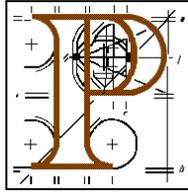


An Bord Pleanála



Inspector's Report

Development: Wind energy development including 8 wind turbines, 4 meteorological masts and other works

Site Address: Loughnan North, Commons, Uggoon Upper and Derryulk Tds., Tulla, Co. Clare

Planning Application

Planning Authority: Clare County Council
Planning Authority Reg. Ref.: 08/1950
Applicant: SWS Wind Energy Ltd.
Type of Application: Permission
Planning Authority Decision: Grant permission subject to conditions

Planning Appeal

Appellants:
1. Dr Joseph Wheatley
2. Irish Peatland Conservation Council
Type of Appeal: 3rd parties vs. grant
Observers:
1. Centre for Environmental Living and Training
2. Shannon Regional Fisheries Board
3. An Taisce
4. Daniel O'Gorman
Date of Site Inspection: 16th March 2010

Inspector: Stephen J. O'Sullivan

1.0 INTRODUCTION

1.1 This report deals with two third-party appeals against a decision of Clare County Council to grant permission for a wind energy development.

2.0 SITE

2.1 The site is in north-east Co. Clare. It is part of the upland area around Slieve Aughty. It has an area of approximately 170ha. It is elevated between 240m and 324m above sea level. This is significantly higher than the agricultural lowland to the south, but below the peak of 400m at Maghera c2.5km to the north-east. The landcover on the site and in the surrounding area consists of coniferous forestry, laid out in orthogonal blocks at various stages of growth, and bog. A small lake, Lough Ea, lies close to the north-eastern boundary of the site. Blanket bog predominates on the opposite shore of that lake. The topography across the site could be best described as rolling, with locally steep slopes. A forest track provides access to the site from the Regional Road R462 c1km to the west.

3.0 PROPOSAL

3.1 The proposed development would include –

- Clear felling up to 25.5ha of forestry
- Excavating stone from 7 borrow pits on the site
- Upgrading the access road to the site from the public road
- Building internal access roads approximately 5.5km long and installing a surface water drainage system
- Erecting 8 wind turbines with a hub height of 80m and a blade height of 125m. Each turbine could have a rated power output capacity of up to

3MW

- Erecting 4 meteorological masts, one of which would be 80m high and the rest 70m high. 2 of the mast are described as temporary, 2 as permanent.
- Installing an electrical sub-station

3.2 The amount of material that would be excavated from the site is estimated at 98,623m³. The estimated operational life of the windfarm is 25 to 30 years. The applicant requested that the planning authority grant permission for the development to be carried out within 10 years.

4.0 POLICY

4.1 The site is within the Special Protection Area (SPA) at Slieve Aughty, site code 004168. The SPA is of special conservation interest for Hen Harrier and Merlin, which are species listed in Annex 1 of the Birds Directive. According to the site synopsis it is a stronghold for the Hen Harrier with a 2005 survey showing 24 confirmed and 3 possible breeding pairs, 17 % of the national total. The mix of open areas and forestry provides optimum habitat conditions for the bird.

4.2 The site adjoins the candidate Special Area of Conservation (SAC) at Glendree Bog, site code 1912. The site hosts active blanket bog, a priority habitat in Annex 1 of the Habitats Directive. Its management plan states that Greenland White Fronted Geese, a species lists in Annex 1 of the Birds Directive, used the area to the south for roosting until 1994 and that, although none have been recorded recently, the site may still be used for passage.

4.3 The Department of the Environment, Heritage and Local Government issued Guidelines for Planning Authorities on Wind Energy Development in 2006. The guidelines state national policy in favour of the development of renewable energy resources including wind energy. Section 3.4 of the guidelines states that development plans should identify areas where wind energy will be

acceptable in principle.

Section 5.2 re-iterates the obligation on planning authorities under the EC Habitats Directive and the EC (Natural Habitats) Regulations 1997 not to authorise projects which would have an adverse effect on the integrity of Natura 2000 sites, including SACs and SPAs unless there is no alternative solution and where there are imperative reasons of overriding public interest. Peatland habitats in upland areas are particularly vulnerable to the impact of wind energy development due to high rainfall and short growing seasons there. Raptor bird species are at risk to impacts from wind energy development. Its impact on migratory species of bird also needs careful consideration. The main potential impacts are from disturbance, barrier to movement and direct loss of habitat, although collision mortality is a low risk. Section 5.3 identifies ground stability and the possibility of bog burst as a concern.

Section 6 of the guidelines deals with aesthetic considerations which, while subjective and qualitative, are stated to be some of the most critical issues for wind energy development. The site is located in an area which the guidelines would describe as mountain moorland. Although some of those landscapes may be inappropriate for wind energy as rare or pristine wilderness areas, many will be open for consideration. If the development is in one landscape character type but visible from another, the entire visual unit should be taken into consideration.

Appendix 4 of the guidelines describes best practice for wind energy development in peatlands. It states that the development of most peatland sites will lead to impacts on natural heritage. If development is permitted there, construction guidelines are given that may serve to reduce impacts. A thorough ground investigation and analysis would be required and construction on wet areas, flushes, easily eroded soils should be avoided.

4.4 The 2005-2011 Clare County Development Plan applies. Policy CDP 52 of the plan states that

The Planning Authority will normally only permit development where it can be clearly demonstrated that :

i) There is no direct or indirect adverse affect on areas designated as sites or candidate or potential sites of national, European or international importance for wildlife and

ii) There will be no direct or indirect impact upon protected species and their habitats; and

iii) There will be no adverse impact upon features of major importance to wild flora and fauna; and

iv) There are no adverse impact upon features of geological or geomorphological importance recognised by the Geological Survey of Ireland; and

v) There are no significant adverse effects on local habitats or species.

The plan was amended on 14th December 2009 to incorporate a new wind energy strategy. It identifies strategic areas for wind energy development, areas where it will be acceptable in principle and areas where it will not normally be permissible. There is a target for wind energy generation capacity of 550MW in the first two types of area. The site is not in any of those areas but in the residual area where wind energy development is open for consideration. Policy WES 10 is that wind energy applications in those areas will be evaluated on a case by case basis subject to viable wind speeds, environmental resources and constraints and cumulative impacts. The site is in the Slieve Aughty Landscape Character Area which has the visual capacity to absorb some wind energy development. The landscape character area to the east, around Lough Graney, is highly attractive and any tall development there would have a profound negative impact. When the application was made and when the planning authority made its decision the county development plan had a different wind energy strategy, under which the site was within the preferred area for wind energy development.

5.0 ENVIRONMENTAL IMPACT STATEMENT

5.1 **Volume 1** of the statement is a non-technical summary of the main statement which is contained in **volume 2**.

5.2 The **pre-amble** to the statement states that the site is owned by Coillte Teo. and was selected because of its location in the preferred area for wind energy development designated in the county development plan, its high wind regime, its offer of a grid connection and ease of site access. ESB networks have offered a grid connection for 24 MW. When it is designed this connection will be the subject to a future application for planning permission. No significant difficulties were encountered in the preparation of the EIS.

Section 1 is entitled *Introduction*. Section 1.1.4.2 states that the applicant proposes to contribute €12,000 per annum to the planning authority for a community fund. Section 1.2.3 states that a 24MW windfarm on the site has the potential to displace 61,474 tonnes of CO₂ per annum by replacing electricity production from a typical mix of coal, oil and gas.

