submissions can be summarised as follows:

6.1.1 Kevin Deering:

• The cumulative impact of the proposed development, when taken in conjunction with other wind farm developments in the surrounding area, has not been given adequate consideration.

- The proposed development will contribute to a situation whereby there will be an 'arc' of wind turbines extending from Kings Mountain as far as Bunnyconnellan and around to Lough Talt.
- One of the proposed turbines will occupy a position only 200m from the Ox Mountains Bog Special Area of Conservation whilst the entirety of the proposed development will be located on the periphery of the SAC to the northeast and southeast.
- The proposed development will have a significant visual impact on the Ox Mountains Bog Special Area of Conservation (Site Code: 002006) which features Vertigo geyeri, oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae), natural dystrophic lakes and ponds, Northern Atlantic wet heaths with Erica tetralix, Blanket Bog, and Depression on peat substrates of the Rhynchosporion.
- Due to the proximity of the proposed development site to the county boundary and the fact that there are several other proposed wind farm developments in the surrounding area awaiting decision, it is considered that there is a need for a common approach / shared strategy between Mayo and Sligo County Councils with regard to the development of wind energy in order to preserve the visual amenity of the wider area.
- There are concerns with regard to the adequacy of the measures to be put in place in order to protect the River Moy Special Area of Conservation (Site Code: 011970) from incidences of pollution, with particular reference to the potential impact of suspended solids and runoff.
- Degraded bogs can recover with time, however, if the proposed development were to proceed it is likely that the existing bogland will be permanently damaged / lost.
- There is a legal obligation to protect the River Moy and the Ox Mountains Bog Special Areas of Conservation.

6.1.2 Tom Rouse:

- Inadequate consideration was given by the Planning Authority to issues raised by third parties in its assessment of the subject application. Furthermore, a total disregard was shown by both the applicant and the Planning Authority with regard to other issues set out in the '*Wind Energy Development, Guidelines for Planning Authorities*' published by the Department of the Environment, Heritage and Local Government in June, 2006.
- The validity of the planning application is questionable as does not comply with the requirements of the Planning and Development Regulations, 2001, as amended.
- The landscape and visual impact assessment is considered to be selective in its application of the 'Wind Energy Development, Guidelines for Planning Authorities', with particular reference to its consideration of cumulative impact and the nature of the receiving landscape.
- The proposed development, when taken in conjunction with other wind farm developments in the surrounding area, would irrevocably alter this upland bog landscape.

- The assessment of the impact of the development on the natural environment has failed to adequately address the issues raised by the proposal.
- There are concerns with regard to the likely success of the proposed peat management plan which is fundamentally underpinned by the control of peat extraction. In this respect it is noted that the adjoining wind farm development secured the cessation of peat extraction on that site, however, if the extraction of peat on the subject lands is beyond the control of the applicant then the site should be deemed unsuitable for the development of a wind farm and should be refused permission accordingly. The absence of any control over peat extraction is tantamount to having no control over the ecological impacts that may arise consequent on the proposed development.
- The undergrounding of the proposed electrical cabling on site would impinge on turbary rights both during and after construction and, therefore, it is difficult to accept the applicants claim that they do not have any control over turbary rights. Furthermore, the applicants have not obtained permission from the owners of the turbary rights to obstruct access over the existing floating roads in the unlikely event that cable trenching were to take place along said roads.
- Inadequate details have been provided of the location of the cabling serving the proposed turbines and this raises concerns over the extent of the site to be developed.
- It is considered doubtful that the mitigation measures proposed will be sufficient to protect water quality within the Moy River and its tributaries. In this respect it is submitted that the scale and extent of the measures considered necessary to protect water quality, in addition to the range of planning conditions imposed in the decision to grant permission with regard to the required level of protection, would strongly suggest that the subject site is an unsuitable location for the development proposed.
- There are concerns with regard to the impact of the proposed development on the Easkey River which hosts a population of Freshwater Pearl Mussel (a species protected under Annex I of the Habitats Directive).
- There are turbines proposed to be located within the catchment of the Easkey River that will require the diversion of existing streams, however, the applicants have referred to these streams as drains in the EIS in an effort to demote the importance of these first order tributaries to the Easkey and Moy Rivers. The 'Wind Energy Development, Guidelines for Planning Authorities' state that proposed construction works should be kept more than 50m away from existing watercourses where reasonably possible and in this respect it is submitted that the applicants reference to existing streams on site as 'drains' is an attempt to flout the foregoing parameters which have been put in place to protect water quality.
- No consideration has been given to the issue of windtake. Furthermore, as the minimum downwind turbine separation distance of 7 No. blade diameters (i.e. 497m) has not been applied, the performance of the adjoining (existing) wind farm could be seriously affected by the proposed development.
- Inadequate details have been provided with regard to the availability and route etc. of a grid connection to serve the proposed wind farm. In the absence of

indicative proposals for a grid connection which would be acceptable to the Planning Authority permission for the proposed development should be refused.

- The applicants have acknowledged that they do not have a GATE 3 connection offer and that it is in the group processing system. This is further proof that the subject application is premature pending a grid connection offer from the ESB or Eirgrid.
- The renewable support system (REFIT) expires in December, 2015 and in order to qualify for REFIT support a project must be commissioned by that date. In the absence of a grid connection offer the proposed development has no chance of being commissioned by December, 2015 and thus must be considered premature.
- There are other more suitable locations in the county which do not present a threat to the natural environment, including water quality, and which will not result in unacceptable cumulative visual impacts.

6.2 First Party Appeal:

This appeal has been lodged by the applicants, John Duffy & Others, against the inclusion of Condition Nos. 2, 23, 50 & 52 as attached by the Planning Authority in its notification of a decision to grant permission for the proposed development. Accordingly, the grounds of appeal can be summarised as follows:

6.2.1 Condition No. 2:-

- This condition imposes a 25-year period for both the construction and operation of the wind farm from the date of the (final) grant of permission, however, the subject application had sought a 20-year permission for the construction of the wind farm to be followed by an operational period of 25 years thereafter. This 20-year permission was sought in order to address the lengthy due diligence process which the applicants must embark on with financial institutions in order to secure the multi-million euro investment required for the construction of the wind farm, together with the lengthy delays involved in processing a grid connection.
- Wind farms in Ireland are experiencing long delays from the moment they receive planning permission through to the operational stage. Wind farm grid connection applications are processed under a Group Processing Approach (GPA) known as the 'Gate' system which is based on a 'date order queue' or 'first come –first served' basis. For example, applications for the current 'Gate 3' were submitted in the year 2004-2008, however, the grid offers were only issued in 2011. To date (January, 2013) no Gate 3 projects have yet been connected and it is for that reason, following pre-planning consultations with Mayo County Council, that the applicants sought a 20-year permission life for the construction stage of the project with a 25-year operational period thereafter. Condition No. 2 as imposed by the Planning Authority in the notification of the decision to grant permission only provides for a 25-year period for both the construction and operation of the windfarm and thus has the effect of rendering the project commercially unviable.
- The income stream from wind farms fluctuates with output which is the subject of vagaries of the wind and any possible downtime of a turbine. Therefore, financial institutions normally require a 25-year operational life in order to allow for a part

deferral of the loan repayment if the initial production targets are not met. Accordingly, an operational period of less than 25 years is unworkable.

- Section 7.0 of the 'Wind Energy Development, Guidelines for Planning Authorities' does not favour the imposition of conditions which limit the operational lifespan of wind energy developments. In the past, when wind farm development was still in its infancy, such conditions were included to enable the Planning Authority to re-assess the operation, however, it is now recommended that a condition be imposed requiring future re-equipping to be agreed in writing with the Planning Authority or be made the subject of a separate planning application. Accordingly, the Guidelines states that 'the inclusion of a condition which limits the life span of a wind farm energy development should be avoided'. Nevertheless, if the Board is of the view that the imposition of a time limit is required, it is requested to impose a limit of not less than 25 years from the date of commissioning.
- In view of the foregoing, it is suggested that Condition No. 2 should be amended as follows:
 - a) 'The development shall be carried out and completed within 20 years from the date of permission being granted.

<u>Reason:</u> Having regard to the nature of the development, the Planning Authority considers it appropriate to specify a period of validity of this permission in excess of five years.

b) This permission shall be for a period of 25 years from the date of the commissioning of the wind turbines. The wind turbines and related ancillary structures shall then be removed unless planning permission for a further period shall have been granted.

<u>*Reason:*</u> To enable the Planning Authority to review the operation of the wind farm having regard to the circumstances then prevailing'.

6.2.2 Condition No. 23:-

• There are concerns with regard to the terms of reference of this condition which states that an Environmental Monitoring Committee shall be established 'to assess and monitor the surface water run-off, drainage control, traffic management and road maintenance, dust control, noise monitoring and other environmental issues during the period of construction'.

It is considered that any role in the assessment and monitoring of the construction of the development would be more appropriately carried out by qualified and experienced Environmental Scientists or Environmental Engineers.

• This condition conflicts with the requirements of Condition No. 30.

- It is considered that the role of the Environmental Monitoring Committee should be to review the findings at a higher level rather than to carry out the assessment and monitoring of surface water, traffic, dust etc.
- It is suggested that Condition No. 23 should be amended as follows:

'At least 6 months prior to the commencement of development, an Environmental Monitoring Committee (EMC) shall be established for the duration of the construction period of the project. The Committee shall include representatives of the developer, Mayo County Council, Inland Fisheries Ireland and representatives of the local community. The exact composition and the functions of the committee and the regularity of meetings shall be agreed with Mayo County Council.

Reason: To provide for appropriate review of environmental monitoring of the construction phases of the development'.

6.2.3 Condition No. 50:-

- The Board is requested to consider whether or not the terms of the Development Contribution Scheme have been correctly applied in this instance. In this respect it is referred to the Planning Authority's calculation of the applicable development contribution as set out on Page 11 of the Planner's Report dated 15th January, 2013.
- Mayo County Council utilises a 'housing equivalent' when estimating the development contributions associated with non-residential developments, and whilst the applicants would have several concerns with regard to the use of such a calculation method, it is submitted that the Planning Authority would also appear to have utilised a further arbitrary figure in its calculation of the development contributions for the proposed development through the use of an 'average house price equivalent'. In this respect the Planning Authority has stated that '1 turbine = circa 1.5 million' which would seem to imply that it considers a single wind turbine as having a monetary value equivalent to €1.5 million, regardless of its size and power output. Similarly, it would also appear to have claimed that the average house price in Co. Mayo is €250,000. No justification has been provided for the use of either of these figures and there is no basis to such a method of calculation and no evidential rationale to determine that the proposed development has a 'housing equivalent' of 126 No. units. Indeed, it is submitted that this method of calculation has come as a complete surprise to the applicants and is not set out in the Development Contribution Scheme.
- Mayo County Council normally calculates the 'housing equivalent' of nonresidential development on the basis of occupancy rates and water usage as determined by the Water Services Section. Accordingly, it is submitted that as only a small staff / equipment compound and service building will be located on site the occupancy rate will be extremely low.
- The Planning Authority has arbitrarily devised a new method of calculating development contributions which is not reflective of the proposed use of the site

or its future potential occupancy rate, water demand or 'housing equivalent' as set out in the adopted Development Contribution Scheme. Furthermore, the amount of the contribution as calculated is not consistent with previous planning decisions and is tenuously based on recent Board decisions and Government guidance.

- In its decision to grant permission for the development of 13 No. wind turbines on the adjacent lands to the immediate east under PA Ref. No. 06/3861, the Planning Authority considered that the imposition of a General Development Contribution of €23,000 and a Special Development Contribution of €50,000 was warranted. Accordingly, it was considered that a total contribution of €73,400 was appropriate for a 29.9MW project which would equate to an average of €2,455 per 1MW output. If a similar rationale were to be applied in respect of the subject proposal the total development contribution would equate to €118,576.
- Neither the Mayo County Council Development Contribution Scheme nor any of its updated indexes provide any reference to the levying of financial contributions in respect of wind energy developments. In this respect it is submitted that whilst the applicant is unaware of any planning appeals relating to the imposition of development contributions on wind energy developments in Co. Mayo, it is of relevance to note that the Board has previously ordered the removal of similar conditions with respect to proposals for telecommunications masts, antennas and ancillary equipment. For example, in its determination of ABP Ref. No. PL16.235396 the Board stated the following:

'Having regard to the fact that there is no stated provision in the Mayo County Council Development Contribution Scheme for the levying of financial contributions in respect of the provision of telecommunications masts, antennas or associated equipment, the Board considered that the terms of the said scheme have not been properly applied in this case'.

Accordingly, whilst it is acknowledged that the subject proposal relates to a different type of development, it is nevertheless submitted that there is no provision in the Development Contribution Scheme for the levying of a contribution in respect of wind energy development and, therefore, it is unfair and non-transparent to apply financial contributions outside of the adopted Scheme as the applicants would have no knowledge of the level of financial commitment required in advance of embarking on the development of the wind farm.

• The 'Wind Energy Development, Guidelines for Planning Authorities' state the following:

'In general, any levy that a planning authority intends to apply to wind energy development should be clear from the Development Contribution Scheme, drawn up under Section 48 of the 2000 Act. There is no appeal against a general development contribution except on the basis that the terms of the scheme were not properly applied. However, where the General Development Contribution Scheme contains no reference to wind energy development, or where the costs involved in the development are not provided for in the scheme, it may be appropriate to attach a special contribution condition ...?

This Departmental guidance would appear to mirror the approach taken by the Board. In addition it should be noted that the recently published 'Development Contribution Guidelines' prepared by the Department of the Environment, Community and Local Government state the following:

'planning authorities are required to include the following in their development contribution schemes – Options for reduced charges in respect of renewable energy development to promote uptake of renewable energy technologies'

Accordingly, it is submitted that there is an extensive rationale for omitting Condition No. 50 whilst there is no legal basis for the Planning Authority to attach a general development contribution in respect of the subject proposal. Therefore, the Board is requested to direct the omission of this condition.

- In the event that the Board is of the opinion that upgrading works to the local road network are required and that a special development contribution towards same is warranted pursuant to Section 48(2)(c) of the Planning and Development Act, 2000, as amended, it is submitted that provision has already been made for such a 'special contribution' in a more specific and evidence-based manner in Condition Nos. 13 & 14 as imposed by the Planning Authority. In addition, measures to support the applicant's commitment to ensure that the access road to the site is maintained in a safe and passable condition are set out in Section 6.11 of the EIS.
- It is considered that the inclusion of a condition requiring the payment of either a general or special development contribution towards road upgrade / repair works is unwarranted given that Condition No. 14 already addresses the maintenance / repair of the local road network. Furthermore, it is submitted that the practice of 'double-charging' is inconsistent with both the primary objective of levying development contributions and the spirit of capturing 'planning gain' in an equitable manner.
- The proposed development will not require the provision of footpaths and as such there should be no requirement to pay any monies towards the provision of same in the County.
- It is considered that the terms of the Mayo County Council Development Contribution Scheme have not been properly applied in this instance which has resulted in the requirement to pay excessive contributions that lie outside the scope of the adopted scheme.

6.2.4 Condition No. 52:-

• The 'Wind Energy Development, Guidelines for Planning Authorities' do not encourage the use of conditions requiring financial bonds and specifically state that 'the use of long-term bonds to secure satisfactory reinstatement of the site upon cessation of the project puts an unreasonable burden on developers given the long time span involved in wind energy developments and is difficult to enforce. The recycling value of the turbine components, particularly copper and steel, should more than adequately cover the financial costs of the decommissioning. Accordingly, the use of a long-term bond is not recommended'.

• In the event that the Board is minded to re-instate this condition, it is requested to omit the requirement for the bond / security to be delivered '*within one month of the date of this [the] order*' and to instead require its lodgement '*prior to the commencement of development*' as no insurance company will provide a bond of €630,000 for a project which has only received planning permission.

