



Inspector's Report

PL 03 244088

Development

10 year planning application to erect 9 wind turbines with a hub height of 85m and all site works at Carrowmore South, Einagh and Shragh, Doonbeg, County Clare.

Planning Application

Planning Authority: Clare County Council

Planning Authority Reg. Ref.: 14/0487

Applicant: Clare Coastal Windfarm Ltd.

Type of Application: Planning permission.

Planning Authority Decision: Refuse permission.

Planning Appeal

Appellant(s): Clare Coastal Windfarm Ltd.
Mrs K H Gorman

Type of Appeal: First v refusal
Third v refusal

Observers: Several

Date of Site Inspection: 19th & 20th January 2015

Inspector: Karla Mc Bride.

1.0 INTRODUCTION

1.1 Site and location

The appeal site is located to the N of Kilrush and c.2km to the S of Doonbeg Village in W County Clare. The Wild Atlantic Way (N67) is located to the S, W and N of the site with the Loop Head peninsula beyond to the W. Poulnasherry Bay and Moanmore Lake are located to the SW and SE respectively, there are 5 European sites within 1-5km of the site and the Doonbeg Golf Report is located to the N.

The surrounding area is low-lying, open and it is exposed and characterised by a mix of forestry, agricultural land and blanket bog which includes intact and cutover sections of peatland with turbary plots. The lands are traversed by a series of drains and watercourses that drain to Doonbeg River to the N and E, this river flows into the sea at Doonbeg Bay to the N and it is populated by Freshwater pearl mussel.

Vehicular access is off the Doonbeg to Kilrush road (L2034) to the W and via a network of bog roads. There are several farms and houses in the vicinity. There is a 7 turbine windfarm at Moanmore South to the S which is operational and a permitted 6 turbine windfarm at Tullabrack to the SE which has not yet been constructed.

Photographs and maps in Appendix 1 describe the site and location in some detail.

1.2 Proposed Development

A 10 year planning permission is being sought for the construction of a windfarm on a c.30.52ha site comprising:

- Nine turbines with a hub height of 85m, a rotor diameter of 82m with an overall height of 126m
- Turbine bases and hard-standings, site roads, drainage and site works
- An electrical compound, control building and meteorological mast (80m high)
- Widened vehicular entrance off the L2034 with new boundary fencing

Accompanying documents:

- Environmental Impact Statement
- Screening Report and Natura Impact Statement
- Letters of consent from landowners

1.3 Interdepartmental reports, prescribed bodies and submissions.

Interdepartmental reports:

The Engineering Department raised has no objections to the proposed development but raised concerns in relation to:

- The capacity of existing infrastructure (bridges/culverts/roads) to carry the intended loads.
- Haulage route has overlooked narrow sections of Lower Moore and Crawford Streets in Kilrush, unclear if route will also be used to haul quarry material.
- Drg. No. 4699/TR/003 has mixed up the identities of 3 quarries in the area.
- All works or damage to the road network will be at the developer's expense.
- The drainage works should not damage existing land or road drainage.
- Require a Special Contribution of 1 million euro.

The Fire Department has no objection to the proposed development.

Prescribed Bodies:

Department of Arts, Heritage and the Gaeltacht noted the close proximity of 5 European Sites.

FI is required in relation to:

- Peat disposal areas 1 and 4.
- Details of disposal sites.
- Location and details of culverts for all watercourse crossings.
- How buffer distances in the EIS will apply.
- Details of construction methodology.
- Details of the temporary compound.
- Type of fill to be used in road construction.
- Details of storage locations and management of surface layer peat.
- Management details for the treatment of contaminated water from construction works.

Other matters:

- Full details of the Environmental Management Plan should be available for review at the application stage.
- Grid connection should be considered and assessed.
- Detailed methodology and monitoring programme for freshwater pearl mussel should have been undertaken.
- Autumn migration bird surveys not provided.
- Potential exists for flight paths to cross the site between feeding and roosting locations.
- The assessment of cumulative impact on birds does not extend beyond windfarms and should look at other plans and land use changes.

The NIS:

- No reason given for why NIS looks at sites within 10km radius, and potential effects on wider bird migration, passage migrants and more distant SPAs are excluded.
- Deficiencies in Stage 1 screening are carried through to Stage2.
- Site specific conservation objectives are not utilised.
- The full scope of the generic conservation objectives for other sites is not considered (e.g. whether Greenland White fronted Geese is or could be considered a typical Annex 1 habitat of Tullaher Lough and Bog cSAC).
- Revised NIS informed by robust screening required.

Failte Ireland noted the reduced scale of the current proposal; referred to their study on visitor attitudes to windfarms; noted the proximity of the Wild Atlantic Way (WAW), the golf course, and other tourist amenity areas; the main potential impacts are construction related and visual within a coastal setting; and the incremental proliferation of windfarms will detract from the WAW and other tourism initiatives.