Section 2 is entitled *Project Description and Construction*. Section 2.2.2 states that some minor upgrading of the forest roads leading to the site will be required. Section 2.2.7 states that the total land take for construction is estimated at 7.65ha. A felling licence will be sought. No compensatory forest planting is proposed. Section 2.3.5 states that peat excavated from the site will be stored as per the geotechnical engineers' requirements. Section 2.3.7 states that a route survey will be conducted to specify the exact haulage route to the site for the delivery of turbine components. Section 2.4 discusses alternatives in respect of sites, layout and access routes. No alternatives would meet the specified criteria.

Section 3 is entitled *Environmental Assessment Procedure*. **Section 4** is entitled *Human Environment*. 43 inhabited houses were identified within 2.5km, none of which would be within 1km of the nearest turbine.

Section 5 is entitled *Landscape and Visual Impact Assessment*. A map of the

zone of theoretical visibility of the development is submitted, as are photomontages from 24 viewpoints. The visual impact assessment states that the impact on one view, from the walking route to the north-east of the site, would be major. No other major impact was identified. The impact on views from around Lough Graney would be moderate, minor or none. The visual impact of the windfarm is categorised as moderate due to its design the ability of the surrounding landscape to screen and absorb it.

Section 6 is entitled *Ecological Impact Assessment*. It states that there were no limitations on the surveys carried out. Coniferous plantation is the dominant habitat on the site. Planting occurred mostly in the 1970's and the principal trees are sitka spruce and lodgepole pine. 32ha or 19% of the site area has not been planted and contains blanket bog and wet and dry heath, which are all habitats listed in Annex 1 of the Habitats Directive. 9.2ha or 6% consists of cleared forest. Part of the site drains to Lough Ea to the north-east, which is locally popular as a brown trout lake. A hen harrier survey was carried out in 2008. No breeding pairs were found within the site but there were several sightings in the area. The foraging potential of the site is low. Good foraging potential exists in Glendree Bog to the east and on the open bog and young forestry to the west of the site. It is unlikely that Greenland White-Fronted Geese would nowadays visit Lough Ea, although a small breeding population remains on Lough Derg. Most of the habitat lost during the course of development will be coniferous forest, which is not of conservation value. Some unplanted bog and heath will be lost, mostly from road construction, which will have a significant but minor effect. Construction of the proposed windfarm would be likely to give rise to disturbance to hen harriers. Monitoring of the Derrybrien windfarm cited in a report by Madden and Porter published in 2007 and other preliminary studies indicate that the operation of the windfarm would not cause such disturbance. Mitigation of the risk of collision might be required if a pair nested near the site. It is unlikely that the proposed windfarm would give rise to a cumulative adverse risk to hen harriers as it is small and the nearest other windfarms are more than 16km distant. Proposed mitigation to protect habitats include minimizing construction works on unplanted bog and heath and identifying other areas to store excavated peat. The potential for

habitat restoration on the site by the removal of trees and blocking of drains is identified, but no specific proposals are made to that effect. In relation to hen harriers, the area around the windfarm should be monitored and if any hen harriers nest nearby the NPWS should be contacted to determine any mitigation measures. Best management practice should be used during construction to prevent water pollution. It is envisaged that there will be no significant adverse effect on the ecology of the site or the neighbouring SAC due to the presence of the windfarm.

Section 7 is entitled *Geology, Hydrogeology, Drainage & Soil Stability Assessment*. It states that an original proposal for 9 turbines on the site was amended to 8 turbines with a different layout to avoid deep peat and other constraints. Survey results indicate that the soil cover on the site is peat, which ranges in depths from 0m at rocky outcrops to 5.2m. The peat is generally very wet to saturated. There are areas where forestry planting has failed, probably due to the depth of peat there. Slopes generally range from 0° to 15°, with one record indicating a slope of 45°. 10 streams and drains were identified on the site. The development would involve felling c25.5ha of forest and the excavation of approximately 98,623m³ of peat and 51,156m³ of rock. The intention is to avoid mass storage of peat on unsuitable ground. Surplus peat can be spread in a layer 1m thick beside the access roads; placed in the borrow pits; and the balance can be spread in low lying areas identified by a peat expert. The potential impacts include peat slippage or landslide; and alternations to the drainage regime with increased surface runoff and sedimentation of the existing drainage regime. Tree felling will have a positive effect by removing nutrients from the peatland habitat and increasing its saturation. Brash will need to be removed quickly in order to avoid the release of nutrients into watercourses. With regard to bogslide, it is noted that there are 3 localised pockets of deep peat (more than 1.5m) on the site. Slope gradients are high at two of the proposed turbine locations, T3 and T5, but peat depths there are shallow (0.3m and 0.4m respectively). The proposed access road is generally located on shallow peat but where it is constructed on deep peat testing, preparation and supervision will be required. A constraints map shows which parts of the site are unsuitable for development. Locally high slopes could not be avoided.

However the geotechnical investigations indicate stable peat conditions. The proposed 8 turbine layout was deemed by the applicant's consulting engineers as the best design layout available. Approximately 51,156m³ of surplus peat can be stored in the borrow pits which will reduce the level of material to be taken from the site. Best practice should be used if the removal of trees is required for habitat creation and the forest drains should be blocked in accordance with a water management runoff statement. Felling that could impact on Lough Ea should be carefully considered. The drainage of peat before excavation is recommended in the 1-1.5m depth zone. This drainage must be attenuated prior to outfall. It is strongly recommended that a geotechnical engineer approve construction methodology and supervises all excavations. No permanent spoil should be left on the site. If peat is required for reinstatement, the acrotelm should be turved. Catotelm can be stored temporarily on low, flat parts of the site. There is a low risk / probability of slope failure or peat slides. Any excavations that may tend to undermine up slope peat or unstable sub soils should be sufficiently supported to resist lateral slippage. Ponding of water should not be allowed in recent excavations and all sumps must be drained following rain. Ground should be effectively drained before earthworks. Blasting borrow pits is not recommended. Excavation should not occur after heavy rainfall or before it is forecast. Waste should be removed from the site. A construction management plan will include drainage and sediment management measures. The use of clear span structures set back from stream edges is preferred. The plan will be sent to regulatory bodies for review and approval. It will include recommendations for settlement and siltation ponds, a silt management programme, restricting side casting of surface materials to a depth of 1m, avoiding surcharging vulnerable areas of peat, seeding side cast areas, an environmental/construction audit and consultations with the Fisheries Board and the NPWS. All stone required for the development can be sources from the borrow pits. Provided that appropriate engineering supervision, good site practice and the incorporation of recommendations are carried out, no adverse effects are likely to occur arising from this development on ground conditions and the surrounding area.

Section 8 is entitled *Noise Assessment*. The impact of the development on the

soundscape will be negligible. **Section 9** is entitled *Material Assets – Incorporating Archaeological, Architectural and Cultural Heritage Assessment*. It recites measures to mitigate the impact of the development on any unrecorded archaeology. **Section 10** is entitled *Electro-Magnetic Telecommunications & Aviation Impact Assessment*. The likelihood of disruption is extremely low. **Section 11** is entitled *Shadowflicker Impact Assessment*. No significant impact is predicted. **Section 12** is entitled *Other Potential Impacts*. It states that no significant impact is predicted in relation to health and safety or turbine decommissioning. **Section 13** provides a summary of impacts and mitigation measures. **Section 14** is entitled *Interaction of Elements*. The interaction of impacts for wind energy are seen as minor compared to those for other power generation technology.