7.0 RESPONSE TO GROUNDS OF APPEAL

7.1 Response of the Planning Authority: None.

7.2 Response of the Applicant:

7.2.1 Response to Third Party Appeal: Tom Rouse:

- It is clear that both the applicants and the Planning Authority had regard to the 'Wind Energy Development, Guidelines for Planning Authorities' throughout the planning application process. In this respect it is of particular relevance to note that the Planner's Report recommended approval of the subject application for a number of reasons including the fact that the Guidelines support this type of development as a visual extension of the already permitted neighbouring wind farm and as the development would facilitate the avoidance of further *ad hoc* proposals in less appropriate locations.
- The appellant's assertion that the validity of the planning application is questionable on the basis that an incorrect planning application fee was submitted is rejected. The basis for the calculation of the applicable fee was clearly set out in the application form and was accepted as correct by the Planning Authority.
- With regard to the appellants claim that in compiling the landscape and visual impact assessment for the proposed development the applicants 'cherry-picked' items from the 'Wind Energy Development, Guidelines for Planning Authorities' which supported the proposal and ignored or dismissed other items, it is submitted that the appellant has instead been selective in choosing those aspects of the Guidelines which he believes supports the grounds of appeal.
- The visual impact assessment of the proposed development was undertaken by MosArt (leading experts in this area who worked on the preparation of the 'Wind Energy Development, Guidelines for Planning Authorities') and a technical response by same to the issues raised in the appeal is appended to the submission.
- Extensive visuals accompanied the planning application which included a series of photomontages from various locations following extensive investigations. These visuals also take into account the implications of the proposed development where relevant to other permitted wind farms in the area.
- The appellants have incorrectly referred to the '*Flat Peatland*' section of the Wind Energy Guidelines despite the fact that the site can be more readily referred to as '*Mountain Moorland*'.

- The Wind Energy Guidelines do not preclude the development of more than one wind farm in areas of *'extensive upland moorland or blanket bog'*.
- The Guidelines state that 'Different wind energy developments can appear as a single collective unit if located near each other' and in this respect it has been demonstrated through the use of photomontages that the proposed turbines with a hub height of 85m would appear as one development when viewed in conjunction with the neighbouring wind farm. Notably, the Planner's Report has acknowledged that 'by locating the proposed wind farm beside the wind farm under construction, the visual impact of the proposed development'. Whilst it is accepted that cumulatively the turbines will form a dominant feature on the landscape at the site, this sense of dominance will dissipate rapidly on travelling approximately 2-3km beyond the site.
- The Project Landscape Architects have adhered to the Wind Energy Guidelines in guiding the design and siting of the overall proposal. Furthermore, the methodology employed in assessing the subject proposal rigorously complies with the requirements of the Guidelines and takes into account, amongst other things, the main scenic routes within the area and the landscape quality of the receiving and neighbouring environments.
- The proposed development clearly negates the necessity to use more sensitive and unsuitable lands for wind energy development. By clustering such proposals into less visually intrusive pockets of land well away from the main scenic routes, planning policy and national strategic renewable energy policy can be more readily achieved.
- In respect of the appellants concerns regarding the integrity of the information and assessment undertaken as part of the Environmental Impact Statement and the Natura Impact Statement which accompanied the subject application, it is should be noted that numerous expert consultees, including the National Parks and Wildlife Service, Inland Fisheries Ireland and the Environment Section of the Local Authority, were satisfied in this regard.
- The issue of 'peat management' has been comprehensively addressed in the Peatland Management Plan prepared by Biosphere Environmental Services and submitted to the Planning Authority. Further to this, correspondence submitted to the Planning Authority on 23rd November, 2012 from the applicants solicitor details the legal position with regards to peat management.
- The accompanying report prepared by Dr. Brian Madden (Project Ecologist), Biosphere Environmental Services, as attached at Appendix C, confirms that the Peat Management Plan can be carried out successfully with or without control of peat extraction and was prepared in the knowledge that the applicants do not have control of peat extraction on the site.
- The wind farm will be located on cutaway / cutover bog, which is already well serviced by an existing road network, and the locations selected for the individual turbines have taken cognisance of the need to minimise the excavation of peat.
- The implementation of the Peat Management Plan in addition to the proposed monitoring programme will serve to ensure that there will be no risk of

uncontrolled peat movement or detrimental impact on receiving surface waters downstream of the site during the construction stage.

- The proposed development will not prejudice existing turbary rights on site and the implementation of the peatland management plan will not be dependent on the discontinuation of any existing turf-cutting activities.
- There are currently approximately 600 No. turbary holders on site and whilst many of these were contacted on an individual basis, a public workshop was also held in Bunnyconnellan prior to the lodgement of the application which afforded these turbary plot holders an opportunity to attend. Notably, none of these turbary holders objected to the development.
- The Peat Management Plan details a series of mitigation and monitoring measures that will provide a level of redundancy and fail-safes to avoid any occurrence of peat landslides such as:
 - A method of works to handle, transport and store peat and excavated material to avoid triggering events (inappropriate storage of excavated material is identified as a major contributory factor in wind farm-related peat landslides).
 - Automated monitoring of water quality with alarm values set at 75% of the emission limit value to alert site personnel by phone of increased turbidity of water quality. The alarm will also initiate an emergency response from the Site Foreman.
 - A programme of monitoring and inspection by the Site Engineer will be put in place. These inspections and monitoring will highlight any issues that require mitigation. It is noted that at the Derrybrien Wind Farm site, small peat failures occurred prior to the main failure event; a proactive response (e.g. a change in material handling practices) to these earlier smaller failures may have prevented the main failure event.
- The implementation of the peat management plan will not necessitate the cessation of turf-cutting activities in the vicinity of the proposed turbines and it is envisaged that the extraction of peat will continue across the site which is a matter outside the control of the applicants.
- Details have been submitted of the applicant's legal entitlement to use the existing tracks on site to access the proposed turbines and to provide for underground cabling. In this respect the use of a phased construction programme when combined with orderly site management will ensure that access is maintained for turbary holders.
- It is not the applicants intention to '*damage the structural stability*' of the floating roads through the emplacement of cabling alongside same. The methodology for the laying of cabling was considered in the EIA and will be engineered and managed to ensure that no damage occurs to the structural stability of site tracks.
- The route alignments for all cabling works are shown on Drg. No. S5-03B as prepared by Aeolas Development Consultants.

- With regard to those matters relating to surface water management, the Board is referred to the accompanying report prepared by Keohane Geological & Environmental Consultants.
- In relation to the appellants concerns that the surface water management plan does not include for the entire site, with particular reference to the treatment of runoff from sections of the access roads, it is submitted that as the area to be developed will equate to less that 1% of the total site area, it is unnecessary to collect surface water runoff from the entirety of the site. Furthermore, the principle of separating uncontaminated runoff from potentially silt-laden waters has been applied (as is the case in most earth works projects) in that:
 - It reduces the volume of water to be treated i.e. clean water originating from non-work areas can leave the site as normal without mixing with runoff from earthworks areas; and
 - The smaller volume of water to be treated provides for greater treatment efficiency in the settlement ponds.
- It is not considered necessary to treat runoff from the existing roads whilst the measures proposed to collect runoff from areas where earthworks will be carried out are considered to appropriate and sufficient.
- The surface water management arrangements are considered to be robust. The proposed settlement pond construction methods will have the least impact when compared to the more traditional construction method of excavating ponds. The submitted design utilises the existing drainage arrangements, topography and cutaway pattern of the site to good effect whilst the use of the vegetative layer (reestablished in most of the cutaway plots) will serve to enhance the efficiency of fines removal which is not reflected in the design calculations submitted with the further information response.
- The complexity of the conditions imposed by the Planning Authority merely serves to reflect the robust proposals for the protection of surface water quality which include the construction of settlement ponds, silt busters (if required, subject to discharge water quality), the implementation of a programme of surface water quality monitoring, and the supervision of construction works by an environmental scientist.
- The Water Framework Directive places additional responsibilities on local authorities to ensure good water quality is achieved and maintained by 2015. In this respect it is submitted that the surface water management plans for the subject proposal reflect what is now becoming standard practice for large infrastructural projects.
- The appellants claim that 'Mayo County Council was not concerned with the runoff to the Easky River, despite the fact that the Easky hosts populations of Freshwater Pearl Mussel (a protected Annex I species)'. In this respect, and with regard to other ecological matters raised in the appeal, the Board is referred to the response prepared by Conservation Services, Ecological & Environmental Consultants, as appended to this submission.

- The appellants claims in relation to windtake are entirely unsubstantiated and inaccurate as the proposed development was designed at the outset having regard to the positioning of the proposed turbines relative to other existing, permitted and proposed turbines in the vicinity of the site.
- The accompanying report prepared by Aeolas Development Consultants has reviewed the planning files associated with the neighbouring wind farm approved under PA Ref. Nos. 06/3861 (Mayo County Council) and 10/235 (Sligo County Council) and has determined that the permitted turbines with rotor diameters of 71m are well within the 142m (i.e. 2 No. x rotor diameters) of the site boundaries and therefore do not meet the requirements of the Wind Energy Guidelines. Furthermore, it appears that one of the turbines (T2) of the adjacent operational development has been permitted in a position which traverses the western site boundary into the subject site.
- Aeolas Development Consultants have determined that the prevailing wind • direction is south-westerly which would confirm that a 5-rotor diameter separation distance in all directions, as is proposed in the subject development, would provide an appropriate layout. This report includes a map showing a 497m separation distance from each of the proposed wind turbines along the prevailing (south-westerly) wind alignment. This highlights that in designing the turbine layout, the turbines were positioned to ensure that they were not within 5 rotor diameters of the permitted turbines on the adjoining Carrowleagh wind farm for all wind directions, nor within a 7-rotor diameter linear distance in the prevailing south-westerly wind direction. Additionally, the layout chosen ensured that there were no turbines located within 2.5 rotor diameters of the application site boundary adjacent to the permitted Carrowleagh wind farm. This spacing is considered to represent a sustainable solution between the need to maximise the utilisation of the wind resource on site, to ensure the best use of existing site tracks, to minimise the volumes of excavated peat by positioning turbines in cutaway / cutover areas, and the need to provide for adequate separation distance in order to lessen the potential energy loss through windtake from upstream turbines.
- The issue of windtake has been considered from the outset of the design process and the approach employed complies with the requirements of the Wind Energy Guidelines, 2006 and the more recent Irish Wind Energy Association Best Practice Guidelines, 2012.
- The grid connection and its infrastructure do not form part of the subject application and will be addressed through the planning process in due course when an application is submitted by ESB Networks or Eirgrid. In assessing the application, the Planning Authority accepted the applicant's response to its concerns in this regard. Notwithstanding, there is nothing to preclude the applicant in applying for planning permission for the wind farm prior to any application being lodged for the grid infrastructure. It is not a prerequisite for a developer to have secured a grid connection in order to secure planning permission. The adjoining wind farm submitted a planning application in 2006 for its parent development and secured a grid connection in or around 2012. The Board will be aware of other examples where planning permission was granted

prior to a grid connection offer and others have been cited in the accompanying report prepared by Mott MacDonald Ireland.

- Based on the various references to the Wind Energy Guidelines throughout the application, it is clear that same has guided the development proposal at all stages including site selection, scoping, screening, preliminary design, and the final detailed design and siting process.
- The appellant has failed to identify any *'more suitable locations'*. In this respect it should be noted that the first port of call from a planning perspective in considering the suitability of a site for a wind energy development must be the Renewable Energy Strategy for Co. Mayo, 2011 which details that the subject site is suitable for large-scale wind farms.
- The environmental impacts of the proposed development have been addressed at length in the various submissions on file and it should be noted that the Planner's report states that it is *'satisfied that the proposed development subject to the mitigation measures proposed is acceptable at this location and recommends a grant'*.

7.2.2 Response to Third Party Appeal: Kevin Deering:

- It is considered that the validity of this appeal is questionable given that it has lodged by only one of the two parties who co-signed the original submission on the planning application.
- The suggestion that the 'cumulative effect of other wind farms in the area has not been adequately addressed' is rejected on the basis that the Environmental Impact Assessment undertaken as part of the planning application considered at length the cumulative effect of the proposed development with respect to other permitted developments in the area.
- It is incorrect to claim that there will be an 'arc' of wind turbines extending from Kings Mountain around to Lough Talt.
- Each planning application must be considered on its individual merits by the relevant planning authority and in this respect it should be noted that Sligo County Council were consulted with regard to the subject proposal and that it responded by referring to issues concerning turbine height and road access. Accordingly, it is considered that this demonstrates that the necessary statutory consultation was carried out and that 'joined-up' thinking has been applied.
- The accompanying response prepared by MosArt, the Project Landscape Architects, states that 'neither the study area nor the zone described by the appellant is considered to be approaching a critical threshold in terms of the cumulative effects of wind farms. Furthermore, by coupling the proposal to an existing development its contribution to cumulative effects in this area is much less than if, for example, it were located midway between the Kings Mountain and Carrowleagh wind farm'.
- When considering the impact of the proposed development on local habitats the Project Ecologists note in the EIS that 'Overall, the loss and disturbance of habitats at this site is not considered of significance due to the existing condition of the affected bog habitat'. Furthermore, with regard to the appellants claim that 'there will be a massive visual impact on the Ox Mountains Bog SAC', MosArt

have responded by stating that 'the Ox Mountain Bog SAC 002006 is not considered to be a visual receptor and thus, it is not in itself subject to visual impacts . . . habitat concerns are not dismissed, but they are unrelated to the visual impact of the proposed wind farm'.

- In relation to those issues raised by the appellant regarding surface water management the Board is referred to the accompanying report prepared by the Keohane Geological & Environmental Consultancy.
- All legal obligations have been adhered to throughout the application process. The proposed development site is outside of any Natura 2000 designation and the assessment provided has shown that, subject to mitigation, no undue impacts on any such areas will occur.
- The proposed development adheres to national and regional policy in efficiently using a rural site in a sustainable manner and is wholly consistent with the provisions of the County Development Plan.
- The proposed development has been designed and sited considerate of an expansive array of issues, including all those referred to in the appellants submission. The proposal has been subjected to rigorous assessment at various stages in line with regulatory requirements and best practice and is consistent with the proper planning and sustainable development of the area.
- It is considered that the subject scheme is appropriate to the area and accords with its inclusion as an area suitable for large-scale wind development proposals under the Renewable Energy Strategy for Co. Mayo, 2011. The scheme is sensitive to the visual and environmental amenities of the area and provides for a high standard of renewable energy supplies to aid in meeting local and national demands / goals.

8.0 RESPONSE TO CIRCULATION OF APPLICANT'S SUBMISSION:

<u>8.1 Response of the Planning Authority:</u> None.

<u>8.2 Response of Tom Rouse (Third Party Appellant):</u> None.

8.3 Response of Kevin Deering (Third Party Appellant):

- The development of 44 No. wind turbines along a 15km stretch in this rural area will have a significant impact and will not be in keeping with the character of the prevailing landscape.
- Whilst the description of the Ox Mountain Bog Special Area of Conservation as provided by the applicant is acknowledged, this is not to say that part of its intrinsic character is its future potential as a recreational site of scientific interest. Therefore, it is important to look forward and to preserve the ambience of such sites.
- The suggestion by MosArt that visual receptors are population-based is rejected and shows a complete disconnection from any relative understanding of landscape character and valuable attributes.

- The appellants reference to the proposed development having been designed and sited following consideration of an expansive array of issues and the apparent suitability of the area for large scale wind energy development as per the Renewable Energy Strategy for Co. Mayo, 2011, would seem to contradict the response of MosArt which raises concerns that the area will be blighted by excessive development. Furthermore, it is considered that the evidence base for the extensive zoning provided for in the Renewable Energy Strategy for Co. Mayo, 2011, is questionable.
- It is reiterated that careful consideration must be given to the overall cumulative impact of the development on the receiving environment.

<u>8.4 Response of the Irish Peatland Conservation Council (Observer):</u> None.

9.0 OBSERVATIONS:

9.1 Irish Peatland Conservation Council:

- The IPCC recognises the importance of increasing the renewable energy sector as part of international efforts to combat climate change and reduce dependency on the abstraction of non-renewable resources such as peat and oil, however, it cannot support the subject proposal as it would result in the destruction of a mosaic of blanket bog and upland heath habitats. Blanket Bog is an internationally rare habitat which accounts for less than 3% of the world's peatlands. In an international context, the blanket bogs of Ireland and the UK form the largest single contribution (10-15%) to a globally scare resource (Malone & O'Connell, 2009). At present, only 21% of the original area of blanket bog is Co. Mayo is intact. Ireland has both a European and an international obligation to protect this rare and threatened habitat for future generations under the EU Habitats Directive and the Ramsar Convention.
- The proposed development will be adjacent to the Ox Mountains Bog Special Area of Conservation which is a site of international importance noted for supporting the Annex I Priority Habitat 7130(*) Blanket Bog (*active only) as well as a number of rare plant and animal species. The accompanying site synopsis of this Special Area of Conservation states the following:

'The Ox Mountains Bogs site is of considerable conservation significance, due primarily to the extensive, largely intact areas of blanket bog it contains'.

In addition, the site also contains good quality examples of several other habitats namely, wet heath, lowland oligotrophic lakes, and dystrophic lakes whilst the presence of several rare species, in particular, the EU Habitats Directive Annex II-listed, *Vertigo geyeri*, and the red-listed bird spies, Greenland White-fronted goose and Golden Plover, further adds to the conservation significance of the site.

- All of the aforementioned Annex I habitats were classified with an overall assessment of 'BAD' in the 2008 National Parks and Wildlife Service report on the 'Status of EU Protected Habitats and Species in Ireland' while both of the Annex II species were given an overall assessment of 'POOR'. Proper planning in and around these areas is required if Ireland is to achieve its commitments under the EU Habitats Directive and the IPCC would put forward that to allow a development such as that proposed would be counter to such aims.
- A number of wild birds of conservation interest are known to use the area throughout the year. The Greenland White Fronted Goose, *Anser albifrons flavirostros*, is a winter visitor and is listed on Annex I of the EU Birds Directive and in the Irish Red Data Bok. The Golden Plover, *pluvialis apricaria*, is a species that has suffered large declines in Ireland and is now red-listed by Birdwatch Ireland in the Birds of Conservation Concern in Ireland, 2008-2012. Accordingly, the Board is referred to a particular study (Pearse-Higgins et al. 2009) which found that 7 of 12 peatland birds were adversely affected by wind farm development. It concludes '(*t*)his is the first study to examine the impact of wind farms on peatland birds . . . and we find considerable potential for negative effects'. The study was carried out on upland sites of moorland, rough grassland, and blanket bog in Scotland, similar habitat to that which makes up the Ox Mountains Bog Special Area of Conservation. Therefore, serious consideration must be given before allowing the construction of a potentially damaging development in an area known to support a number of protected birds.
- It should be noted that another case study (Pearse Higgins et al. 2008) which focussed solely on the Golden Plover found significant avoidance of turbines by the bird and that areas with turbines supported lower densities of plover in comparison to their undeveloped counterparts.
- There has been much commendation within the environmental sector of the Board with regard to its decisions to refuse permission for a number of recent developments. The IPCC welcomes these decisions to protect the designated habitats and hopes to achieve the same outcome with respect to the subject proposal.
- Having regard to the aim of protecting rare and threatened blanket bog habitat and birds of international concern, it is submitted that the proposed development should not be permitted to go ahead. A grant of permission for the subject proposal would set a poor example for nature conservation and could compromise Ireland's commitment to conserving protected areas throughout the country. The species diversity of blanket bog and upland habitats is rich, containing 15% of the Irish flora, 49% of Ireland's endangered birds and 26% of Irish mammals. All of these species are strongly adapted to the environmental conditions prevailing in peatland habitats. Under the International Convention on Biodiversity and as a member of the EU, Ireland has signed up to halting the loss of biodiversity. This target cannot be achieved for peatlands if wind farms are allowed to substantially disrupt the habitat refuge of species.
- The proposed development cannot be considered to be sustainable as it will deteriorate the conservation status of the Ox Mountains Bog SAC and put the future of a number of protected habitats and species at risk.

10.0 NATIONAL AND REGIONAL POLICY

The National Climate Change Strategy issued by the Dept. of the Environment and Local Government in 2000 advocates the expansion of renewable energy to reduce emissions and to meet commitments under the Kyoto Protocol and wind energy is identified as a means of achieving this.

The National Spatial Strategy 2002 - 2020 states "in economic development the environment provides a resource base that supports a wide range of activities that include agriculture, forestry, fishing, aqua-culture, mineral use, energy use, industry, services and tourism. For these activities, the aim should be to ensure that the resources are used in sustainable ways that put as much emphasis as possible on their renewability" (page 114).

White Paper – Delivering a Sustainable Energy Future for Ireland 2007 – 2020' sets out as a strategic goal to accelerate the growth of renewable energy sources, reduce reliance on fossil fuels and to increase the ratio of renewable energy sources in the overall production of electricity to 33% by 2020.

Wind Energy Development, Guidelines for Planning Authorities:

The guidelines pertaining to wind farm development in Ireland are set out in the publication "Wind Energy Development, Guidelines for Planning Authorities" by the Department of the Environment, Heritage and Local Government in June, 2006. The presumption is in favour of wind farm development in suitable circumstances.

The Guidelines indicate:

- The need for a plan led approach.
- In section 4.3 there is reference to access to the electricity grid and that best practice would suggest having in applications for windfarms information on grid connection including indicative or feasible options but this may not always be possible.
- Noise is another important consideration and is referred to in paragraph 5.6 and account should be taken of the nature and character of nearby surroundings and developments in assessing noise levels and guidance on levels for different locations are outlined.
- Chapter 6 relates to aesthetic considerations in siting and design.
- Regard should be had to profile, numbers, spacing and visual impact and the landscape character.
- Account should be taken of intervisibility of sites and the cumulative impact of developments.

The Guidelines consider that the following influence visual impact:

- Form and characteristics of the landscape;
- Design and colour;

- The existing skyline;
- Layout of turbines, and
- The number and size of turbines and intervisibility of sites.

11.0 DEVELOPMENT PLAN

<u>11.1 Mayo County Development Plan, 2008-2014:-</u> Part 2:

Section 2.1: Overall Strategy and Core Strategy:

Section 2.1.1.2: Transport & Infrastructure Development Aims:

- To optimise the development of appropriate renewable energy sources, which make use of the natural resources of the area concerned in an environmentally acceptable and sustainable manner

Section 2.1.1.4: *Environment Development Aims:*

- To ensure the conservation and responsible guardianship of Mayo's natural and built heritage for future generations, whilst optimising its potential role in sustaining local communities and the overall socio-economic development of the County.
- To ensure that the resource that is Mayo's diversity and variety of landscapes is utilised prudently and sustainably and that new development is integrated sympathetically into the landscape in a manner that will ensure that the landscape can be handed on to future generations without being degraded.

<u>Part 3:</u>

Section 3.1.3: *Transport and Public Infrastructure: Energy: Policies:*

- *P/TI-E 1* It is the policy of the Council to support and facilitate the provision of a high quality electricity infrastructure in the County whilst seeking to protect and maintain biodiversity, wildlife habitats, scenic amenities, including protected views, and nature conservation.
- *P/TI-E 2* It is the policy of the Council to facilitate the development of alternative sources of power generation subject to proper planning and sustainable development.

Renewable Energy: Policies:

- *P/TI-RE* It is the policy of the Council to support the *National Climate Change Strategy 2000* and reduced energy consumption by encouraging energy efficiency, low energy design and integration of renewable energy techniques into new and existing developments, including the Council's own operations.
- *P/TI-RE 2* It is the policy of the Council to encourage the production of energy from renewable sources, in particular from biomass, forestry, wind, solar power, tidal, hydro, wave and geothermal.
- *P/TI-RE 4* It is the policy of the County to seek to meet the targets below in relation to Renewable Energy:

- Target of 50MW of renewable energy electricity capacity to meet the requirements of the EU White Paper on Renewable Energy Directive by 2010.
- A Target of 50MW wind connect in conjunction with other Renewable Energy Sources, which would promote Mayo as a CO2 Neutral for Electricity Generation in the County by 2010.
- *P/TI-RE7* It is the policy of the Council to support community-based windfarm initiatives where they are proposed subject to proper planning and sustainable development.
- *P/TI-RE* 8 It is the policy of the Council not to allow any development that would interfere with existing Rights of Way of traditional walking routes.

Objectives:

- *O/TI-RE 1* It is an objective of the Council to review the *Wind Energy Strategy* as a variation of the County Development Plan within one year of adoption of the Plan.
- *O/TI-RE 2* It is an objective of the Council to facilitate the development of wind energy in the County on a case by case basis in locations consistent with the Wind Energy Strategy for Mayo, having regard to Government Guidelines and the principles of proper planning and sustainable development.
- *O/TI-RE 6* It is the objective of the Council that there is a community involvement and benefit where possible in any proposed windfarm development in the County.
- *O/TI-RE* 7 It is the objective of the Council to encourage wind energy developments to take place in the following designated areas:
 - Belderg
 - Ballycastle
 - Porturlin
 - Eskeragh
 - Bellacorrick
 - Sheskin
 - Doogary
 - Louisburgh
- *O/TI-RE* 8 It is a priority of Mayo County Council to facilitate development of wind energy and other renewable energy sources and in particular community wind farm projects.

Infrastructure Corridors: Policies:

P/TI-IC 1 - It is the policy of the Council to require major public and private utilities infrastructure to follow the line of existing infrastructure of a similar type,

unless there are over-riding issues of public safety *etc.*, in order to minimise impact on the landscape and natural environment.

P/TI-IC 3 - It is the policy of the Council to protect areas of high sensitivity identified in the Landscape Appraisal of County Mayo and other environmentally sensitive areas from large-scale visually intrusive energy infrastructure.

Section 3.1.5: Environment, Heritage and Conservation:

Water Quality: Policies:

P/EH-WQ 1 - It is the policy of the Council to participate fully in the Western River Basin District Project as part of the implementation of EU Water Framework Directive to ensure the protection, improvement and sustainable use of all waters in the County, including rivers, lakes, ground water, coastal and estuarine waters, and to restrict development likely to lead to a deterioration in water quality.

Landscape Protection: Policies:

- P/EH-LC1 It is the policy of the Council, through the Landscape Appraisal of County Mayo, to recognize and facilitate appropriate development in a manner that has regard to the character and sensitivity of the landscape, to ensure that development will not have a disproportionate effect on the existing or future character of a landscape in terms of location, design and visual prominence, and that development will have regard to the effects of developments on views from the public realm towards sensitive or vulnerable features and areas. In this regard, proposals for development that have the potential to impinge on the integrity of significant landscape resources will be assessed having regard to the guidelines set out in Section 4.18 of the Development Management Guidelines.
- P/EH-LC 2 It is the policy of the Council that all proposed development shall be considered in the context of the Landscape Appraisal of County Mayo with reference to the four Principal Policy Areas shown on Map 9 Landscape Protection Policy Areas and the Landscape Sensitivity Matrix (Figure 3), provided such policies do not conflict with any specific objectives of this Plan.

Views and Prospects: Policies:

- P/EH-VP 1 It is the policy of the Council to ensure that development does not adversely interfere with views and prospects and the amenities of places and features of natural beauty or interest when viewed from the public realm. Views and prospects worthy of preservation and protection are indicated on Map 10.
- *P/EH-VP 2* It is the policy of the Council to ensure that all proposals have regard to the potential effects of development on views from the public realm towards sensitive or vulnerable features and areas.

Air Quality & Noise Pollution: Policies:

- P/EH-AN 2 It is the policy of the Council to support the Climate Change Strategy on an ongoing basis through implementation of supporting policies in the Plan, particularly those supporting use of alternative and renewable energy sources, sustainable transport and promotion of the retention of, and planting of trees, hedgerows and afforestation.
- P/EH-AN3 It is the policy of the Council to ensure that noise levels from new and existing developments do not exceed normally accepted standards, as set down in the DoEHLG Noise Regulations 2006, and that the requirements of S.I No 140 of 2006 (Environmental Noise Regulations 2006) are complied with, with regard to existing and future development in proximity to National roads.

Heritage: Policies:

- *P/H-G 1* It is the policy of the Council to conserve, protect and enhance the special character of the County, as defined by its natural heritage and biodiversity, its built environment, landscape and culture, in co-operation with the Department of the Environment, Heritage and Local Government, the Heritage Council and all relevant agencies, bodies *etc*.
- *P/H-G 2* It is the policy of the Council to protect and where appropriate, restore and enhance access to the County's heritage assets whilst having regard to the need to protect the inherent conservation and amenity value of these assets.
- *P/H-G 3* It is the policy of the Council to support the implementation of the *National Biodiversity Plan.*
- *P/H-G 4* It is a policy of the Council to work with other relevant agencies in promoting awareness and pride in the County's natural and built heritage and promote codes of best practice in relation to conservation of this heritage.

Natural Heritage: Policies:

P/EH-NH 1 - It is the policy of the Council to protect, enhance and conserve:

- a) Candidate Special Areas of Conservation, Special Protection Areas, Natural Heritage Areas and proposed National Heritage Areas, Statutory Nature Reserves, Ramsar Sites and Biogenetic Reserves, including those listed in Appendix VI, any modifications or any additional areas that may be so designated during the lifetime of the plan.
- b) Natural habitats and plant and animal species identified under the Habitats Directive, Birds Directive, Wildlife Act and the Flora Protection Order, or any other relevant legislation including that may be implemented during the lifetime of the plan, including bogs, fens and turloughs listed in Appendix VI.
- c) Features of natural interest and amenity, which provide a unique habitat for wildlife including ecological networks (including ecological corridors and stepping stones), riparian zones, hedgerows,

stonewalls, shelterbelts, woodlands, individual or groups of trees and forest amenity areas.

- d) Features of geological interest, bogs, fens and turloughs listed in Appendix VI.
- e) The conservation value of disused railway lines, waterways, walkways *etc.* notwithstanding that some of these items (*e.g.* disused rail lines) may be sustainably developed at some future date as part of the County's infrastructure.
- f) Surface waters, aquatic and wetland habitats and freshwater species through the implementation of the *EU Water Framework Directive*.
- g) Trees or groups of trees protected under Tree Preservation Orders as listed in Appendix VII, as well as trees and woodlands of particular amenity and nature conservation value, or which make a valuable contribution to the character of the landscape, a settlement or its setting.
- h) Sites of local conservation importance including those identified in the *Local Biodiversity Action Plan*.
- P/EH- NH 3 It is the policy of the Council to require that any planning application that proposes development within an area designated as a cSAC, SPA, NHA or pNHA listed in Appendix VI to be accompanied by an Ecological Impact Assessment, assessing the impact of the proposal on these areas with conservation designations. The Ecological Impact Assessment will be forwarded to the National Parks & Wildlife Section of the Department of Environment, Heritage & Local Government for their comments prior to the making of a decision by the Planning Authority.
- P/EH- NH 4 It is a policy of the Council to implement Article 6(3) of the EU Habitats Directive, and to subject any plan or project likely to impact Natura 2000 or European Sites (SACs, SPAs), whether directly (in situ), indirectly (exsitu) or in combination with other plans or projects, to an appropriate assessment in order to inform decision making. A plan or project may only be authorised after the competent authority has made certain, based on scientific knowledge, that it will not adversely affect the integrity of the site; in the case of derogations, authorisation must be pursued under Article 6(4).

Part 4: Development Management Guidelines

Section 4.2: General Section 4.10.5: Wind Energy Section 4.14: Environment & Heritage Section 4.18: Landscape Heritage

11.2 Renewable Energy Strategy for County Mayo, 2011-2020:-

11.2.1 The aim of this Strategy is to develop the plan-led approach to the location of renewable energy development at a more detailed level than that outlined in the Wind Energy Strategy (2008) and the renewable energy policies and objectives set out in the

Mayo County Development Plan, 2008-2014. This Strategy consequently revises and replaces the Mayo Wind Energy Strategy, 2008 and the 'Renewable Energy' policies and objectives of the Mayo County Development Plan, 2008- 2014.