Section 15 is entitled *Conclusions of this EIS Report*. It states that all concerns raised by the planning authority on the previous application have been addressed and it has been demonstrated that the development has been designed to minimise and avoid significant environmental impacts. The advice of the applicant's consulting engineers regarding drainage and slope stability will be incorporated into a construction management plan that will be issued for agreement with all relevant regulatory bodies. The advice from the ecological consultants retained by the applicant considers that the development will not adversely impact the hen harrier population of the Slieve Aughtry SPA. The visual impact of the development on the overall landscape character will be minor. The project will not cause substantial adverse effects on human beings, housing or recreation. The environmental impacts associated with a wind energy development of this size and layout can be absorbed and accommodated at this location without significant adverse effects.

- 5.3 **Volume 3** contains various appendices to the EIS. **Appendix 6** is entitled *Ecological Assessment Report*. It includes details of surveys of the site, including a survey for hen harriers carried out between April and July 2008. Replanting of trees should include native species. Construction work should not be carried out between April and July to avoid disturbance to hen harriers. The residual impact of the development on flora and fauna and the conservation

interest of the SPA and adjoining SPA will not be significant.

Appendix 7 is entitled *Geotechnical Survey and Report on the Stability of the Existing Ground Conditions*. It includes the results of surveys on the site involving peat probes, gouge cores, outcrop logging and shear vane testing, as well as measurements of slope angles and searches for evidence of ground disturbance or stress. Rock was the dominant refusal type, although clay was recorded beneath the peat after 4 of the 42 gouge cores. The shear vane tests suggest a weak to moderately weak peat substrate throughout the site. The GSI have records of three peat slides within 10km of the site. An assessment is given of a layout of 9 turbines for which permission is not being sought. A description is given of the peat depths and ground slope in the vicinity of the proposed turbines, masts and access roads. There is still a low risk for peat instability particularly during construction. Redistribution of excavated peat and soil could have significant direct impacts on ground stability and the indirectly on the site's hydrology. Mitigation measures are recommended which are similar to those outlined in section 7 of the main EIS. Provided that appropriate engineering supervision, good site practice and the incorporation of recommendations are carried out, no adverse effects are likely to occur arising from this development on ground conditions and the surrounding area.

5.4 The EIS submitted with the application was augmented by the further information submitted to the planning authority, as follows -

Four other sites within 25km were considered as alternatives to the proposed site.

The hen harrier survey conducted in 2008 is stated to be in accordance with NPWS advice. The maturing of forestry in the area will diminish foraging opportunities in the area for hen harriers. The clearing of forestry required for the development will therefore have a beneficial impact.

A model indicates that there is a low risk of wind throw occurring at the site.

An Environmental Report was submitted for the proposed upgrading of the access road to the site from the public road on lands owned by Coillte Teo.. It states that conditions can be imposed on those works even though they are outside the site boundary by virtue of section 34(4)(a) of the Planning and Development Acts 2000-2006 because it is owned by the same person as the application site. The access road is c1.75 km long and 3m wide. It will need to be widened to 5m to accommodate the development. A dirty water drain will be installed on the southern side of the road and a clean one on the northern side. Runoff from the dirty water drain will be directed to silt traps which will then drain to vegetated areas. The junction with the R462 regional road will be widened to 16m. A separate turning area will be built at another access to a forestry road 500m to the south. Waste material from the construction will be laid at the northern side of the road. Traffic impacts will be minor and temporary. The habitats on the margin of the road are composed mainly of wet grassland with intermittent scrub. There is a peat bank on the southern side. The margin adjoins coniferous forestry, except for a stretch of the Affick River. The river has a moderate population of brown trout and sections of a high quality salmonid nursery and is slightly polluted. There is a potential impact on aquatic ecology from the release of sediment and other pollutants and works that would effect the hydrology of the river channel. These can be avoided by mitigation measures and no adverse impact on ecology are likely. The road will not threaten peat stability and mitigation measures will maintain the hydrology of the area. No other significant impacts are predicted in relation to the roadworks.

The submitted further information included a document entitled *EU Habitats Directive Article 6(3) Appropriate Assessment Report*. Potential impacts identified included loss of habitats; alteration of habitats; effect on peat stability; impairment of water quality; disturbance or displacement of bird species during construction; and disturbance or displacement of bird species during operation. The effect on the Slieve Aughtry SPA and the Glendree Bog SAC. The qualifying interests for the former site are Hen Harriers and Merlin, both Annex 1 species under the Birds Directive. No conservation management plan has

been prepared for the SPA. Such a plan has been prepared for the SAC whose qualifying interest is the active blanket bog, a priority habitat under the Habitats Directive. It refers to surveys of habitats and birds cited in the initial EIS. It refers to a survey of freshwater ecology not previously cited. The site is on the watershed of the River Fergus system and that which drains to Lough Ea and hence to the Shannon. Both systems include trout fisheries. The loss of mature coniferous forestry on the site included in the development would have a positive impact for hen harriers. The conclusion of the initial EIS regarding peat stability is repeated. The risk of collision or displacement of hen harriers from the operation of windfarms is now regarded as low (the 2007 article from Madden and Porter on the Derrybrien windfarm is cited to that effect, again). Disturbance during construction could be reduced by avoiding works during the hen harriers nesting season. There is no real evidence that Greenland White Fronted Geese roost or pass the vicinity of the site so as to be effected by the development. The development would not have add to the various other uses in the area that might effect the designated sites. Mitigation measures for hen harriers will include avoiding construction work from April to July and monitoring the operation of the windfarm. Flashing lights will mitigate the risk of collision with Greenland White Fronted Geese. The peat management plan and previously described mitigation measures will mitigate the potential impact on peat stability. A range of measures will mitigate the impact on water quality. Proposals are contained in a site management plan, which is appendix 9 of the further information, for habitat restoration by the selective clearance of 18.6ha of trees and spreading excavated peat over 1.784ha and blocking drains. The remainder of the site will change dramatically as commercial forestry is removed. It is strongly recommended that other clear felled area not be subject to replanting. The net effect is that the majority of the site will be cleared and habitats of varying quality will regenerate. It can be concluded that the proposed development will not adversely affect the integrity and conservation status of any Natura 2000 site or annexed species if all mitigation measures and recommendations are adopted and the site management plan implemented.