11.2.2 Section 6.4: 'Location of Renewable Developments' of the Strategy states that a detailed study was carried out to identify those areas potentially suitable for the development of different types of renewable energy in the County. This entailed the evaluation of the landscape and its sensitivity for renewable energy development in addition to the identification of planning considerations such as designated natural heritage areas, items of built heritage, scenic views / routes, cycle / walking routes, populated areas, and infrastructural constraints. Environmental considerations arising from the Strategic Environmental Assessment and Habitats Directive Assessment (e.g. water quality, flooding etc.) were also identified whilst planning constraints within 15km of the county boundary with any adjoining local authority (i.e. Galway, Sligo and Roscommon) and town councils (Castlebar, Westport, Ballina and Tuam) were similarly given consideration. This culminated in the completion of a mapping exercise which identified those areas as having no or low planning constraints whilst the Wind Atlas of Ireland was also considered to ensure that those areas selected for wind farm development would have adequate wind speeds to accommodate wind-related renewable energy development.

11.2.3 Map 1: '*Wind Energy*' of the Strategy proceeds to identify those areas with the potential for on-shore wind energy development in 4 No. classifications as follows:

- Priority Areas are areas which have secured planning permission and where on shore wind farms can be developed immediately.
- Tier 1 Preferred (Large Wind Farms) are areas in which the potential for large wind farms is greatest.
- Tier 1 Preferred (Cluster of Turbines) are areas identified as being most suitable for smaller clusters of wind turbines (clusters of up to three to five turbines depending on site conditions and visual amenity).
- Tier 2 Open for Consideration identifies areas which may be considered for wind farms or small clusters of wind turbines but where the visual impact on sensitive or vulnerable landscapes, listed highly scenic routes, scenic routes, scenic viewing points and scenic routes will be the principal consideration. The Tier 2 classification will be reviewed by the Council following a determination by EirGrid of grid infrastructure for the County.

N.B. The proposed development site is located in an area designated as '*Tier 1* - *Preferred (Large Wind Farms)*' identified on '*Map 1: Wind Energy*' as having the potential for the development of on-shore wind energy.

11.2.4 Those areas identified in the Strategy are considered to be the most appropriate for renewable energy development as other areas are likely to have planning and environmental constraints which would make them less suitable for renewable energy developments. Furthermore, in compliance with the Habitats Directive, and the fact that

there are alternative sites available for renewable energy development in the County, the Strategy states that no renewable energy development will be considered within Natura 2000 sites.

11.2.5 All proposals for on-shore wind farm developments are to be determined in accordance with the Wind Energy Development Guidelines (DoEHLG) 2006 or any subsequent guidelines and the requirements set out in Section 6.5: 'Environmental Considerations and SEA Mitigation Measures' of the Strategy.

11.3 Mayo County Landscape Appraisal, 2008:-

11.3.1 The Landscape Appraisal identifies 16 No. landscape character units which have been simplified into 5 No. policy areas, with a landscape sensitivity matrix to provide preliminary guidance on the potential impact of a range of developments. In this respect, it should be noted that the proposed development site is located within 'Area H: East Mayo Uplands' and 'Policy Area 3 - Uplands, moors, heath or bogs' which is considered to be a highly sensitive landscape. The applicable policies set out in the Appraisal are as follows:

- **Policy 12:** Recognise the occurrence of areas of highly valued scenic vistas, uninterrupted by shelter vegetation or undulating topography, which can cover vast areas and are abundant.
- **Policy 13:** Encourage development that will not have a disproportionate visual impact (due to excessive bulk, scale or inappropriate siting) and will not significantly interfere or detract from scenic upland vistas, as identified in the Development Plan, when viewed from areas of the public realm.
- **Policy 14:** Encourage development that will not interrupt or penetrate distinct linear sections of primary ridge lines when viewed from areas of the public realm.
- **Policy 15:** Facilitate developments that have a locational requirement to be situated on elevated sites (e.g. telecommunications and wind energy structures). It is necessary however to ensure that adverse visual impacts are avoided or mitigated wherever possible.
- **Policy 16:** Preserve from development any areas that have not already been subject to development, which have retained a dominantly undisturbed upland/moorland character.
- **Policy 17:** Consider development on steep slopes, ensuring that it will not have a disproportionate or dominating visual impact on the surrounding environment as seen from areas of the public realm.

11.3.2 In accordance with the 'Development Impact - Landscape Sensitivity Matrix' set out in Section 5 of the Appraisal, wind farm developments within 'Policy Area 3' are noted as having a "high potential to create adverse impacts on the existing landscape character. Having regard to the intrinsic physical and visual characteristics of the landscape area, it is unlikely that such impacts can be reduced to a widely accepted level".

12.0 ASSESSMENT

I propose to assess the Third Party appeal first, followed by the First Party's appeal against a number of the conditions.

12.1 Third Party Appeals:

From my reading of the file, inspection of the site and assessment of the relevant local, regional and national policies, I conclude that the key issues raised by the appeals are:

- The principle of development
- Environmental impact assessment
- Appropriate assessment
- Other issues

These are assessed as follows:

<u>12.1.1 The Principle of Development:</u>

12.1.1.1 The provisions of the Mayo County Development Plan, as superseded by the Renewable Energy Strategy for County Mayo, 2011-2020, are generally in favour of the development of renewable energy, including wind energy, and acknowledge the economic and environmental benefits which can be derived from same. In this regard particular consideration should be given to the potential for the development of wind energy to aid in the achievement of Ireland's international, European and national commitments as regards the reduction of greenhouse gas emissions and the provision of energy from renewable sources. Accordingly, the Renewable Energy Strategy for Co. Mayo, 2011-2020 advocates a strategic plan-led approach with regard to the siting of wind energy developments in accordance with the recommendations of the 'Wind Energy Development, Guidelines for Planning Authorities'. This has entailed undertaking a detailed study with a view to identifying those areas of the county potentially suitable for the development of wind energy which culminated in the completion of a mapping exercise which has identified those areas with no or low planning constraints. The Wind Atlas of Ireland was also consulted to ensure that the areas selected for wind farm development would have adequate wind speeds to accommodate wind-related renewable energy development. Therefore, Map 1: 'Wind Energy' of the Renewable Energy Strategy has identified those areas with the potential for on-shore wind energy development in 4 No. classifications on the basis that other areas of the county would be likely to have planning and environmental constraints which would make them less suitable for renewable energy developments. In this respect it is of relevance to note that the subject site is located within an area identified as 'Tier 1 - Preferred (Large Wind Farms)' in the Renewable Energy Strategy as having the potential for the development of on-shore wind energy. Accordingly, on the basis of the foregoing, and in view of the fact that the existing Carrowleagh Wind Farm occupies those lands to the immediate east of the subject site, I am satisfied that the proposed development is acceptable in principle at this location.

12.1.2 Environmental Impact Assessment:

12.1.2.1 Outline of Process:

12.1.2.1.1 In accordance with the requirements of Article 3 of the European Directive 85/337/EEC, as amended by Council Directives 97/11/EC and 2003/35/EC and Section 171A of the Planning & Development Act 2000-2010, this process requires the Board, as the competent authority, to identify, describe and assess in an appropriate manner, in light of each individual case and in accordance with Articles 4 to 11 of the Environmental Impact Assessment Directive, the direct and indirect effects of the proposed development on the four indents listed in Article 3 of that Directive as set out below:

- a) human beings, flora and fauna,
- b) soil, water, air, climate and the landscape,
- c) material assets and the cultural heritage, and
- d) the interaction between the factors mentioned in paragraphs (a), (b) and (c).

12.1.2.1.2 This assessment also requires consideration to be given to, where relevant, the indirect, secondary, cumulative, short, medium and long-term, permanent and temporary, positive and negative effects of the proposal, including those which arise during the construction phase, which are essentially short-term and temporary, as distinct from the likely long-term effects arising from the operational phase.

12.1.2.1.3 The Environmental Impact Statement which has accompanied the subject application follows a grouped format structure with each environmental topic presented in a separate chapter. It includes a generally satisfactory description of the receiving environment, the proposed development, its impacts and proposed mitigation measures, and has been accompanied by a non-technical summary. In my opinion, this document can be described as 'adequate' in that it accords with the minimum requirements of Schedule 6 of the Planning and Development Regulations, 2001, as amended, and is sufficient to comply with Section 172 of the Planning and Development Act, 2000, as amended, and Article 94 of the Regulations.

12.1.2.1.4 In general, this part of my assessment of the subject application is informed by the contents and conclusions of the EIS and also by information provided during the various stages of the application / appeal process in relation to the likely effects of the development on the environment and its likely consequences for the proper planning and sustainable development of the area in which it is proposed to be situated. My assessment also has regard to potential mitigation measures, including those indicated in the EIS, and any others which might reasonably be incorporated into any decision to approve the development through the attachment of conditions.

12.1.2.2 Consideration of Alternatives:

12.1.2.2.1 Schedule 6 of the Planning and Development Regulations, 2001, as amended, requires an EIS to include 'An outline of the main alternatives studied by the developer and an indication of the main reasons for his or her choice, taking into account the effects on the environment'. In this respect I would refer the Board to Section 4.9 of the EIS which states that during the initial site selection process a number of potential

alternative site locations were considered with the following two sites having been assessed in detail:

- Kilcummin, on the eastern side of Lacken Bay, Co. Mayo.
- Sheskin, to the east of Slieve Fyagh and to the west of the Oweniny River, Co. Mayo.

12.1.2.2.2 The EIS subsequently states that both of these sites had positive attributes as potential wind farm locations, although they were eliminated from further consideration having regard to certain critical site selection criteria. For example, the Kilcummin site apparently raised concerns with regard to visual impact, the proximity of nearby dwellings and the adequacy of the road access arrangements, whilst there were also concerns about peat depth and potential ecological impacts at the Sheskin site. Accordingly, the case has been put forward that the subject site is the preferred location for the proposed development due to its larger site area, its location adjacent to another wind energy development, and its siting within an area of cutover bogland habitat which is served by an existing road structure. It has also been suggested that the application site was chosen in support of planning policy, presumably in reference to its location within an area identified as '*Tier 1 - Preferred (Large Wind Farms)*' in the Renewable Energy Strategy for Co. Mayo, 2011.

12.1.2.2.3 At this point it is of relevance to note that the 'Guidelines on the information to be contained in Environmental Impact Statements' published by the Environmental Protection Agency in March 2002 acknowledge the existence of difficulties and limitations when considering alternatives in the context of Environmental Impact Assessment. In this respect it should be noted that whilst EIA is confined to the assessment of the environmental effects which influence the consideration of alternatives, it is important to acknowledge that other non-environmental factors may have equal or overriding importance to the developer such as project economics, land availability, engineering feasibility and planning considerations. Similarly, the consideration of alternatives also needs to be set within the parameters of the availability of land or the need for the project to accommodate demands or opportunities which are site specific.

12.1.2.2.4 Having regard to the foregoing, and following a review of the available information, including the consideration of alternatives as set out in the submitted EIS, in my opinion, the applicants have complied with the requirements of the regulations insofar as they has provided a satisfactory examination of the main alternative locations studied with regard to the project in addition to a reasonable explanation for the selection of the subject lands.

12.1.2.3 Human Beings:

12.1.2.3.1 In terms of assessing the potential impact of the proposed development on human beings I would, in the first instance, refer the Board to Chapter 6.9 of the submitted EIS which focuses attention on population, tourism, employment, attitudes to wind energy development, and other socio-economic considerations. The potential physical impacts on residential, working and visiting communities within the study area, for example, those relating to traffic, noise, dust, visual, and electromagnetic interference etc., are all considered under separate sections in the EIS.

12.1.2.3.2 Whilst I would generally concur with the findings of the EIS as regards the likely impact of the proposed development on human beings, it is of relevance to note that there are various inter-relationships between effects on the human environment and effects on other aspects of the environment such as air and water quality. Accordingly, in order to avoid unnecessary repetition, I would refer the Board to my assessment of the specific implications of the proposal as regards soil, water and air quality etc. as set out elsewhere in this report. Furthermore, although referenced in separate chapters of the EIS, I propose to focus the remainder of my assessment of the impact of the proposed development on human beings on the key issues of traffic, noise and shadow flicker.

12.1.2.3.3 Noise:

12.1.2.3.3.1 In assessing the impact of noise levels arising as a result of the proposed development I would refer the Board in the first instance to Chapter 6.2 of the Environmental Impact Statement which details the results of noise monitoring surveys carried out at identified Noise Sensitive Locations (NSLs) in the vicinity of the proposed development site. In this respect it should be noted that a total of 7 No. (occupied) dwelling houses (Noise Sensitive Locations) were identified within 1.5km of any of the proposed turbines (See Figure 6.2.2) with the nearest of these (NSL Ref. No. R05) located approximately 915m distant from Turbine No. 18. Notably, this dwelling is the home of one of the project developers and, therefore, it is prudent to highlight that the nearest inhabited dwelling not associated with the proposed development is NSL Ref. No. R07 which is located 979m from Turbine No. 18. It should also be noted that there are 2 No. other 'unoccupied' dwelling houses within a 1km radius of the nearest turbines i.e. NSL Ref. Nos. R03 & R04 which are located 695m west and 746m southwest respectively of Turbine No. 4, although these properties are apparently uninhabitable in their current state. Accordingly, two noise sensitive locations were identified for the purpose of undertaking noise monitoring in order to establish baseline noise conditions prior to any development occurring, however, it is of relevance to note that these locations were selected as they were considered to represent the lowest ambient noise conditions expected in the area and not because of their proximity to any of the wind turbines. In this respect I would advise the Board that whilst Noise Monitoring Location WF2 (as shown on figure 6.2.1) corresponds with the location of the dwelling house identified as NSL Ref. No. R05 (i.e. the dwelling house closest to any of the proposed turbines), Noise Monitoring Location WF1 corresponds with NSL Ref. No. R02 and is located further north along a minor roadway in excess of 1km from the nearest turbine. Section 6.2.5 of the EIS proceeds to outline that the results of the noise monitoring confirmed that existing baseline noise levels in the area were low and thus it would be appropriate to apply a threshold level within the range of 35-40dB(A) for day-time hours and a night-time threshold of 43dB(A) as per the 'Wind Energy Development, Guidelines for Planning Authorities'.

12.1.2.3.3.2 At this point it should be noted that the 'Wind Energy Development, Guidelines for Planning Authorities' state that in general a lower fixed limit of 45dB(A)

or a maximum increase of 5dB(A) above background noise at nearby noise sensitive locations is considered appropriate to provide protection to wind energy development neighbours, however, in low noise environments where background noise is less than 30 dB(A), it is recommended that the daytime level of the $L_{A90, 10min}$ of the wind energy development noise be limited to an absolute level within the range of 35-40 dB(A). The Guidelines also advise that separate noise limits should apply for day-time and night-time and that a fixed limit of 43dB(A) will protect sleep inside properties during the night. Furthermore, it is stated that noise arising from wind turbines is typically unlikely to be a significant problem where the distance from the nearest turbine to any noise sensitive property such as a dwelling house is more than 500m.

12.1.2.3.3.3 Having established the baseline noise environment, the applicant subsequently utilised the 'Garrad Hassan Windfarmer' software package as a means of predicting the cumulative noise impact of the proposed wind turbines when taken in conjunction with the 13 No. Enercon E-70 turbines permitted on the adjacent site to the immediate east under PA Ref. No. 06/3861 (which presently operates as the Carrowleagh Wind Farm) in addition to the 3 No. Enercon E-70 turbines permitted by Sligo County Council under PA Ref. No. 10/235 as an extension of that scheme. This modelling has produced noise contour mapping based on a critical wind speed of 9 metres per second which is set out in Appendix 'B' of the Noise Impact Assessment attached to Chapter 6.2 of the EIS (N.B. For clarity purposes, I would advise the Board that the aforementioned Appendix 'B' is actually contained in Vol. 2 of the EIS). From a review of this mapping, and on the basis of the detailed results of the predicted noise modelling, it has been submitted that the predicted noise levels at the ten nearest NSLs (including both occupied and unoccupied dwellings) will all be within the relevant night-time fixed criterion of 43dB(A). In terms of the predicted daytime noise levels it has been submitted that whilst the predicted noise levels at NSL Ref. No. R05 (i.e. the nearest occupied dwelling to any of the turbines located approximately 915m distant from Turbine No. 18) will moderately exceed the lower fixed level of 35dB(A) by in excess of 5dB(A), on the basis that this dwelling is occupied by one of the project developers it would be appropriate to apply a slightly relaxed criterion of 45dB(A) at this location and, therefore, the predicted noise levels at various wind speeds will not exceed this limit. With regard to the remaining 9 No. NSLs the daytime noise levels are not predicted to exceed 40dB(A) at any of the dwelling houses occupied by persons not involved in the project (based on a lower fixed level of 35dBLA90(10mins) and a 5dB increase in background noise, whichever is greater). Whilst it is acknowledged that the predicted noise levels at 2 No. of the NSLs (R03 & R04) will slightly exceed the permitted limits, it is emphasised that these structures are unoccupied, have not been lived in for many years and are currently uninhabitable. It is further emphasised that the noise modelling / predictions represent a 'worst case scenario' in that they assume the noise locations are downwind of all turbines at all times, which will not be the case in practice. Therefore, on the basis of the submitted information, and noting the separation distances between the proposed turbines and nearby occupied NSLs, it would appear that in all instances (during both day-time and night-time) the predicted noise levels during the operational phase of the development will be below the recommended fixed night-time noise levels of 43d(B)A and will not exceed the ambient noise levels by the DoEHLG recommended limit of 5d(B)A, and, therefore, should not give rise to any significant impact on the amenities of nearby Noise Sensitive Receptors / dwelling houses.