Appendix 3 of the further information and appendix 3 of the appropriate assessment report is entitled *Peat Management Plan and Drainage Management*

Plan. The peat management plan states that, of the 98,623m³ of excavated material, 51,156m³ will be placed in the worked borrow pits on the site, 40,688m³ will be laid in 5m wide strips along the roads and 6,779m³ will be placed in additional peat spread areas. Rock berms will be built at the front of the borrow pits to give stability and allow drainage to silt traps and settlement ponds along a dirty water drain. The spread areas along the roads will be between 300mm and 800mm deep. Typically the acrotelm will be stripped and placed on clear fell area while catotelm will be deposited in the borrow pits. Additional peat storage areas are shown where peat will be spread to an average depth of 380mm. Peat excavated from the catchment of Lough Ea will be deposited in the north-western part of the site. No excavation will occur there during heavy rainfall and felled trees and brash will be removed quickly to prevent increasing phosphorous levels in the lough. Silt traps and settlement ponds will keep water clear. Other mitigation measures described in the initial EIS are described again. The proposed site layout and construction is not viewed as high risk in terms of peat stability or water pollution if the plan is fully implemented and strictly enforced on the site. The drainage management plan states that the sandstone occurs on the site is a suitable material for road construction because it does not readily breakdown under loads and has a low dust factor. The borrow pits would be drained by clean water drains on the upslope side to divert water that would otherwise enter the pit, while dirty water discharging from the pit would be drained to vegetated area via silt traps and settlement ponds. Clean water drains will also intercept drainage onto peat spreading areas. The deposition of peat in layers up to 380mm will quickly revegetate thus preventing rainwater runoff from the areas carrying sediment away. The track near turbine T8 will require a stream crossing which will consist of a pre-cast concrete U duct whose construction will require a diversion of the stream. There will be no storage of excavated material in the catchment of Lough Ea and an interceptor drain will be installed there prior to road construction. Felled trees and brash will be removed quickly from this area. A dirty water drain with silt traps and settlement pond will be built along the southern edge of the widened access roads. Various other mitigation measures are listed. The drainage management plan is stated to provide a robust

mechanism for the management of surface water during the construction and operation of the windfarm.

6.0 HISTORY

- 6.1 Reg. Ref. 07/962 – the planning authority refused permission on 16th January 2008 for a windfarm with 8 turbines on the site. The reasons for refusal stated that the planning authority could not conclude that the development would not adversely effect the SPA at Slieve Aughty or as a result of soil stability and tree felling due to deficiencies in the submitted EIS.
- 6.2 Reg. Ref 09/705 – An application was made to the planning authority for permission for a 398kv line that would link to site to the national grid. A request for further information was outstanding with respect to that application when the planning authority made its decision on the application that is the subject of the current appeals.

7.0 DECISION

- 7.1 The planning authority decided to grant permission subject to 17 conditions. The reason for the decision stated that regard was had, *inter alia*, to national policy on the development of sustainable wind energy development and the location of the site on lands zoned as suitable for wind energy in the county development plan, and that it was not considered that the development would injure the amenities of property in the vicinity or the landscape character of the area, or have an adverse impact on the ecology of the area.

Condition no. 2 required the removal of structures 25 years after the commissioning of the development.

Condition no. 4 required the submission and agreement of a construction management plan before development commenced which would include proposals to ensure slope stability including necessary site investigation.

Condition no. 17 required a bond of €20,000 to ensure repair of any damage to the public road

8.0 REPORTS TO THE PLANNING AUTHORITY

On the initial application

- 8.1 Submissions – Numerous submissions objected to the development on grounds similar to those raised in the subsequent appeals and observations. The impact of noise was also raised. Submissions were received which supported the development subject to appropriate supervision and environmental expertise being employed and a financial contribution being made to community gain. A submission stated that a 10 year permission might lead to undue delays in the commencement or completion of the development.
- 8.2 Shannon Regional Fisheries Board – the development poses a significant risk to fisheries. The baseline data on aquatic ecology in the EIS is inadequate.
- 8.3 Department of the Environment, Heritage and Local Government – The site is in the Slieve Aughty Mountains SPA and close to the Glendree Bog SAC. It is a known roosting site for Greenland White Fronted Geese, a species listed in Annex 1 of the Birds Directive. The development may have a significant effect on the conservation objectives of those sites and an appropriate assessment is required. The responsibility for ensuring that an authorised plan or project would not have an adverse effect on the conservation objectives of a Natura 2000 site rests with the planning authority. Insufficient information is contained in the submitted EIS to determine whether adverse effects on a Natural 2000 site are likely. The conservation objectives for the SPA include maintaining the population of the hen harrier. The conservation objectives for the SAC include maintaining and enhancing the ecological value blanket bog and other habitats including lakes and to include the populations of bird species including Greenland White Fronted Geese. Although no geese have been recorded in recent years Glendree may still be used by geese on passage. The policy in the 2005 development plan identifying the area as preferred for wind energy

development was never subject to an appropriate assessment under the habitats directive which is required for plans as well as projects. Information on peat disturbance and its impact is required.

- 8.4 Heritage Officer – The proposed development would have a negative impact on the hydrology and ecology of the adjacent SAC which requires consideration by an appropriate assessment.
- 8.5 Planner’s report – Concerns arise with clear felling that has already occurred. Sightlines at the access to the regional road should be achievable. The proposed development will be visible over a wide area in this vulnerable landscape. However having regard to the layout and location of the proposed turbines and their limited impact on the skyline, the development is open for consideration. The internal road network crosses areas of deep peat. Detailed information on drainage has not been included in the EIS which is not acceptable. The development would more than 1 km from the nearest house and would not effect residential amenity. Indicative proposals for connection to the national grid should be sought. It was recommended that further information be sought from the applicant.

On the further information

- 8.6 Submissions – Several submissions were received which re-iterated previously expressed concerns about the proposed development, as well as about its visual impact on archaeological sites.
- 8.7 Department of the Environment, Heritage and Local Government – The required widening of the Coillte roads outside the application site but inside the SPA are a matter for the planning authority. The meteorological masts require justification. The grid connection is subject to a separate planning application, 09/705, but requires appropriate assessment. It is uncertain if clear felling on the site can provide habitat restoration. Assurances are required that such felling will be licensed and will not result in more planting elsewhere. Conditions should require the works to be completed to the satisfaction of the NPWS before

the windfarm is operational. There are concerns regarding the used of quarried areas or borrow pits for the disposal of peat and such proposals should be monitored under a condition.

8.8 Planner's report – A meeting was held with the applicant prior to the submission of further information. The upgrade of roads outside the site owned by Coillte can be required by a condition on any permission. The development will include measures to open up the forest canopy at this location and increase the foraging areas available to hen harriers. In relation to the ecology of peatland, the applicant has submitted a detailed peat management and drainage management plan will be prepared for the proposed development. The details submitted by the applicant are adequate to address the concerns regarding tree felling and ecology. Regard has been had to the wind energy strategy in the draft variation to the county development plan under which windfarms in this area are open for consideration. A grant of permission was recommended.

9.0 GROUNDS OF APPEAL

9.1 The grounds of the appeal from Joseph Wheatley can be summarised as follows–

- The development would be a windfarm on a site of blanket bog and so would threaten ground stability. Peat depths on the site range from 0 to 5.2m. Well humified peat, such as that in the area, is susceptible to a solid to liquid transition. Three landslides have been recorded in the area. The Derrybrien landslide occurred 17km to the north-west and was associated with the construction of a windfarm. The assessment of the geo-technical engineers retained by the applicant is open to question. A finding that the peat on the site is currently stable does not imply that it would remain stable under radically altered conditions. The selection of the site and the layout of the development does not appear to have been based on consideration of ground stability. Turbines 1,6 and 7 and the access road are in areas of deep peat. The engineering and construction techniques proposed would involve robust lowering of the water table which would

not necessarily ensure peat stability in period of high rainfall and would have serious environmental consequences. A bog slide in the area would threaten the adjacent SAC and Glendree Bog.

- The SPA around the site includes breeding populations of hen harriers and merlin, both of which are Annex 1 species under the Birds Directive. While the existing site is not a suitable habitat for the hen harrier, research indicates that hen harriers avoid wind turbines and recorded a 50% reduction in breeding bird densities and flight within 500m of them. An article by Pearce Higgins et al. published in 2009 and based on surveys of Scottish wind energy development is cited to that effect. The proposed development would therefore adversely affect the habitat of that species beyond the site's boundaries. The benefit of the proposed habitat restoration in mitigation of such effect would be marginal. Therefore the proposed development would have a serious adverse effect on an Annex 1 species.
- The site adjoins the SAC at Glendree Bog which includes active blanket bog, a priority habitat under Annex 1 of the Habitats Directive. It is also used by small numbers of Greenland White Fronted Geese, a species in Annex 1 of that directive. The conclusion in the appropriate assessment that any geese would quickly habituate to the turbines is not supported by evidence. The proposal is undesirable in relation to the SAC because the development would create a risk of water pollution and bogslide in the SAC and create disturbance to the habitat it provides for birds. It is unreasonable to locate a windfarm beside an SAC given that there are only two relatively small SACs in the Slieve Aghtries which the forestry plantations there are extensive. The proposed development would adversely affect the integrity of the SAC and is not required for imperative reasons of overriding public interest and would therefore contravene the EC(Natural Habitat) Regulations of 1997.
- The proposed windfarm would have a serious adverse impact on the

landscape around Lough Graney. This is a separate landscape character area from the one in the immediate vicinity of the site, as defined in the county development plan. Any tall development in that former landscape character area would have a profound negative impact, as stated in the county development plan. The proposed windfarm would dominate the western horizon from many views across Lough Graney from south of the village of Flagmount and so would transform the character of the landscape. The assessment of this impact as ‘moderate’ in the EIS is incorrect.

- Any reduction in greenhouse gas emissions that might arise from the generation of electricity at the proposed windfarm might be cancelled out by the emissions arising from its construction which would involve excavating about 100,000m³ of peat. The oxidation of that amount of peat would result the release of 393,000 tonnes of CO₂ and the windfarm would then have to operate for 21 years to become carbon neutral.
- The site is more than 15km from any area identified for development in the draft wind energy strategy for the county. The designation of the area around the site as a preferred location for wind energy in the current development plan is defective because that designated is not based on a proper consideration of the natural heritage value of Slieve Aughtry. In any event the development contravenes the current policy CDP 52 in the development plan because of its impact on natural heritage.

9.2 The appeal from the Irish Peatland Conservation County can be summarised as follows –

- The development would have an adverse impact on conservation status of the SPA at Slieve Aughtry and the SAC at Glendree Bog. Recent research has shown a considerable potential for negative impacts on peatland birds from windfarms (this is the same research cited in Joseph Wheatley’s

appeal). The development would also effect the hydrology on the adjacent bog.

- Bogbursts have arisen from the construction of windfarms in peatland areas that have not been subject to proper environmental impact assessment.
- The impact of carbon emissions from the disturbance of peat needs to be assessed in determining the impact of the proposed development on the level of greenhouse gas emissions.

10.0 OBSERVATIONS

10.1 The observation from the **Shannon Regional Fisheries Board** objects to the development on the grounds that it is not possible for the developer to guarantee that a landslip will not occur arising from the construction and operation of the windfarm that would be environmentally catastrophic. Three major bogslides have occurred in recent years that have devastated fish stocks and caused significant long term damage to the aquatic habitat. A further landslip occurred in connection with the construction of a windfarm in Leitrim in October 2009. In all cases experts had been employed which suggests that it is not possible to mitigate the risks associated with such works. If the board does grant permission, a list of conditions is recommended.

10.2 The observation from **An Taisce** stated that the development would have an adverse effect on the hen harrier population in Slieve Aughty which is already under pressure. Its impact on Merlin and Red Grouse is not determined. As such it would have an adverse impact on the SPA. It would effect the hydrology of the adjoining blanket bog and have an adverse impact on an SAC. The disturbance of peat would also result in the emission of greenhouse gases. Sediments from disturbed peat could also pollute watercourses and threaten aquatic species.

- 10.3 The observation from the **Centre for Environmental Living and Training** expressed concerns regarding the impact of the development on natural heritage and the landscape similar to those raised in the appeals. It also stated that there are sufficient areas designated in the county and in the adjoining parts of Co. Galway to provide the requisite level of wind power generation.
- 10.4 The observation from **Daniel O’Gorman** stated that the development would have a dramatic visual impact on an area around Lough Graney of extraordinary beauty. Greenland White Fronted Geese are seasonally present in the area and the development may adversely effect them. The impact of the development on that species and the surface water drainage regime has not been properly assessed.

11.0 RESPONSES

11.1 The planning authority did not respond to the appeal.

11.2 The applicant’s response can be summarised as follows –

- Dates of various stages of the application’s progress are given, along with tables giving the titles of various documents submitted by the applicant and consultations which it undertook.
- The description of development in Dr. Wheatley’s appeal is incorrect because it refers to the clear felling of 25.5ha of forestry, disregarding the additional 11.9ha of felling proposed in the submitted further information to increase habitat restoration. A full copy of the habitat restoration plan was included in the appropriate assessment report submitted as further information. The draft wind energy strategy referred to in that appeal does not have effect until a variation is made to the development plan. The board is referred to the appendices to the response with regard to the substantial grounds of the appeals.

- Appendix 1 is a solicitor's letter that states that the planning authority's decision was valid and had regard to matters required under article 6(3) of the habitats directive and the EC (Natural Habitats) Regulations. The decision in *Kenny vs. An Bord Pleanála No. 2 (2001 1 IR 704)* was that an application should be dealt with in accordance with the law which applied at the time the application was made. There can be no assumption that the draft wind energy strategy referred to in the appeals will be adopted by the planning authority. Therefore the applicant is entitled to have the appeal considered without reference to that draft variation. The information submitted by the applicant demonstrated that the development would comply with the requirements of policy CDP 52 of the development plan.
- Appendix 2 is a report from the applicant's consulting engineers. An account is given of that firm's experience including windfarm projects on upland bogs. The average depth of peat on the site is 1.69m. There are only four main areas of deep peat identified on the site with wide contour profiles. All turbines avoid peat depths of more than 2m. The report includes a lengthy commentary on the text of the submitted appeals. The assertion that peat is an inherently unstable material is incorrect. Peat would be stable if it lay on a flat plateau. The topography of the site and the slope and depth of peat varies. Shear vane measurements are reliable. The Derrybrien landslide is not comparable to the current case because no detailed peat geotechnical assessment was made of peat stability. There is no published report which demonstrates that the event in Co. Leitrim on 23rd September 2008 was the direct result of wind farm development. The assertions in the appeals which seek to contradict the conclusion by the applicant's consulting engineers with regard to peat stability are not based on site visits or appropriate professional expertise. The site is low risk because peat in excess of 2m is localised on the site; the site is relatively dry and well drained except where the peat is deep; and the forestry cover and associated drainage works have heavily modified and drained the original peat blanket. The site assessment took proper account of previous

survey work on the site. The purpose of a site drainage plan is not to lower the water table but to handle surface water flow from permanent works and avoid risks to watercourses. The development represents an optimum layout based on best practice. The location of Turbine No 4 does not pose a risk to Lough Ea because the peat in the vicinity is at an average depth of 1.5m, the slope angle is low at 5° and the area is well drained. The site is not within the same hydrological unit as Glendree Bog, as shown by the submitted catchment map. It is impossible for works on the site to have any effect on the hydrology of Glendree Bog because of the because of its higher elevation, its distance and the presence of Glendree stream. The proposed method for stress testing in peat referred to in the appeal from the Irish Peatland Conservation Council is not tried and tested. The methodology adopted by the applicant is best practice. A review was conducted by chartered geologist employed by the applicant's consulting engineers. It uses a risk analysis method based on 10 parameters which yield a score of 198 – which means that the site is low risk because the score is below 200. Various appendices are attached to this appendix that include information previously submitted to the planning authority.