12.1.2.3.3.4 In relation to the predicted noise impact during the construction of the proposed development, it must be acknowledged that due to the nature of the construction activity to be conducted on site there is an inherent potential for the generation of increased levels of noise. Similarly, the flow of traffic transporting material to and from the site is also likely to be a potential source of increased noise. In this respect the applicant has submitted that all construction work will be carried out in accordance with the guidance set out in BS5228: Part 1: 1997: 'Noise Control on Construction and Open Sites'. In addition, it is proposed to prepare a Construction Method Statement prior to the commencement of development, which will take into account various means of reducing noise impacts during the construction period, and I would envisage that any such document should include mitigation measures such as the use of mobile machinery with an inherently low potential for noise generation fitted with effective well-maintained silencers and the restriction of construction activity to day-time hours in order to minimise any noise impact arising during unsociable hours. Therefore, considering that the construction works will be temporary in nature, I am satisfied that the short-term noise impact arising from same can be satisfactorily mitigated by way of condition and adherence to best practice site management so as to avoid any undue impact on the amenities of nearby dwelling houses.

12.1.2.3.4 Shadow Flicker:

12.1.2.3.4.1 The effect known as shadow flicker occurs when the blades of a wind turbine cast a shadow over a window in a nearby house and the rotation of the blades causes the shadow to flick on and off. This effect lasts only for a short period and happens only during a specific set of combined circumstances such as when the sun is shining at a low angle, the turbine is directly between the sun and the affected property, and there is enough wind energy to ensure that the turbine blades are rotating.

12.1.2.3.4.2 Section 5.12 of the 'Wind Energy Development, Guidelines for Planning Authorities' states that shadow flicker at neighbouring dwellings within 500m of proposed turbines should not exceed 30 hours per year or 30 minutes per day and that at distances greater than 10 No. rotor diameters from a turbine the potential for shadow flicker is very low. In this respect I would refer the Board to Chapter 6.13 of the EIS which states that a shadow flicker analysis of the subject proposal (as shown in Figures 6.8A & B in Vol. 2 of the EIS) has established that none of the houses in the vicinity of the proposed wind farm will exceed the recommended limits for shadow flicker as set by the Departmental Guidelines. Indeed, given the absence of any occupied dwellings within the likely impact range of 710m (i.e. Rotor diameter: $71m \times 10$ No.), I am satisfied that the occurrence of shadow flicker arising from the operation of the proposed turbines will be within accepted limits and should not give rise to any significant loss of amenity or disturbance of nearby residences.

12.1.2.3.5 Traffic:

12.1.2.3.5.1 The principle impacts in terms of traffic will arise during the construction of the proposed development and, in particular, during the transportation of the turbines themselves to the site along the surrounding road network, however, it should be noted that these impacts will be of an interim and temporary nature. Chapter 6.11 of the EIS details that various access route options were examined by a specialist transportation company in order to determine their suitability for transporting large-sized loads and the associated safety and environmental impact of using these routes. Accordingly, it was determined that the likely access route for construction traffic visiting the site would involve delivery traffic travelling along the N56 National Secondary Road to a point approximately 8km northeast of Ballina before turning south-eastwards onto a local road and continuing southeast towards the village of Bunnyconnellan for a distance of c. 3.85km at which point it would turn left at Kilbride and head directly east towards Carrowleagh. After 2.67km this roadway reaches a 'T'-junction with a small grass island dividing the junction whereupon a right turn would be made before heading southwards with the site entrance located 1km along this road (Local Road No. L2604). Notably, the proposed access road to the site from the public roadway has already been widened as part of the works associated with the construction of the neighbouring Carrowleagh Wind Farm and from this point onwards the internal site roads will accommodate traffic to the individual turbine locations. Section 6.11.3 of the EIS subsequently details that the aforementioned route was selected on the basis that it offers very good access to the site with no need for remedial works and no requirement for major traffic management procedures for turbine delivery apart from prudent load escorting.

12.1.2.3.5.2 Given the presence of a number of wind energy developments in the wider area, with particular reference to the neighbouring scheme at Carrowleagh, it would appear that the surrounding road network is capable of accommodating the likely traffic movements associated with the construction of the proposed development. Indeed, it would be prudent for delivery traffic associated with the subject proposal to utilise the same haul route as that utilised during the construction of the Carrowleagh Wind Farm, however, I would suggest that the selection of the final haul route can be best addressed by way of condition in order to permit the review of same closer to the time of construction in conjunction with Mayo and Sligo County Councils thereby providing for the least amount of disruption as possible.

12.1.2.3.5.3 In addition to the foregoing, I would advise the Board that it is proposed to undertake some road improvements along those county roads providing access to the site in order to facilitate the transportation of oversized loads and the large volumes of trucks delivering crushed stone and concrete. In this respect two separate assessments of the access route from Corbally to the site were undertaken and these have identified 6 No. locations which require road widening works to be undertaken to accommodate turbine delivery and 8 No. locations where pull-in bays will be provided in order to allow for the passing of construction traffic. Notably, the applicants have apparently received the consent of the affected landowners to carry out these road improvement works. It is also proposed to lay a structural overlay along the entire access route from the N59 to the site entrance in order to protect the local road network from any potential damage due to

construction traffic and to implement an on-going programme of repairs with the agreement of the Council in the event of any damage to the road network occurring during the construction period. Furthermore, on completion of the project it is proposed to repeat the structural overlay along the entire length of the access route from the N59 to the site entrance.

12.1.2.3.5.4 It is also proposed to undertake a detailed appraisal of the road pavement strength along the agreed haul route prior to the commencement of development in order to re-assess the condition of the route (in light of the potential for delay between any grant of permission and the commencement of construction works) and to identify any defects or damage to the existing road surface and the precise areas where road widening or strengthening may be required. Additionally, the applicants have indicated that they are amenable to entering into a bond prior to the commencement of development as security to ensure compliance with planning conditions and to cover proposals for the maintenance of access roads and the satisfactory reinstatement of any public roads which may be damaged by the transport of materials to the site.

12.1.2.3.5.5 With regard to the wider traffic impact of the proposed development, Section 6.11.5 of the EIS provides a detailed summary of the likely traffic movements associated with the construction, operation and decommissioning of the wind turbines. Notably, the principle impact will arise during the 24-month construction period when an estimated 8,692 No. loads are expected to be delivered to the site, the bulk of which appears to be stone / rock for use in access roads, hardstanding areas and turbine foundations. In order to mitigate the impact of these traffic movements on the surrounding road network it is proposed to agree a Traffic Management Plan with the Roads Authority prior to the commencement of development and to schedule the delivery of exceptionally large loads to off-peak times thereby avoiding unnecessary traffic disruption along the agreed haul route.

12.1.2.3.5.6 On balance, whilst it is apparent that the construction of the proposed development will have a significant impact on traffic movements on the surrounding road network, I am generally satisfied that these impacts can be mitigated to within acceptable limits subject to the implementation of the identified measures set out in Chapter 6.11 of the EIS and the Traffic Management Plan appended to same.

12.1.2.3.5.7 In respect of the on-going operation and maintenance of the proposed turbines I would anticipate that the traffic levels associated with same would be low and would be unlikely to have any significant impact on the surrounding road network.

12.1.2.4 Fauna and Flora:

12.1.2.4.1 In the first instance, and in order to avoid unnecessary repetition, I would advise the Board that the proposed development site is not subject to any National or European designation and that my assessment of the impact of the proposed development on the qualifying interests of Natura 2000 sites in the surrounding area pursuant to Article 6 of the Habitats Directive, is set out elsewhere in this report under the section entitled 'Appropriate Assessment'. Accordingly, I propose to focus the following aspect of my

assessment on the broader environmental impact of the proposed development on the remaining ecological considerations (i.e. those aspects of flora and fauna which are not subject to a requirement for 'appropriate assessment').

12.1.2.4.2 Chapter 6.3: 'Ecologic Impact Assessment' states that both the application site and adjoining lands are dominated by cutover bog arising from their historical use for peat extraction / turbary purposes and that intact active bog in the wider area is now largely confined to the Ox Mountains Bog Special Area of Conservation to the south of the site. In this respect it has been submitted that whilst the continuing peat extraction activities on site have resulted in a mosaic of bog and heath habitats derived from the degraded blanket bog, the entirety of the site can be classified as 'cutover bog' and, therefore, there is no merit in compiling a habitats map for the site but rather the cutover bog can be seen clearly on the accompanying aerial photography. However, following the compilation of a series of habitat surveys, it has been acknowledged that there are some uncut surfaces scattered throughout the site which still support typical blanket bog vegetation (more or less corresponding to 'upland blanket bog') with one of the best examples of same located in the southern-western corner of the site where the peat is deeper and the bog surface is wet with occasional pools. Nevertheless, the proposed turbines are stated as having been purposely located in areas of cutover or highly disturbed bog just off the existing bog roads (i.e. uncut parts of the bog have been avoided) whilst the only section of new road required will traverse a strip of cutover bog which is considered fairly dry and dominated by ling heather and bog myrtle. Accordingly, it has been submitted that the proposed development site is composed entirely of cutover blanket bog (with active turbary throughout), which is a habitat common to the west of Ireland with a relatively low conservation value, and that whilst there are some small isolated patches of relatively intact blanket bog on site, these uncut areas are all losing water due to the proximity of drains and cannot be considered as comprising active bog.

12.1.2.4.3 In terms of the likely impact of the proposed construction works on habitats on site, it is anticipated that the proposal will result in the permanent loss of an area of cutover bog amounting to approximately 60,000m², however, given that these areas are not in pristine condition due to the extensive history of turbary extraction which has already taken place in the wider area, and as these habitats are of a relatively low conservation value, the impact arising from the loss of these areas is not considered to be of significance. Similarly, whilst it has been acknowledged that construction works may also impact on the vegetated bog habitats adjoining those areas of the proposed roadways and turbine bases as a result of drying where water loses occur due to site excavations, it has been suggested that the extent of these drying effects will be unlikely to extend beyond 10-20m from the zone of disturbance whilst the hydrology of the affected areas has already been compromised by past turf cutting and drainage works. In this respect, I would also suggest that the continuation of turbary activities within the landholding, regardless of whether or not the proposed development were to proceed, could potentially result in the continued degradation of the remaining habitats on site.

12.1.2.4.4 In relation to flora and fauna, the proposed development will inevitably result in the loss of some plant and animal species from within the footprint of the proposed construction, whilst it also likely that the disturbance arising during the construction period may also indirectly impact on fauna using the site, however, given that no rare plant species were recorded within the site and that the fauna present (which includes some legally protected species such as the common frog and the Irish hare) are typical of blanket bog habitats, I would suggest that any such impacts will be of limited significance. Similarly, any disturbance of fauna arising during the construction phase is likely to be short-term given the temporary nature of the works.

12.1.2.4.5 With regard to avifauna, I would be inclined to suggest that the likely potential impacts on bird populations within the site area would typically include:

- The disturbance of bird communities within the site and the surrounding area which may lead to the desertion of nest sites during the breeding season or avoidance of the site by new and returning birds for breeding purposes.
- The indirect habitat loss through site development works near the turbine locations and on access tracks to the site which may reduce the extent of suitable habitat locations for wintering and breeding birds.
- The direct loss of habitat from the construction of the turbine bases and hardstanding areas etc.
- The risk of collisions with turbine blades.

12.1.2.4.6 Accordingly, the EIS has referred to a series of bird surveys conducted on site during both the breeding season and winter months, the results of which are set out in Tables 1 & 2 as appended to Chapter 6.3 of the EIS, which suggest that the site and its environs support a fairly typical cross-section of avifauna, although it is acknowledged that the wider area has the potential to support several species of conservation significance including Greenland white-fronted geese, merlin, the hen harrier, golden plover, red grouse and 'amber-listed' species such as the kestrel and skylark. Accordingly, the EIS has chosen to focus its assessment on the potential impact of the proposed development on those more vulnerable species of conservation significance in the site area as follows:

- Red Grouse:

This species is known to utilise the site, although the high level of human activity (associated with turbary) may preclude nesting attempts on site, and whilst construction works could disturb grouse in the immediate area, it is submitted that this will be of a temporary duration and will be limited to a small area of the site at any one time.

In terms of the actual presence of the turbines it is considered that this will be unlikely to deter grouse from using nearby areas (where suitable habitat exists) as this species tends to remain in dense heather cover for much of the time. Notably, at other wind farm sites, grouse have apparently been observed using wind farm roads, perhaps to pick up grit to aid digestion. With regard to the potential collision risk posed by the turbines, it has been suggested that this is minimal given the fact that grouse seldom fly and that when they do their flight line is invariably close to the ground.

- Merlin:

A breeding territory occurs along the south-western margin of the site with nesting having occurred in 2006 and also probably in 2009. Notably, in 2009 the breeding location was considered to be within 1km of Turbine No. 20. Therefore, it is acknowledged that should construction works occur during the breeding season, there is some likelihood that the normal activities of this breeding pair could be disrupted. However, as breeding pairs can change their nesting locations between years, it will be necessary to establish whether or not a pair is holding territory close to (within 1km) any of the proposed turbine locations (i.e. existing baseline data may not be relevant at the time of construction). Accordingly, in order to mitigate this potential impact, in the event that works are proposed to be carried out during the nesting season, it is proposed to undertake a survey to establish if any merlin are holding territory in the vicinity of the site. If this is the case, then works may need to be restricted in that part of the site until nesting is complete. Once constructed, it is considered that the turbines are unlikely to have any effects on the nesting or foraging activities of this species in the area. Furthermore, it has been submitted that there is no evidence to suggest that merlin is a species at significant collision risk with turbines, particularly as they almost always keep low to the ground when hunting and would be well below the level of the rotors.

- Greenland White-Fronted Geese:

Whilst the site synopsis for the Ox Mountains Bog SAC notes that numbers of birds have been reported in the Easkey Bog area, and although past records indicate that the closest feeding areas to the subject site were in the vicinity of Gowlan River and Kilbride Bog, no signs of this species were recorded during visits to these sites as part of the bird surveys conducted in December, 2009 despite the existence of good feeding opportunities in the wider context of the Gowland River. Nevertheless, it has been submitted that as the subject site is entirely cutover bog it does not present any feeding opportunities for geese and that there do not appear to be any flight paths over the site. Accordingly, it is suggested that the proposed development poses no threat to the traditional (sub) flock of geese associated with the Ox Mountains.

- Skylark:

This is an 'amber' listed species which is common within the Carrowleagh-Kilbride site and, in general, it has been submitted that wind farm developments can be expected to have fewer effects on passerine species than when compared to waterfowl or birds of prey. In this respect reference is made to a recent UK study (Pearce Higgins et al.) which found that the effect of turbine proximity on skylark distribution was of marginal significance. Therefore, the EIS has stated that it is not anticipated that the proposed development will in any way affect the important population of nesting skylarks at the Carrowleagh-Kilbride wind farm.