- Appendices 3, 4 and 5 comprise reports by persons with qualifications in natural heritage and expertise on hen harriers and bog habitats. It includes a lengthy commentary on the text of the submitted appeals. The density of hen harrier population around the site is mid-range. The 2009 article cited in one of the appeals was published in September and was not available before the submission of the appropriate assessment. That study was based on Scottish habitats in open moorland. Irish hen harriers are more commonly found in pre-thicket conifer forest. The appeal by Dr Wheatley did not acknowledge the study and surveys cited in the submissions from the applicant. A copy of article by Madden and Porter based on a study of hen harriers around the Derrybrien windfarm is submitted. The appeal does not justify the premise that hen harriers would not use the corridors provided by the proposed clear felling because of disturbance arising from the proposed turbines. The absence of a winter field survey for Greenland White Fronted Geese is not a significant shortcoming because a detailed

risk assessment was carried out on the effect of the development on that species. The site occupies 0.01% of the SPA. The development will improve the foraging habitat for hen harriers by removing forestry and opening up corridors between bogland. The available data suggest that hen harriers are not vulnerable to the risk of collision with wind turbines. Although no conservation management plan has been published for the Slieve Aughty SPA it can be reasonably inferred that its conservation objectives are to maintain the hen harrier population and to maintain and, where possible, enhance the habitats on which it relies. There is excellent baseline data on the hen harrier population in the SPA. It has been demonstrated that the development will not affect the conservation status of the hen harrier or the merlin in the SPA. The 2009 study cited by one of the appellants is not entirely applicable because the breeding habitat of hen harriers in Ireland is different from that in Scotland and the north of England. As 5km is the maximum distance that a hen harrier will travel from the nest, those nesting beyond 5km from the development would not be affected by it. The alterations to habitat arising from the development will benefit other species apart from the hen harrier and will constitute a net conservation gain for the SPA. A critique of the 2009 study is made which concludes that it is worthy of consideration but it is not strong enough to lead or inform policy on wind farm development in Ireland because of concerns about the applicability of UK research and about the survey methods and mathematical models used. Mitigation measures will prevent bog failure or the release of suspended solids above 25mg/l which is a stringent level of protection. Only 13.5ha or 7.85% of the site drains to Lough Ea. Only 1 turbine and 360m of road is proposed in that area.

- Appendix 6 is a report from landscape architects. It defends the conclusions with regard to the visual amenity stated in the EIS and the further information submitted to the planning authority. The windfarm is not in the Lough Graney landscape character area defined in the and references. It states that there will be no impact on people enjoying the visual amenity of Lough Graney from the west, southwest, north or northeast. The spatial extent of the proposed development is modest and has been designed to

reflect the 2006 Wind Farm Planning Guidelines and is visible from a limited area of the lake and surrounding countryside. There is no reason why the windfarm should not be granted full planning permission.

- Appendix 7 is a calculation of the impact of the development on carbon levels in the atmosphere. It concludes that the operation of the windfarm for 4.6 years would displace enough emissions for other types of energy generation to offset the emissions that would arise as a result of the development, rather than the 21 years stated in the appeals. Estimated carbon loss arising from the development is 104,418 tonnes. Most of the loss would occur because of the release of carbon from the ground on the site as a result of works involved in the development. A critique is made of the calculations in the appeal from Dr Wheatley.

11.3 The response from Joseph Wheatley to the appeal from the Irish Peatland Conservation Council endorsed its content. It included a photomontage of the development from a location above Flagmount village and referred to the setting of Merriman's *Cúirt an Mheán Óiche* in the area to establish its importance to cultural heritage.

12.0 ASSESSMENT

The planning issues arising from the proposed development can be addressed under the following headings:

1. Policy
2. Natural heritage
3. Visual amenity
4. Adequacy of the EIS

12.1 Policy

Wind Energy Guidelines

The wind energy guidelines issued by the Department of the Environment, Heritage and Local Government lay down a general policy in favour of wind energy development in order to increase the use of renewable energy resources and limit the emission of greenhouse gases. However the guidelines also advise that any proposed wind energy development may give rise to particular concerns. In this regard the guidelines specifically refer to the legal obligation to protect aspects of natural heritage under the Habitats and Birds Directives (including bog habitats and migratory and raptor species of bird), to the stability of peatland, and to impacts on the visual amenity and landscape character of the area in which the project is located and adjacent areas from which it may be visible. The guidelines state that the development plan has a key role in reconciling the general policy and the specific concerns by identifying where wind energy resources are readily capable of development and where wind energy development would be acceptable in principle.

Relevant local policy

There is only one development plan in force at any time. A draft variation to the development plan which has been published but not adopted is not, therefore, a material consideration under section 34(2)(a) of the Planning and Development Acts 2000-2006 to which a planning authority, or the board, must have regard when making a decision on an application for permission. On the same basis, once a variation has been made by a planning authority and becomes

part of development plan, then the previous provisions of the plan cease to be material considerations to which a planning authority or the board must have regard when making its decision, even if the previous provisions were in force at the time the application was made. This can be distinguished from the situation established under section 265 of the acts, whereby express provision is made for the continued authority of the legislation that was in force when an application for permission was made. No similar provision exists to extend the authority of development plans that have been replaced or amended. The development plan as amended by the planning authority on 14th December 2009 therefore provides the relevant policy to which the consideration of the current application and appeal must have regard. Furthermore, all parties would have been aware at the time when the appeals, observations and responses were made to the board that the planning authority was considering altering the provisions of its development plan that were of particular relevance to the proposed development. Therefore all parties had to opportunity to make submissions to the board that dealt with the eminently foreseeable contingency that the development plan would be altered in the manner that subsequently occurred. It is noted that the applicant's response to the appeals was given to the board after the development plan had been finally amended.

County Development Plan

The county development plan lays out a wind energy strategy that sets an objective to achieve a capacity of 550MW for wind energy generation in the county by 2020. It identifies strategic areas for wind energy development, and other areas where such development is acceptable in principle. The strategy is that the target wind energy generation capacity of 550MW will be provided in those areas. The current site is in neither of those areas. Nor is it part of the area where wind energy development area not normally permissible. So, while the proposed windfarm would not materially contravene the provisions of the county development plan, its location is not favoured by those provisions either. Furthermore, the fact that the county development plan identifies other areas for the exploitation of wind energy, as is recommended by the national guidelines, and those other areas are stated to be capable of providing the entire target capacity for the county, implies that a failure to develop the current site would

not necessarily reduce the overall capacity for wind energy generation that could be achieved in the county. Rather it may result in that capacity being provided in another area that is identified in the statutory development plan as more suitable for such development.

Conclusion

I would therefore advise the board that consideration of the proposed development should be informed by the national policy in favour of exploiting renewable resources, but that the specific concerns raised by the appellants regarding natural heritage, peat stability and visual amenity are relevant to the application of the national wind energy guidelines and the county development plan. The location of the wind farm is neither supported nor prohibited by the wind energy strategy in the current development plan, although it is pertinent that that strategy identifies alternative areas where the entire target wind energy capacity should be located.

12.2 Natural Heritage

The obligations imposed on the state by Article 6 of the Habitats Directive are referred to in various policy documents and in the submissions from the parties. In brief, if a project is likely to have a significant effect on a designated site, (including an SPA or a candidate SAC), then it must be subject to an appropriate assessment of its implications in view of the site's conservation objectives, after which the competent national authority can only agree to the project if it has ascertained that it will not adversely effect the integrity of the site. The decision of the European Court of Justice in C-127/02 (the Waddenzee case) held that a national consent authority can reach such a conclusion only if it has made certain that the project will not adversely effect the integrity of site, which is the case where no reasonable scientific doubt remains as to the absence of such effects. As pointed out in the first report by the DoEHLG to the planning authority, the competent authority in this regard is the planning authority (and so on appeal, the board). The National Parks and Wildlife Service of the DoEHLG may state an expert opinion to the competent authority that the authority can ascertain after an appropriate assessment that the project would not adversely

effect the integrity of the site. It did not do so in the two reports which it made to the planning authority on the project currently proposed.

Slieve Aughtry SPA

The proposed development would be located within an SPA. It would entail significant works and the erection of substantial structures. It would therefore be likely to have a significant effect on the designated site and must therefore be subject to an appropriate assessment. The conservation objectives for the SPA can be taken to include the maintenance of the hen harrier at a favourable conservation status. The applicants have submitted much information regarding the hen harrier population and its habitats in and around the site, citing a published article that is based on monitoring data of the impact of Derrybrien windfarm on the hen harrier population of the same SPA. Therefore, taken together, the various submissions from the applicant present extensive information relevant to the conservation objectives of the SPA that describe the existing condition of the environment, the nature of the proposed development and the proposed mitigation measures. The submissions include analysis and predictions of the potential impact of the development on the conservation objectives of the SPA, and to its likely residual impact. The analysis and prediction of the likely residual impact of the development on the hen harrier population and the habitats that support it have been carried out by appropriately qualified persons and are based on empirical data. The conclusion presented in the EIS and subsequent submission that the development is unlikely to have any significant negative impact on hen harriers is therefore soundly based and probably accurate.

However, following the Waddenzee judgement, the test against which the proposed development must be judged is whether there is any reasonable scientific doubt regarding the absence of adverse effects. The test is therefore balanced against any proposed project which is subject to appropriate assessment. The appeal from Dr Wheatley includes assertions that the development would have an adverse impact on the hen harrier population, by collision risk and/or the permanent disturbance and displacement of birds during the operational phase of the development. Some scientific basis has been

provided for this assertion by the submission of a recently published article raising concerns about such impacts on the basis on research on various bird species, including hen harriers, in the vicinity of windfarms in Scotland. The qualified experts retained by the applicants provided various specific criticisms of the cited research and its usefulness for policy making in Ireland, but their submissions do not provide a sufficient basis to dispel the concerns raised in the appeal regarding the impact of the development on the hen harrier. A possible negative impact on the maintenance at a favourable conservation status of the hen harrier population of the SPA has therefore been established whose absence cannot be ascertained beyond reasonable scientific doubt.

The question then arises as to whether the possible negative impact arising from the proposed development could be regarded as having an adverse impact on the integrity of the Slieve Aughtry SPA. I would consider that it does. Notwithstanding the fact that the appeal site occupies only a small fraction of the SPA, the development would introduce several very substantial structures into the area whose impact could not be dismissed as trivial. Furthermore the appropriate assessment also requires consideration of the impact of any project in combination with other projects. The EIS and the other submission for the applicant seek to justify the selection of the appeal site for the proposed project on criteria including and offer of a grid connection, its wind speed resources, road access and its proximity to environmental designations. The criteria advanced would not clearly distinguish the current site from other lands in the SPA. Unless the decision to offer a grid connection to this site in preference to others was itself made after an appropriate assessment, it would circumvent the process and undermine the purpose of the Habitats Directive to rely upon such a decision when the competent national authority is carrying out its appropriate assessment. A grant of permission for the proposed development may establish grounds to argue for a similar permissive approach to proposals for windfarms in the same SPA which would have a further, negative cumulative impact on its conservation objectives. It does not appear to me that the timing of the applicant's proposal, i.e. before any other possible similar proposals, would provide a rational basis to disregard other such possible proposed projects that related to the protection of the environment or the proper planning or sustainable

development of the area. It is therefore considered that the possible negative impact on the hen harrier population that would arise from the proposed development should be regarded as having an adverse impact on the integrity of the designated site both in itself and in combination with other similar projects that could be proposed in the area.

Having regard to the foregoing, it is considered that an appropriate assessment of the implications of the proposed development for the conservation objectives of the Slieve Aughtry SPA must conclude that the proposed development would adversely effect the integrity of that SPA because the board cannot ascertain beyond reasonable scientific doubt that the proposed development, both in itself and in combination with other projects, would not have negative effects on the hen harrier population in the area, even if those effects are unlikely.

As the policy set out in the development plan, following the form advised in the national wind energy guidelines, is that the capacity for wind energy generation in the county can and should be located in other identified areas, it is not considered that there is any overriding public interest that would justify a grant of permission in this case under the procedure set out in article 6(4) of the Habitats Directive. The question of compensatory measures therefore does not arise.

Glendree Bog cSAC

This cSAC host active blanket bog, which is a priority habitat in Annex 1 of the Habitats Directive. The applicant's response to the appeal attempts to refute the assertion that the development might affect the hydrology of the blanket bog, and thus the conservation objectives of the adjoining Natura 2000 site, by discussing the mitigation measures required to avoid peat instability and water pollution in the vicinity of proposed turbine no. 4 and Lough Ea. However after inspection of the site, and consideration of the drainage catchment map submitted by the applicant and the contours on the OS maps, the only part of the development which would be likely to have a significant impact on the hydrology of the adjoining bog in the SAC would be the meteorological mast No. 4 near the boundary of the SAC and the service track leading to it.

However it is not considered that sufficient information regarding that part of the development, in particular the nature and extent of the groundworks associated with it, or a satisfactory analysis of the effects of those works has been submitted that would support a conclusion that it would not have a impact on the hydrology of the adjacent bog. Given that hydrology has a crucial influence on the nature and viability of a bog habitat, and so on its status as a priority habitat, this considered a serious omission that requires an adverse conclusion regarding the impact of the development on the adjoining cSAC.

Given the absence of any recent record of Greenland White Fronted Geese in the cSAC, and the fact that that bird is not a qualifying species for the SPA in which the appeal site is actually located, a conclusion may be made that the proposed development would not have any implications for the conservation status of that species.

Disturbance of peat

The site has a substantial depth of peat cover, high levels precipitation and locally steep slopes. Thus there is a considerable risk that substantial works upon it would threaten the stability of that peat. Part of the site on land that slopes down to Lough Ea, which supports a trout fishery. The several submissions from the applicant provide a large amount of survey information about the peat coverage on the site, a detailed account of the proposed mitigation measures and an expert analysis of the impact of the proposed development on its stability. Nevertheless a residual risk remains that the development could undermine the stability of the peatland on the site and so give rise to serious pollution of the aquatic environment from release of material that could not mitigated by the drainage mitigation measures that are proposed.