- Snipe:

This is also an 'amber' listed species and a UK study prepared by Pearce Higgins *et al.* has found that nesting snipe is a species which shows significant avoidance of wind turbines. In this respect it is of relevance to note that a scattering of snipe was recorded on site during the winter and that this species could also breed on site (*N.B.* Whilst snipe were recorded as breeding off site in 2009 this pair was apparently located at a sufficient distance from the site (>500m) so as to avoid any potential impacts). Accordingly, notwithstanding that the species is common throughout Ireland and that they move between sites, it is acknowledged that the presence of the proposed wind turbines could potentially have a minor impact on the local population.

12.1.2.4.7 In relation to other bird species which occur in the vicinity of the application site the EIS has indicated that the majority of these are passerine species which would not be expected to be impacted in any way by the presence of wind turbines.

12.1.2.4.8 Accordingly, having considered the available information, I am generally satisfied that the proposed development, subject to the implementation of the mitigation measures set out in Sections 6.5.5 of the EIS, will not result in any significant adverse impact on bird communities either on site or within the wider area.

12.1.2.4.9 In terms of the aquatic environment, Chapter 6.4: 'Aquatic Ecology' of the EIS notes that the site is located on the watershed between the Easkey River system which receives the drainage from the northwest of the site, and the Brusna River system which drains those lands to the south and west of the site. In this respect it is of relevance to note that the Easkey River is an important salmon and sea trout fishery whilst its main channel (c.7km downstream of the proposed development site) has a population of freshwater pearl mussel (a protected species). In addition, the River Brusna is in turn a major tributary of the River Moy which has been designated as a candidate Special Area of Conservation. Accordingly, any deterioration in surface water quality within tributaries / watercourses draining to these river systems consequent on the proposed development could potentially have a significant indirect impact on both downstream species and habitats. For example, potentially negative impacts during the construction and operational stages of the proposed development on the aquatic environment and fisheries would include:

- Pollution of watercourses with suspended solids due to runoff of soil from construction areas;
- The contamination of surface waters during construction works through the accidental release or discharge of hydrocarbons or other contaminated site runoff;
- Sedimentation arising from peat erosion during construction;
- Obstruction of upstream movement of aquatic fauna due to culverting;

- Changes to the hydrological regime of the area such as through the alteration of the flow rates of streams / rivers;
- The generation of increased surface water runoff arising from impermeable surfaces with high suspended solids content entering watercourses;
- The creation of preferential flow paths for surface water resulting in a significant increase in the volume of water entering local watercourses which can place additional pressure on those watercourses and interfere with the sustained flow of water particularly during dry weather; and
- The leachate or slippage of disturbed / stockpiled peat soil into watercourses

12.1.2.4.10 However, it is my opinion that the risk of the foregoing can be satisfactorily mitigated through the implementation of an appropriate programme of pollution control measures as per the recommendations of the EIS, the NIS and the supplementary reports submitted such as the Peatland Management Plan as received by the Planning Authority in response to a request for further information, combined with the on-going monitoring of same.

12.1.2.4.11 In conclusion, it should be acknowledged that most forms of development will invariably impact on ecological considerations to some degree, however, in this instance, I am satisfied that on balance the residual impacts of the proposed development are both localised and of such limited significance and influence as not to warrant a refusal of permission. Accordingly, having considered the available information, in my opinion, the impact of the proposed development on the aforementioned flora and fauna on site is within tolerable limits.

12.1.2.5 Soils & Geology:

12.1.2.5.1 Chapter 6.5 of the EIS describes the soil and bedrock conditions underlying the subject site and I would advise the Board that this information is based on a desk study of the available information in addition to on-site investigations, including a peat probing survey.

12.1.2.5.2 With regard to the dominant bedrock geology underlying the subject site, reference to the GSI database indicates that it consists of the Ballina Limestone Formation and the Attymass Group. In respect of the overlying soils and subsoils it can be confirmed that the site is completely covered by blanket bog (the majority of which has been cutover).

12.1.2.5.3 Potential negative impacts on the underlying soil / geology / hydrogeology arising as a result of the proposed development will include the direct physical impact of excavations carried out during construction, any requirement for the dewatering of excavations, and the possible contamination of surface and ground waters due to accidental spillages / leakages or the release of suspended solids. However, perhaps the most significant potential impact arising as a direct result of the construction of the proposed development is the possibility of bog failure / slippage given the peatland conditions on site.

12.1.2.5.4 With regard to the operational impact of the proposed development on soil / geology / hydrogeology, it should also be acknowledged that the increase in surface water runoff consequent on the replacement of previously vegetated / peatland areas with concrete / hardstanding at the turbine locations could result in changes to the hydrological regime. Further impacts on the water environment may arise during the operational phase if regular maintenance, monitoring and auditing of mitigation structures and procedures is not undertaken during the lifetime of the project.

12.1.2.5.5 In order to minimise the potential constructional impacts arising from the development, it is proposed to implement a series of mitigation measures set out in Section 6.5.7 of the EIS which includes various mechanisms intended to minimise the accidental release or discharge of hydrocarbons and other contaminated site runoff, however, in my opinion, the principle issue of concern remains the likelihood of bog failure / slippage. In this respect I would refer the Board to the peat slide risk assessment set out in the EIS, which notes that the subject site is not identified as being susceptible to landslide as per criteria used by the GSI due to the shallow slopes on site, and the accompanying quantitative risk assessment which ultimately concludes that the likelihood of a landslide occurring on site is negligible.

12.1.2.5.6 Having considered the foregoing, I am satisfied that, subject to the implementation of the identified mitigation measures, the proposed development should not give rise to any significant impact in terms of soil, geological and hydrogeological considerations on site.

12.1.2.6 Water (Hydrology & Hydrogeology):

12.1.2.6.1 In order to avoid unnecessary repetition I would advise the Board of the need to consider any hydrological impacts arising on site as a result of the proposed development in tandem with my assessment of the potential impacts on the aquatic environment. Furthermore, any implications for Natura 2000 sites due to impacts on the hydrological regime of the area should be viewed in conjunction with the 'Appropriate Assessment' of the proposal as set out in Section 12.1.3 of this report.

12.1.2.6.2 Chapter 6.6 of the EIS has chosen to focus on the likely hydrological and hydrogeological impacts arising as a result of the proposed development including the following:

- Additional surface water runoff thereby increasing the peak flow to streams draining the site;
- Potential hydrological changes to the drainage regime of the Ox Mountains Bog SAC;
- The removal of peat to facilitate construction works increasing aquifer vulnerability locally.
- Sediment release during construction phase earthworks and associated suspended sediment and nutrient loading of rivers via site surface waters and sediment release due to in-stream works;
- Pollutant release such as hydrocarbons and cement to the aquatic environment.

12.1.2.6.3 Most notably, with regard to the potential impact of the proposed development on the Ox Mountains Bog SAC, I would refer the Board to Section 6.6.4 of the EIS which states that, based on field mapping of the drainage features across the site and given the topography of the area, there would seem to be a general absence of hydrological connectivity between the subject lands and the adjacent SAC and thus no significant impacts arise. In particular, it states that:

- The Ox Mountains Bog SAC is offset from the site to the east, north and south.
- To the east the SAC is approximately 800m from Turbine Nos. T10, T14 & T17. The SAC is on the eastern side of the Gowlan River. The permitted Carrowleagh Wind Farm lies between the proposed development and the Gowlan River. The proposed wind farm does not drain to this river. It has been concluded that the proposed wind farm has no hydrological connection in any way to the Ox Mountains Bog SAC to the east.
- To the northeast, the SAC is approximately 1.5km from Turbines T3 & T6. An unnamed tributary of the Gowlan River drains the eastern side of the proposed wind farm Turbine Nos. T6, T10, T14 & T17 are in the catchment of this stream; T3 is not. This stream passes through the SAC approximately 2.0km northeast of T6; the nearest turbine to this part of the SAC and within the catchment of this stream. It forms a valley through the SAC and receives surface water runoff from the SAC. As the SAC is downstream of the site and distant from it, the proposed wind farm will have no impact on the hydrology in this area of the SAC.
- To the south, the SAC is approximately 250m from Turbine Nos. T20 & T21. The westernmost area of the SAC is within the Glenree catchment the same catchment as T20 & T21. Part of the SAC is in the catchment of the Owencam River and drains / streams flowing past T19 drain the SAC. However, the drainage at Turbines Nos. T20 & T21 will not impact on the hydrology or drainage of the SAC as there is a local surface water divide between T20 / T21 and the SAC. T19 is approximately 800m downstream of the SAC and the works at T19 will not influence or impact on the hydrology of the SAC.

12.1.2.6.4 Further measures to avoid or reduce the potential impact of the proposed development on water quality are set out in Section 6.6.6 of the EIS.

12.1.2.6.5 Having considered the available information, I would generally concur with the findings of the EIS (as supported by additional information submitted in response to the requests for further information and subsequent clarification) as regards the potential hydrological impacts associated with the construction and operation of the proposed development.

12.1.2.7 Air Quality:

12.1.2.7.1 During construction of the proposed development the principle impact on air quality will most likely arise from a combination of fugitive dust emissions emanating from the on-site construction activity, with particular reference to excavation works and

to the movement of traffic and materials both within the site and along designated haul routes, and exhaust fumes from construction traffic and machinery.

12.1.2.7.2 In relation to dust emissions I would suggest that as the site is primarily composed of cutover bog with a high moisture content, the wet nature of this soil is less likely to result in the release of dust particles during construction works. Furthermore, given the separation distance to nearby housing it would seem unlikely that residential amenity would be affected by dust emissions arising from the construction of the proposed development, although there may be a localised effect on flora and fauna in the immediate vicinity of the site / works. Nevertheless, Section 6.8.4.2 of the EIS has outlined a series of measures which will be implemented on site in order to mitigate against the potential release of dust during the construction phase. These include the carrying out of a dust-monitoring programme to be agreed in advance with the Planning Authority, the dampening down of workings during periods of dry and windy weather, and the installation of a wheel-wash facility at the site exit to clean trucks leaving the site. With regard to exhaust emissions I would suggest that any adverse impact on air quality as a result of same will be short-term and of no significance.

12.1.2.7.3 Having reviewed the foregoing, given the inherent temporary duration and impact of the proposed construction works, coupled with measures to ensure best practice site management and dust minimisation, I am satisfied that the construction of the proposed development will not result in any significant impact on air quality in the surrounding area. Similarly, given the nature of the development proposed, I would not anticipate any significant detrimental impact on air quality during the operational phase

12.1.2.8 Climatic Factors:

12.1.2.8.1 Whilst the construction of the proposed development will invariably result in the emission of some greenhouse gases, this can be mitigated by adherence to best practice site management including the shutting off of equipment during periods of inactivity and the implementation of a traffic management plan. Accordingly, in my opinion, the impact of any such emissions on climatic considerations will be minimal.

12.1.2.8.2 With regard to the operational impact of the proposed development, I would concur with the findings of the EIS that the generation of renewable electricity by the proposed turbines will have a wider positive impact on climatic considerations in terms of reducing carbon emissions thereby contributing to the achievement of national and international emission reduction objectives through the displacement of traditional methods of energy generation by the unsustainable combustion of fossil fuels such as coal and oil.

<u> 12.1.2.9 Landscape:</u>

12.1.2.9.1 The design of wind turbines necessitates increased height in order to avail of greater wind speeds and, therefore, such structures are typically visible over a wide area. In this respect concerns have been raised that the proposed development will appear unduly visually prominent on the surrounding landscape, particularly when taken in conjunction with the Carrowleagh Wind Farm on the adjacent lands to the immediate

east. Accordingly, in order to assess the visual impact of the subject proposal it is necessary in the first instance to consider the site context having regard to the site location and the wider sensitivity and landscape value of the surrounding area.

12.1.2.9.2 The proposed development site is located in a relatively flat area to the immediate west of the Ox Mountains in an area predominantly characterised by degraded bogland with extensive areas of 'turbary' peat extraction / turf-cutting as evidenced by the presence of individual plots of cutover bog. Other notable land uses in the area include significant areas of forestry plantation (a considerable proportion of which would appear to have been harvested relatively recently) and, more importantly, the existing Carrowleagh wind farm. In addition, it should be noted that the proposed turbines will be situated below the ridgeline of the Ox Mountains to the east, which will form a backdrop to the development, and thus the principle visual impact of the proposal will be from vantage points located primarily to the north, south and west.

12.1.2.9.3 From a review of the Mayo County Landscape Appraisal, 2008, as appended to the County Development Plan, it is apparent that this particular area is located within Landscape Character Unit 'Area H: East Mayo Uplands', which comprises 'rugged hill country' forming the foothills at the south-western end of the Ox Mountains, in addition to 'Policy Area 3 - Uplands, moors, heath or bogs', which is considered to be a highly sensitive landscape. At this point it is of relevance to note that the 'Development Impact -Landscape Sensitivity Matrix' set out in Section 5 of the County Landscape Appraisal anticipates that wind farm developments within the 'Policy Area 3' designation will have a 'high potential to create adverse impacts on the existing landscape character' and that having regard to 'the intrinsic physical and visual characteristics of the landscape area, it is unlikely that such impacts can be reduced to a widely accepted level'. The wider sensitivity of this particular part of the county is further reinforced by reference to the fact that the application site is also located within a 'Sensitive Area' as identified in the landscape appraisal due to the presence of peat bogs whilst the ridgeline / skyline of the westernmost hills of the Ox Mountains to the immediate east of the site has been designated as 'vulnerable' to development. Similarly, it should be noted that the section of the R294 Regional Road to the south of the application site which extends west of Bunnyconnellan to the boundary with Co. Sligo has been designated as a 'Scenic Route' in the County Development Plan whilst the 'Foxford Way' and the 'Western Way' walking routes are located beyond same.

12.1.2.9.4 Chapter 6.1 of the EIS provides a detailed assessment of the overall visual impact of the proposed development and includes the use of photomontages in order to illustrate the projected impact of the proposal from a number of identified viewshed reference points (i.e. vantage points positioned alongside designated scenic routes & views, major routes, local community views and also within centres of population). It also includes an analysis of the potential cumulative visual impact of the development when taken in conjunction with the existing and permitted farms in the area, with particular reference to the Carrowleagh Wind Farm, through the identification of 'Zones of Theoretical Visibility'. Having conducted an inspection of both the application site and the wider area, in my opinion, the foregoing assessment of the visual impact of the

proposed development is reasonable and I would generally concur with its findings as regards to the likely visibility of the turbines from within the wider area.

12.1.2.9.5 The most significant impacts will be felt within short-medium range views in the immediate vicinity of the site, and particularly from vantage points along the R294 Regional Road to the south and the Foxford Way walking route. Longer distance views of the site will also be available from within the wider area, although intervening landscape features such as buildings and hedgerows will serve to mitigate the overall visual impact of the scheme whilst during the course of my site inspection it was also observed how the prevailing weather conditions, which include high rainfall and expansive cloud cover, could serve to further reduce the likely visual impact. Of particular relevance is the fact that the proposal will most likely be perceived as an extension of the existing Carrowleagh Wind Farm which has already had a notable visual impact on the character of the surrounding landscape.

12.1.2.9.6 Whilst I would acknowledge that the proposed development of 21 No. wind turbines, with a hub height of 85m, a rotor diameter of 71m and base to blade-tip height of 120.5m, will inevitably result in some degree of visual intrusiveness in the landscape, having regard to the site location in a sparsely populated area, the landscape character of the area within the foothills of the Ox Mountains, the backdrop to the east of the site and its positioning relative to the existing Carrowleagh Wind Farm, the spacing and layout of the turbines, and the analysis of the (cumulative) visual impact of the proposal as set out in the EIS, on balance, I am satisfied that the development proposed can be accommodated on site and that the overall visual impact on the area would be within acceptable limits.

12.1.2.10 Material Assets:

Having reviewed the available information, I propose to focus this aspect of my assessment on the impact of the proposed development on architectural / archaeological / cultural heritage considerations in addition to any implications in respect of tourism and the potential for interference with existing peat extraction activities / 'turbary rights' on site.