A significant reason why national policy favours wind energy development is because of the reduction in carbon emissions that it facilitates by the displacement of the burning of fossil fuels for electricity. However, in the current case works required to carry out the development will involve the disturbance and drainage of a large amount of peat, leading to its oxidation and thus the release of greenhouse gases. There would also be carbon losses from

the felling of trees, leaching of carbon and the loss of carbon fixing potential in the bogs, as well as some from the manufacture of the turbines. This would diminish the extent to which the development made a positive contribution on the matter of climate change when its construction and operational phases are considered together. The appellants and the applicants disagree as to the length of time for which the proposed windfarm would have to operate to offset the amount of carbon released by its construction, the former providing a period of 21 years, the latter 4.8 years. Whichever calculation is preferred, it is clear that the carrying out of the development will result in the release of a significant amount of carbon, the large majority of which would occur because of the location of the project in a peatland area

Having regard to the foregoing, it is concluded that the location of the proposed development in a peatland area would result in greenhouse gas emissions during construction and a threat to the stability of ground and thus to water quality. These negative effects might be justified if there were no alternative area in which national policy in favour of the exploitation of renewable energy could be implemented. However, having regard to the provisions of the wind energy strategy in the county development plan, this is not the case.

12.3 Visual amenity

The site is located in a range of hills whose landscape can best be described as rolling moorland that gently slopes up from the surrounding agricultural lowlands. The proposed development could be integrated in that expansive landscape without significant damage to its character and amenities. However the landscape around Lough Graney, c.6km north-east of the site, is very different. Lough Graney is an upland lake closely enclosed by steeply rising land on three sides. This establishes a landscape that is much more scenic, and sensitive, than that in the immediate vicinity of the site. This is recognised by its designation as a separate landscape character area with a high sensitivity to windfarm development in the wind energy strategy in the county development plan.

The proposed development would be visible from the southern end of the lake and from the higher land above the southern end of its eastern shore. From those areas it would appear above the ridgeline of the mountains which establishes the enclosure of the lake and provides its scenic setting. As such it would have a negative impact on the character and amenity of this scenic landscape. This impact would be lessened by the distance from the appeal site to the lake and the fact that the turbines would not be visible from most of the lake shore. Nevertheless it would remain a considerable negative effect that was relevant to the proper planning and sustainable development of the area. It might be justified if there were no alternative area in which national policy in favour of the exploitation of renewable energy could be implemented. However, having regard to the provisions of the wind energy strategy in the county development plan, this is not considered to be the case

It would be contrary to the advice given at section 6.9 of the national guidelines on wind energy to disregard the impact on the development on the landscape around Lough Graney because the site is located in a different character area. The selection of viewpoints for photomontages in any case is, of necessity, selective and incomplete. In this case I would advise the board that the photomontages submitted by the applicant do not illustrate the visual impact on the area around Lough Graney referred to in the recommendation below. However the photomontage submitted in the response by Dr Wheatley to the other appeal appears to exaggerate that visual impact and so would not form a useful basis for a decision on the matter.

12.4 Adequacy of the EIS

The Environmental Impact Statement submitted with the application was augmented by the significant further information that was submitted to the planning authority before it make its decision. Taken together, these submissions provide extensive information on the existing environment, the nature of the proposed development, the proposed mitigation measures and the likely impact of the development on various aspects of the environment. I would have concerns about particular elements of the submitted information

with regard to the examination of alternatives to the development and the impact of the one of the permanent meteorological masts and the access road to it on the hydrology of the nearby bog in the SAC. More generally, it is a concern that public access to the submitted information and thus participation in the decision making process, which is an objective of the European legislation on environmental impact legislation, was rendered more difficult by the complex and repetitive manner in which the information was presented and the poor level of integration of the supporting survey data and expert reports in the various appendices with the main text of the statement. Nevertheless, having regard to the large amount of survey data submitted and the high level of expertise employed in its analysis, I am satisfied that the information required under Schedule 6 of the Planning and Development Regulations 2001 (as amended) has been made available to the public and to the board.

13.0 CONCLUSION

13.1 The nature of the proposed development and its purpose are in keeping with the national policy to promote the exploitation of renewable energy resources and wind energy development. However the national wind energy guidelines recognise that particular proposals for wind energy development could have significant negative effects on the environment, and refers in this regard to development in Natura 2000 sites, on peatland and in or near scenic areas. The guidelines require development plans to provide guidance as to the location of wind energy development.

13.2 The location of the current proposals is not supported by the wind energy strategy in the county development. It would give rise to several specific negative effects, including –

- Disturbance to the hen harrier population in the Slieve Aughtry SPA, whose absence cannot be ascertained beyond reasonable scientific doubt and which would require an appropriate assessment of the proposed development in view of the conservation objectives for the SPA to conclude that it would, either in itself or in combination with other similar

projects that could be proposed in the SPA, adversely effect the integrity of the SPA.

- Possible impact on the hydrology on bog in the adjacent cSAC for the Glendree Bog which cannot be ruled out on the basis of the information submitted in connection with the application and appeal.
- A residual risk to the stability of the peatland on the site and thus of a release of peat that would cause serious water pollution
- Greenhouse gas emissions and other carbon losses associated with the proposed works in a peatland environment.
- A negative impact on the scenic landscape around Lough Graney.

None of these negative effects would be of overriding importance if they were considered in isolation, although their sum would be significant in terms of the proper planning and sustainable development of the area. Nonetheless it might be considered appropriate to allow those effects if it were established that there no alternative locations in which the national objective to increase wind energy generation could be achieved, and the other criteria in article 6(4) of the Habitats Directive were fulfilled. However the county development plan identifies other areas where the stated target for wind energy generation capacity can and should be provided. It cannot be established, therefore, that there are no alternative locations at which the benefits arising from the proposed development could be achieved. Therefore permitting the negative environmental effects described above would not be justified and the proposed development would be contrary to the proper planning and sustainable development of the area.

14.0 RECOMMENDATION

14.1 I recommend that permission be refused

REASONS AND CONSIDERATIONS

The location of the proposed development would give rise to several negative effects on the environment, which are -

- Disturbance to the hen harrier population in the Slieve Aughtry SPA, the absence of which cannot be ascertained beyond reasonable scientific doubt and which therefore requires an appropriate assessment of the proposed development in view of the conservation objectives for the SPA to conclude that it would, either in itself or in combination with other similar projects that could be proposed in the SPA, adversely effect the integrity of the SPA.
- A possible impact on the hydrology of bog in the adjacent Glendree Bog cSAC which cannot be ruled out on the basis of the information submitted in connection with the application and appeal, and which would have an adverse impact on the conservation objectives of that cSAC
- A residual threat to the stability of the peatland on the site and thus a risk of release of materials that would cause serious water pollution
- The release of greenhouse gases and other carbon losses due to the works in a peatland environment required to carry out the development.
- A negative impact on the scenic landscape around Lough Graney.

Having regard to identification in the county development plan, as amended on 14th December 2009, of other areas in Co. Clare as strategic areas for wind energy development and areas where such development is acceptable in principle, and the objective of the development plan to provide the target amount of wind energy generation capacity for the county in the areas so identified, it is not considered that the absence of alternative locations where national policy to promote wind energy development could be achieved has been established. Thus negative environmental impacts associated with the location of the proposed development are not justified. The proposed development would therefore be contrary to the proper planning and sustainable development of the area.

Stephen J. O'Sullivan
26th March 2010