12.1.2.10.1 Architectural Heritage:

Following a review of the available information, including Chapter 6.7: 'Archaeological and Cultural Heritage Assessment' of the EIS, and in light of the absence of any protected structures either within the confines of the application site or in the immediate vicinity of same, I am satisfied that the proposed development is unlikely to give rise to any significant impact on items of built heritage.

12.1.2.10.2 Archaeological Heritage:

In terms of the archaeological heritage implications of the proposed development, in the first instance it can be confirmed from a review of the available information that there is one recorded monument within the confines of the application site (i.e. Recorded Monument No. MA031-034 - Megalithic tomb - court tomb), however, the layout of the proposed development has taken cognisance of the need to avoid this feature by

providing for sufficient separation distance between it and the proposed construction works. It is also of relevance to note that the report of the Senior Archaeologist with the Planning Authority has recommended that a permanent exclusion / buffer zone be established around this monument as a further measure to avoid impacting on same.

In addition to the foregoing, it should be noted that archaeological pre-development testing conducted on site in response to a request for further information recorded the remains of an ephemeral spread of heat affected surface and charcoal within the test trench excavated at the proposed positioning of Turbine No. 16. Accordingly, in order to mitigate any potential impact on these remains it is proposed to ensure that all stripping of topsoil in this area will subjected to archaeological monitoring with any features uncovered to be excavated and recorded under license from the Department of Arts, Heritage and the Gaeltacht.

Therefore, on the basis of the foregoing, I am satisfied that the proposed development, subject to the implementation of suitable mitigation measures, is unlikely to have any significant impact on items of archaeological interest.

12.1.2.10.3 Tourism:

Whilst I would acknowledge the need to maintain and develop Co. Mayo as a tourist destination, given the popularity of the region I am unconvinced that the development of the proposed wind farm would in itself deter visitors from coming to the area. Furthermore, I would suggest that the perception of wind turbines by tourists is likely to be strongly influenced by an individual's views on wind energy. Whilst some individuals / parties may object to wind turbines in principle, or in a given locality, others may welcome such developments or simply be indifferent to same. Similarly, with regard to the possible adverse impact of the proposed development on the use of local amenities in the area such as walking trails, (e.g. the proposed turbines will be visible from vantage points along the 'Foxford Way' to the southwest) it is difficult to predict whether these impacts will be of such magnitude as to discourage the use of these areas. Notably, in some locations in Ireland the development of wind turbines has attracted a certain curiosity factor, for example, at Carnsore Point, Co. Wexford, whereby increased visitor numbers are attracted to a particular area to view the turbines, although I would accept that over the passage of time and as wind energy development becomes more prevalent it is likely that this novelty factor will gradually diminish.

On consideration of the foregoing, it is my opinion that the erection of the proposed turbines will not directly prohibit or hinder the use of surrounding amenities, including nearby walkways, although some individuals may choose to not to avail of same given the presence of the turbines and their impact in terms of noise and visual appearance. This is a matter which is difficult to judge, however, on balance, I would suggest that the proposal is not incompatible with any amenity activities which may take place in the locality.

12.1.2.10.4 Peat Extraction / 'Turbary Rights':

The proposed development site has historically been used for the extraction of peat by means of existing 'turbary' rights and I do not foresee any significant implications associated with the proposed development as regards the on-going use / exploitation of the wider site area for turf-cutting. In any event, I would suggest that the resolution of any concerns pertaining to turbary rights are essentially legal matters beyond the scope of this appeal.

12.1.2.11 Interactions and Cumulative Effects:

12.1.2.11.1 With regard to the inter-relationships between several of the foregoing factors / impacts, in my opinion, these interactions have been satisfactorily addressed throughout the EIS and the further submissions received by the Planning Authority.

12.1.3 Appropriate Assessment:

12.1.3.1 From a review of the available mapping, including the data maps from the website of the National Parks and Wildlife Service, it is apparent that whilst the proposed development site is not located within any Natura 2000 designation there are a number of protected sites in the wider area, with particular reference to the Ox Mountains Bogs Special Area of Conservation (Site Code: 002006) which adjoins the application site to the immediate south and east, and the River Moy Special Area of Conservation (Site Code: 002298) approximately 7.5km to the west. In this respect it is of relevance to note that the policies and objectives of the Planning Authority with regard to the protection of natural heritage, as set out in Section 3.1.5 of the Mayo County Development Plan, 2008, are guided by the strategic aim to protect and conserve nationally important and EU designated sites including Special Protection Areas, candidate Special Areas of Conservation and proposed Natural Heritage Areas. For example, Policy No. P/EH-NH 1 of the Plan seeks to protect, enhance and conserve all candidate Special Areas of Conservation, Special Protection Areas, Natural Heritage Areas (and proposed National Heritage Areas), Statutory Nature Reserves, Ramsar Sites and Biogenetic Reserves, and any modifications to same or any additional areas that may be so designated during the lifetime of the plan, whilst Policy No. P/EH- NH 4 states that proposals likely to impact Natura 2000 or European Sites are to be subjected to an 'appropriate assessment' pursuant to Article 6(3) of the EU Habitats Directive and will only be authorised after it has been established on the basis of scientific knowledge that the plan / project will not adversely affect the integrity of the site.

12.1.3.2 In effect, it is apparent from the foregoing provisions that any development likely to have a serious adverse effect on a Natura 2000 site will not normally be permitted and that any development proposal in the vicinity of, or affecting in any way, a designated site should be accompanied by such sufficient information as to show how the proposal will impact on the designated site. Therefore, a proposed development may only be authorised after it has been established that the development will not have a negative impact on the fauna, flora or habitat being protected through an Appropriate Assessment pursuant to Article 6 of the Habitats Directive.

12.1.3.3 At this point it is of relevance to note that the Ox Mountains Bog Special Area of Conservation has been designated as being of considerable conservation significance due primarily to the extensive, largely intact areas of blanket bog on site which are listed, and given priority status, on Annex I of the EU Habitats Directive. The value of the site is increased further by the presence of good examples of several other annexed habitats, i.e. wet heath, lowland oligotrophic lakes and dystrophic lakes, and of populations of two rare and threatened bird species (i.e. Greenland White-fronted Geese and Golden Plover) both of which are listed on Annex I of the EU Birds Directive and in the Irish Red Data Book. The site has also been designated due to the presence of *Vertigo geveri* as listed on Annex II of the EU Habitats Directive whilst it is also of relevance to note that part of the site has been designated as a Statutory Nature Reserve. The River Moy Special Area of Conservation, which is located downstream of the site, has been designated due to the presence of alluvial wet woodlands and raised bog, both priority habitats on Annex I of the E.U. Habitats Directive. It has also been selected as a candidate SAC for old oak woodlands, alkaline fens, degraded raised bog and Rhynchosporion, all habitats listed on Annex I of the E.U. Habitats Directive. In addition, its qualifying interests include the occurrence of several species listed on Annex II of the same directive i.e. Atlantic Salmon, Otter, Sea and Brook Lamprey, and White-clawed Crayfish. Accordingly, the NPWS conservation objectives applicable to each of the foregoing sites seek to maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species (i.e. the qualifying interests) for which the Natura 2000 designation has been selected.

12.1.3.4 The subject application has been accompanied by a Natura Impact Statement and having reviewed the screening reports contained in same, and by employing the source/pathway/receptor principle of risk assessment, it is clear that particular consideration should be given to the likelihood of the proposal to have a significant effect on the conservation objectives of the Ox Mountains Bog and the River Moy Special Areas of Conservation. In this respect it should be noted that the NIS has concluded that the proposed wind farm will have no impact on the drainage, hydrology or stability of the peatland habitats within the Ox Mountains SAC due to the separation distances involved and the lack of connectivity between these areas. With regard to the Stage 2 Appropriate Assessment in respect of the River Moy Special Area of Conservation as set out in the Natura Impact Statement, it has identified the key characteristics of the potential impacts arising as a result of the proposed development which would be likely to undermine the stated conservation objectives of the designated site including the potential for contaminated ground and surface waters to impact on the integrity of the SAC and its qualifying interests.

12.1.3.5 In order to avoid unnecessary repetition I would refer the Board to my earlier comments with regard to the hydrological and hydrogeological implications of the proposed development as set out in my environmental impact assessment of the subject application. In my opinion, this outlines how the design of the proposed development, when taken in combination with specified mitigation measures, will not impact on the integrity of the Ox Mountains and River Moy Special Areas of Conservation and thus will not compromise their qualifying interests.

12.1.3.6 Therefore, I consider it reasonable to conclude, on the basis of the information available, that the proposed development, when taken individually and in combination with other plans or projects, will not adversely affect the integrity of the Ox Mountains Bogs Special Area of Conservation (Site Code: 002006) or the River Moy Special Area of Conservation (Site Code: 002298) or in view of the sites' conservation objectives.

12.1.4 Other Issues:

12.1.4.1 In relation to the issue of windtake I am satisfied that the overall design and layout of the proposed development relative to the adjacent Carrowleagh Wind Farm has taken sufficient cognisance of the need to avoid impacting on same.

12.2 First Party Appeal:

A first party appeal has been lodged in respect of Condition Nos. 2, 23, 50 & 52 as imposed by the Planning Authority. These are assessed in turn as follows:

12.2.1 Condition No. 2:-

- 'Planning permission shall expire 25 years from the final grant of permission and the structures shall be removed in this period unless planning permission for a further period shall have been granted.

Reason: To enable Mayo County Council to review the operation of the wind farm having regard to the circumstances then prevailing'.

12.2.1.1 This condition imposes a 25-year timeframe for both the construction and operation of the wind farm, however, the applicant has submitted that the subject proposal had sought a 20-year permission for the construction of the development with an operational period of 25 years thereafter from the date of the first commissioning of the wind farm. In this respect it has been submitted that the necessity for the extended 20-year duration of the grant of permission arises from the need to secure the investment required for the construction of the wind farm and to address the lengthy delays involved in processing a grid connection. In addition, reference has been made to the fluctuations in the income stream from wind farms, which is the subject of vagaries of the wind and any possible downtime of a turbine, and that financial institutions normally require a 25-year operational life in order to allow for a part deferral of the loan repayment if the initial production targets are not met.

12.2.1.2 Having considered the available information, whilst I would acknowledge the merits of the applicants submission with regard to the difficulties encountered in securing investment for wind energy developments and the continued delays in the processing of applications for grid connections through the current 'Gate' system, I would consider the permitting of a 20-year permission for the construction of the wind farm to be somewhat excessive. However, in light of the nature of the development proposed and in keeping with current practice as evidenced by the Board's determination of similar development

proposals, in my opinion, a period of 10 years from the date of the grant of permission during which the development may be carried out should be sufficient to address the applicants concerns and in this respect I would recommend that Condition No. 2 be amended accordingly.

12.2.1.3 In relation to the operational lifespan of the development, whilst I would acknowledge that the 'Wind Energy Development, Guidelines for Planning Authorities' do not favour the imposition of conditions which would limit the life of a wind energy development to a particular time period, the Board has consistently imposed a condition whereby the permitted operational period should be for a period of 25 years from the date of commissioning of the wind farm in order to enable the planning authority to review its operation in the light of the circumstances then prevailing. On the basis of the available information, I can see no reason as to why a deviation from this practice would be warranted in the subject case and therefore I am recommending the amendment of Condition No. 2 to include provision for same.

12.2.2 Condition No. 23:-

- 'Prior to commencement of the development, an Environmental Monitoring Committee (EMC) shall be established to assess and monitor the surface water runoff, drainage control, traffic management, road maintenance, dust control, noise monitoring and other environmental issues during the period of construction. The EMC shall comprise two representatives of the developer, two representatives of Mayo County Council, and an invitation shall be extended to Inland Fisheries Ireland Ballina to provide a representative for the committee. In addition, one representative of the local community, selected in accordance with procedures to be agreed with Mayo County Council, shall be invited to serve on this committee. The EMC shall have the right to co-opt other members as required.

Reason: To ensure effective monitoring during construction phase in the interest of the proper planning and the protection of the environment.'

12.2.2.1 Whilst the applicants have indicated that they have no issue with the establishment of an Environmental Monitoring Committee they do have some concerns with regard to the terms of reference of this condition which states that the Environmental Monitoring Committee shall 'assess and monitor the surface water run-off, drainage control, traffic management and road maintenance, dust control, noise monitoring and other environmental issues during the period of construction'. In this respect it has been submitted that any role in the assessment and monitoring of the construction of the development would be more appropriately carried out by qualified and experienced Environmental Scientists or Environmental Engineers. It has also been suggested that this condition would conflict with Condition No. 30 which requires the appointment of a suitably qualified environmental scientist / engineer to liaise with the Local Authority in relation to the implementation of the required environmental monitoring during the construction phase.

12.2.2.2 Having reviewed the available information, I would suggest that the following amendment of this condition (in the event of a grant of permission) should address the applicants concerns whilst also maintaining the need for the establishment of an Environmental Monitoring Committee during the construction phase of the development:

'Prior to commencement of development, an Environmental Monitoring Committee (EMC) shall be established. The Committee shall include representatives of the developer, the planning authority, Inland Fisheries Ireland, and representatives of the local community. The exact composition and the functions of the Committee and the regularity of meetings shall be agreed with the planning authority.

Reason: To provide for appropriate review of environmental monitoring of the construction phases of the development'.

12.2.3 Condition No. 50:-

- 'The following contributions shall be paid to Mayo County Council prior to commencement of the development. The development contributions shall increase in accordance with the Wholesale Price Index for Building and Construction in January of each year from the date of grant of permission up to the date that payment is made to Mayo County Council.

Amenities:	€44,982
Community, Open Space & Recreational Facilities:	€44,982
Public Roads:	€191,394
Public Footpaths:	€29,988
Provision of Artistic Feature within the County:	€21,000

Reason: To comply with Mayo County Council's Development Contribution Scheme'.

12.2.3.1 Following a review of the grounds of appeal it is clear that the key issue in respect of this aspect of the first party appeal concerns whether or not the Planning Authority has properly applied the terms of its Development Contribution Scheme in seeking the payment of a development contribution in the amount of \notin 332,346 towards the provision of public infrastructure and facilities as per Condition No. 50 of its notification of a decision to grant permission. More specifically, the issue arises as to whether or not the Planning Authority was actually entitled to seek this contribution given that there appears to be no basis within the Mayo County Council Development Contributions in respect of wind energy developments and their associated site development works / equipment etc. Accordingly, it is necessary to critically analyse the Planning Authority's interpretation of its Development Contribution.

12.2.3.2 The Mayo County Council Development Contribution Scheme is clear in that development contributions are to be sought towards specified classes of public infrastructure in respect of identified categories of development within the functional area of the Planning Authority, however, it is of relevance to note that the methodology normally employed by the Planning Authority in its calculation of the development contributions applicable in respect of non-residential development utilises a figure derived from a 'cost per dwelling equivalent'. Regrettably, the basis for determining this cost per dwelling equivalent is not set out in the Development Contribution Scheme, although it is my understanding from a review of previous planning appeals determined by the Board that the rationale for same is based on estimated water usage. Accordingly, whilst I would acknowledge that the applicants may have some reservations as regards the foregoing calculation methodology, it should be emphasised that the Board's remit with regard to the assessment of appeals made pursuant to the provisions of S.48 of the Planning and Development Act, 2000, as amended, is simply to determine whether or not the terms of the Scheme have been properly applied by the Planning Authority and not to consider or review the merits of the Scheme under which the contribution is required, nor to read into the Scheme wordings that are not there (Please refer to Cork City Council v. An Bord Pleanala [2006] IEHC 192).

12.2.3.3 At this point I would advise the Board that the Planning Authority's calculation of the relevant development contributions applicable in respect of the subject proposal (as set out on Page No. 11 of the final Planner's Report) is not based on a 'cost per dwelling equivalent' but has instead been calculated on the basis of an '*average house price equivalent*' whereby the cost of a single wind turbine has been determined as equating to six times the average house price in Co. Mayo. On this basis the Planning Authority has calculated the applicable development contributions as follows:

- 21 No. Turbines x 6 No. 'Average House Price Equivalent' = 126 No. Dwelling Equivalent

Development Class: Industrial:

126 No. Dwelling Equivalent x \in 1,519 / Dwelling Equivalent =	€191,394
Footpaths and Public Lighting (Public Footpaths): 126 No. Dwelling Equivalent x €238 / Dwelling Equivalent =	€29,998
Total:	€311,356

N.B. An additional development contribution in the sum of $\notin 21,000$ towards the *'Provision of [an] Artistic feature within the County'* has also been included in Condition No. 50.

12.2.3.4 Having reviewed the Mayo County Council Development Contribution Scheme, I would agree with the applicants that there is no provision within same which would entitle the Planning Authority to utilise a figure as arbitrary as an average house price as a basis on which to calculate the development contribution applicable in respect of a nonresidential development such as that proposed. Similarly, I would accept the applicant's submission that the allocation of a monetary value of €1.5 million to a single wind turbine would be inappropriate given the absence of a clear rationale for same which has taken cognisance of the size and power output of the turbine proposed. Accordingly, it is my opinion that the Planning Authority's suggestion that the proposed development would be equivalent in monetary terms to 126 No. 'average' dwelling houses is fundamentally flawed and that its calculation of the applicable development contributions through the utilisation of a figure purportedly equating to an 'average house price equivalent' as set out in the Planner's Report is without proper foundation and fails to adhere to the terms of the current Development Contribution Scheme as adopted. In addition, I would also advise the Board that there does not appear to be any provision within the Development Contribution Scheme which would permit the levying of monies specifically towards the provision of an artistic feature in the county. In this respect I note that there is no reference to any requirement for this contribution in the final Planner's Report on file and it would appear to have been inserted by an unnamed party into an amended schedule of conditions appended to the Planner's Report at a later date with no rationale having been provided for the inclusion of same. Furthermore, the Planning Authority has failed to offer any explanation by way of a response to the grounds of appeal as to the reasoning for the inclusion of such a contribution. Accordingly, notwithstanding my earlier concerns as regards the Planning Authority's calculation of the wider development contributions to be applied to the proposed development, I would recommend that this element of the condition in particular should be omitted from any decision to grant permission.

12.2.3.5 Therefore, having established that the Planning Authority has failed to properly apply the terms of its Development Contribution Scheme, the wider issue of whether or not the subject proposal actually attracts a financial contribution (and the calculation of any applicable development contribution) must be considered. In this respect it would appear that the Planning Authority has utilised the development contribution rates applicable to both commercial and industrial developments, although the contribution for roads infrastructure would seem to have been derived from the rate applicable in respect of residential development (i.e. per housing equivalent). These rates were then utilised in the calculation of the applicable development contributions through the use of the 'average house price equivalent' as outlined earlier in this report.

12.2.3.6 Following a review of the Mayo County Council Development Contribution Scheme (as amended in 2007) it is of relevance to note that whilst Schedule 1 sets out the rates of contribution to be applied in respect of different classes of development (i.e.

Residential, Commercial and Industrial Development), it does not identify wind energy or wind turbines as an individual class of development. Accordingly, I would be inclined to conclude that there is no basis within the Scheme for the calculation of an amount payable towards public infrastructure and facilities in respect of wind energy developments. By way of precedent in this regard I would refer the Board to its determination of ABP Ref. No. PL16. 239586 (which related to a proposal for the continued extraction of sand and gravel within an existing quarry) wherein it was held that as there was no basis in the Mayo County Council Development Contribution Scheme, 2004 to provide for a financial contribution condition for a quarry development, the terms of the scheme had not been properly applied and thus there was no requirement to pay a contribution in respect of the development proposed. Therefore, it would seem reasonable by an extension of this logic that as the adopted scheme similarly makes no provision for the levying of a financial contribution in respect of wind energy development that the subject proposal would also not attract a development contribution. Given that the purpose of the development contribution scheme is to allow greater transparency into the way in which development contributions are calculated and applied, and in the absence of any provision which would permit the levying of contributions on wind energy developments, I am inclined to conclude that the Planning Authority has erred in its calculation of the development contribution applicable in this instance and that it has failed to properly apply the terms of the development contribution scheme as adopted. Indeed, I would suggest that the only element of the proposal which could otherwise be categorised as a 'commercial' / 'industrial' development as per the provisions of the scheme thereby necessitating a financial contribution would be the proposed control building (floor area: $50.1m^2$) which would need to be calculated on the basis of a 'housing equivalent' by the Planning Authority.

12.2.4 Condition No. 52:-

- 'Within one month of the date of this order, the developer shall lodge with Mayo County Council, a cash deposit, a bond of an insurance company, or such other security as may be acceptable to Mayo County Council, to secure the satisfactory reinstatement of the site, coupled with an agreement empowering Mayo County Council to apply such security or part thereof to the satisfaction completion of the reinstatement, including all necessary demolition and removal. The security shall be lodged as follows:
 - a) an approved insurance company bond in the sum of \pounds 630,0000 or
 - b) cash sum of €630,0000 to be applied to Mayo County Council at its absolute discretion if not completed to its satisfaction, or
 - c) such other security as may be accepted in writing by Mayo County Council

Reason: To ensure the satisfactory completion of the project'.

12.2.4.1 Section 7.19: 'Decommissioning and Reinstatement' of the 'Wind Energy Development, Guidelines for Planning Authorities' specifically states that the use of long-term bonds to secure the satisfactory reinstatement of a site following the cessation

of a project places an unreasonable burden on developers given the long time span involved in wind energy developments and is difficult to enforce. It subsequently states that the recycling value of the turbine components, particularly copper and steel, should more than adequately cover the financial costs of the decommissioning and thus the use of long-term bonds is not recommended. Accordingly, whilst I would acknowledge the difficulties associated with the imposition of long-term bonds in respect of wind energy developments, having regard to the nature and scale of the development proposed, the sensitivity of the receiving environment, and the wider uncertainty as regards the timing of the actual construction and operation of the proposal (e.g. the availability of a grid connection), in my opinion, it would be appropriate in the subject case to seek the lodgement of some form of security to ensure the satisfactory reinstatement of the site upon decommissioning of the project. In this respect I would concur with the decision of the Planning Authority to require a development bond in order to secure the satisfactory reinstatement of the lands in question, although I would suggest that this should be coupled with a further condition which expressly states that upon termination of the use of the wind farm, the turbines are be dismantled and all above ground elements removed from the site with the lands to be restored to their existing condition in consultation with the planning authority.

12.2.4.2 In relation to the requirement to lodge the development bond / security 'within one month of the date of this [the] order' as imposed by the Planning Authority, I am inclined to agree with the applicant that such a provision is unreasonable and unwarranted, particularly as the project has yet to secure a grid connection and thus is unlikely to be pursued pending confirmation of same. Similarly, I would accept the applicants case that no insurance company will provide a bond of €630,000 for a project which has only received planning permission. Accordingly, I would consider it appropriate to amend the condition as imposed in order to require the lodgement of the necessary security 'prior to the commencement of development'.

12.2.4.3 Finally, in terms of the actual amount of the development bond / security required, whilst the applicant has not expressly questioned the methodology used in the calculation of same, I would advise the Board that there is a clear error in the amount sought by the Planning Authority as imposed in Condition No. 52. In this respect I would refer the Board to the calculation of the 'Completion Deposit' as set out in the final Planner's Report which details that the amount of the development bond / security required was calculated as equating to 2% of the overall (estimated) cost of the proposed development. On the basis that each individual turbine costs €1.5 million the Planning Authority has calculated that the overall development cost will equate to approximately €31.5 million (i.e. 21 No. turbines x €1.5 million per turbines = €31.5 million) and that 2% of this figure is $\notin 630,0000$ (i.e. $\notin 6.3$ million), however, having reviewed same, it is abundantly clear that the Planning Authority has made a serious error in its calculation as 2% of €31.5m equates to only €630,000 and not €630,0000 / €6.3 million as detailed in Condition No. 52. Accordingly, I would recommend that if the Board wishes to specify the exact amount of security required in any decision to grant permission it should have regard to the foregoing.

13.0 RECOMMENDATION

Having regard to the foregoing I recommend that the decision of the Planning Authority be upheld in this instance and that permission be granted for the proposed development for the reasons and considerations and subject to the conditions set out below:

Reasons and Considerations:

Having regard to :-

- a) the national policy with regard to the development of alternative and indigenous energy sources and the minimisation of emissions of greenhouses gases,
- b) the guidelines issued by the Department of Environment, Heritage and Local Government in 2006 on Wind Energy Development,
- c) the provisions of the current Mayo County Development Plan,
- d) the character of the landscape and the topography surrounding the site,
- e) the distance to dwellings or other sensitive receptors from the proposed development, and
- f) the nature and scale of the proposed development,

it is considered that, subject to compliance with the conditions set out below, the proposed development would not have a significant adverse effect on the landscape or the visual or residential amenities of the area, would not adversely affect the natural heritage or the integrity of any European site, including Natura 2000 sites or any protected species. 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 further plans and particulars submitted the 6th day of March, 2012 and the 23rd day of November, 2012, except as may otherwise be required in order to comply with the following conditions. Where such conditions require points of detail to be agreed with the planning authority, these matters shall be the subject of written agreement and shall be implemented in accordance with the agreed particulars. In particular, the mitigation measures described in the Environmental Impact Statement, the Natura Impact Statement, and other details submitted to the planning authority, shall be implemented in full during the construction and operation of the development.

Reason: In the interest of clarity.

2. 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.

Reason: In the interest of clarity.

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

Reason: Having regard to the nature of the proposed development, the Board considered it appropriate to specify a period of validity of this permission in excess of five years.

4. 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.

- 5.
- a) The permitted turbines shall have a maximum hub height of 85 metres and a maximum tip height of 120.5 metres. Details of the turbine design, height and colour shall be submitted to, and agreed in writing with, the planning authority, prior to commencement of development.
- b) Cables from the turbine to the substation shall be run underground within the site.
- c) The wind turbines shall be geared to ensure that the blades rotate in the same direction.
- d) Transformers associated with each individual turbine and mast shall be located either within the turbine mast structure or at ground level beside the mast.
- e) The access tracks within the site shall be surfaced in gravel or hardcore and shall not be hard topped with tarmacadam or concrete.

Reason: In the interest of the amenities of the area.

6. Drainage arrangements, including the disposal of surface water, shall comply with the requirements of the planning authority for such works and services.

Reason: In the interest of public health and to ensure a proper standard of development.

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

Reason: In the interest of protection of the environment

8. Details of aeronautical requirements shall be submitted to, and agreed in writing with, the planning authority prior to commencement of development.

Subsequently the developer shall inform the planning authority and the Irish Aviation Authority of the co-ordinates of the as constructed positions of the turbines and the highest point of the turbines (to the top of the blade spin).

Reason: In the interest of air traffic safety.

9. Noise levels emanating from the proposed development following commissioning when measured externally at a noise sensitive location shall not exceed the greater of 43dB(A) L90, or 5dB(A)above background levels. If the noise contains a discrete, continuous note (whine, hiss, screech, hum, etc.), or if there are distinct impulses in the noise (bangs, clicks, clatters or thumps), or if the noise is irregular enough in character to attract attention, a penalty of +5 dB(A) shall be applied to the measured noise level and this increased level shall be used in assessing compliance with the specified levels. All noise measurements shall be made in accordance with I.S.O. Recommendations R1996/1, 2 and 3 "Acoustics – Description and measurement of Environmental noise".

Reason: In the interest of residential amenity.

10. Facilities shall be installed to minimise interference with radio or television reception in the area. Details of the facilities to be installed 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 residential amenity.

11. A condition survey of the roads and bridges along the haul route shall be carried out by a qualified engineer at the developer's expense both before and after construction of the wind farm development. The extent and scope of this survey shall be agreed in writing with the planning authority prior to commencement of development.

Reason: To assess the impact of the development on the public road network in the area.

12. 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.

- 13. 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 Report and the submissions made in connection with the planning application and with the appeal, for the written agreement of the planning authority. The environmental, health and safety management plan shall incorporate the following:
- a) a detailed construction programme, developed in consultation with the Inland Fisheries Ireland,
- b) a detailed method statement for construction,
- c) a detailed health and safety plan,
- d) a site drainage management plan, prepared in accordance with the submissions made in the Environmental Impact Statement by a suitably qualified drainage engineer or equivalent professional, to the satisfaction of the planning authority, and incorporating a detailed silt management plan and pollution prevention plan and including appropriately-sized silt trap and/or settlement ponds as required,
- e) details of the site drainage system which shall be installed to the satisfaction of the planning authority prior to the commencement of construction works on site,
- f) a programme for the on-going monitoring of water quality during the construction and operational periods,
- g) a construction waste management plan, prepared in accordance with the "Best Practice Guidelines on the Preparation of Waste Management Plans for Construction and Demolition Projects", published by the Department of the Environment, Heritage and Local Government in July, 2006, shall be submitted to, and agreed in writing with, the planning authority prior to commencement of development. The plan shall include details of waste to be generated during site clearance and construction phases, and details of the methods and locations to be employed for the prevention, minimisation, recovery and disposal of this material,
- h) an emergency response plan, and
- i) the environmental, health and safety management plan shall be subject to ongoing independent audit (all costs of which shall be borne by the developer), details of which shall be submitted to, and agreed in writing with, the planning authority prior to commencement of development.

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

14. The developer shall draw up an ecological monitoring plan in relation to the proposed development, to include monitoring before, during and after construction and to include potential impacts on flora and fauna, including birds. An annual report on the ecological monitoring shall be submitted to the planning authority, including for five years post commissioning of the project.

Reason: In the interest of ecological protection.

15. Prior to commencement of development, an Environmental Monitoring Committee (EMC) shall be established. The Committee shall include representatives of the developer, the planning authority, Inland Fisheries Ireland, and representatives of the local community. The exact composition and the functions of the Committee and the regularity of meetings shall be agreed with the planning authority.

Reason: To provide for appropriate review of environmental monitoring of the construction phases of the development.

- 16. The developer shall facilitate the preservation, recording and protection of archaeological materials or features that may exist within the site. In this regard, the developer shall
 - a) employ a suitably-qualified archaeologist who shall monitor all topsoil stripping associated with the construction of Turbine No. 16;

A report, containing the results of the monitoring, shall be submitted to the planning authority and, arising from this assessment, the developer shall agree in writing with the planning authority details regarding any further archaeological requirements (including, if necessary, archaeological excavation) prior to commencement of construction works.

In default of agreement on any of these requirements, the matter shall be referred to An Bord Pleanála for determination.

Reason: In order to conserve the archaeological heritage of the area and to secure the preservation (in-situ or by record) and protection of any archaeological remains that may exist within the site.

17. Prior to commencement of development, an exclusion / buffer zone shall be established around the external limits of Recorded Monument No. MA031-034 inside which no groundworks shall occur. This exclusion / buffer zone shall be set out and fenced off under the supervision of a suitably-qualified archaeologist details of which shall be agreed in writing in advance with the Planning Authority. No heavy machinery shall be permitted to operate within the limits of this exclusion / buffer zone and no materials associated with the construction or decommissioning of the proposed development shall be permitted to be stored or otherwise deposited within same.

Reason: In order to conserve the archaeological heritage of the area and to secure the preservation and protection of any archaeological remains that may exist within the site.

18. Soil, rock or peat excavated during construction shall not be left stockpiled onsite following completion of works. Details of treatment of stockpiled materials shall be submitted to, and agreed in writing with, the planning authority prior to commencement of development.

Reason: In the interest of the visual amenities of the area.

19. All site development works shall be carried out to a standard not below the minimum specified in "Best Practice for Wind Energy Development in Peatlands" issued by the Department of the Environment, Heritage and Local Government.

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

20. 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 masts and the turbines concerned (including foundations) shall be removed and all decommissioned structures shall be removed within three months of decommissioning.

Reason: To ensure satisfactory reinstatement of the site upon cessation of the project.

21. 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.

22. 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 reinstatement of public roads which may be damaged by the transport of materials to the site, coupled with an agreement empowering the planning authority to apply such security or part thereof to the satisfactory reinstatement of the public road. The form and amount of the security shall be as agreed between the planning authority and the developer or, in default of agreement, shall be referred to An Bord Pleanála for determination.

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

23. 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.

Signed: _____

Date: _____

Robert Speer Inspectorate