An Taisce raised concerns in relation to the close proximity of European sites; the potential impact on flight paths for golden plover and other birds; the purported decline in Greenland White Fronted Geese (NIS); the lack of integrated strategy for peatland management and a carbon management plan; and impacts on residential and visual amenity.

Inland Fisheries Ireland has no objection to the proposal provided that water quality and water habitats subject to compliance with all water related regulations.

Irish Aviation Authority has no objection to the proposed development subject to an agreed scheme of aviation obstacle warning lights for turbines.

Health Services Executive has no objection to the proposed development subject to assessment and/or monitoring of noise, dust, shadow flicker and water quality.

National Roads Authority has no objection to the proposed development subject to compliance with Planning Authority requirements.

Submissions:

A total of 42 submissions were received from local residents and businesses who raised concerns in relation to: - cumulative visual impact; impacts on residential and tourist amenity; non-compliance with Council plans and inequitable distribution of windfarms; adverse impacts on Doonbeg River, water quality, freshwater pearl mussel; hydrology and flood risk; impacts on birdlife; inadequate infrastructure, traffic generation and hazard; noise, dust, shadow flicker and health impacts; property devaluation; undesirable precedent; and inadequacies in the EIS and NIS.

1.4 Planning Authority's Decision

The Planning Authority decided to refuse planning permission for 4 reasons.

1. Excessive scale of development given the proximity to the existing Moanmore wind farm (7 turbines) and the permitted Tullabrack wind farm (6 turbines); injury to visual amenities; and contrary to the County Windfarm Strategy and Objective CPD 10.3 of the Development Plan.
2. Serious injury to visual and tourist amenities given the scale of the proposal in conjunction with existing and permitted windfarms, and its location relative to residential properties, Doonbeg Village and tourist amenities.
3. The proposed drainage system (within a peatland area) could constitute a serious risk of water pollution to the Doonbeg river system which contains fresh water pearl mussel.
4. Inadequate NIS and insufficient information to assess the implications for the adjoining River Shannon & River Fergus Estuaries SPA and Tullaher Lough & Bog cSAC in relation to Greenland White Fronted Geese and other conservation objectives; non-compliance with EU Habitats Directive (Article 6(3) and Planning Act 2000 (S.177T (2))); significant impact on the adjoining Natura 2000 site and material contravention of Objective CDP 17.3.

This decision reflects the report of the County Planning Officer.

1.5 Planning history

Appeal site:

ABP Ref. PL03.PA0025: SID application for a 45 turbine windfarm (overall height of 126m), 110kv sub station with 2 control buildings, electricity compound, waste water holding tank, new freespan concrete bridge, permanent meteorological mast, viewing tower and associated site works. Permission refused for 3 reasons related to:

1. The scale and proximity to the developed Moanmore wind farm (7 turbines) and to the site of the permitted Tullabrack wind farm (6 turbines) would be contrary to the provisions of the Clare Wind Energy Strategy as it would result in an excessive concentration of development in one part of the county and outside of the areas identified as 'Strategic' in the adopted strategy.
2. Serious injury to residential amenities by reason of visual intrusion and overbearing visual impact, and it would seriously detract from the tourism resource of the area.
3. The proposed drainage system (within a peatland area) could constitute a serious risk of water pollution to the Doonbeg river system which contains fresh water pearl mussel.

Neighbouring sites to SE:

Reg. Ref. 10/0064: Permission **granted** for a 6 turbine windfarm at Tullabrack/Moanmore with an overall height of 120.5m, electrical compound, substation and ancillary works at a site c. 13m to the SE of the appeal site. Not yet constructed.

Reg. Ref. 03/1100: Permission **refused** by the Council and ABP for a 6 turbine windfarm for reasons related to adverse impacts on visual and residential amenity.

Reg. Ref. 03/0908: Permission granted by the Council and **refused** by ABP for a 6 turbine windfarm at Tullabrack for reasons related to adverse impacts on residential, visual and natural amenities including bird habitats.

Reg. Ref. 00/0952: Permission refused by the Council and **granted** by ABP for a 7 turbine windfarm at Moanmore South (PL03.123292) which is operational.

1.6 The Environmental Impact Statement

The EIS described the site and neighbouring windfarms; stated that the proposed development would be compliant with national and local planning and energy policy; considered alternatives (including the “do nothing” scenario); and provided a detailed description of the proposed windfarm. The main body of the EIS described the receiving environment; outlined the study methodologies; assessed the potential impacts on the receiving environment; proposed mitigation measures for the construction and operational phases (including monitoring); identified residual impacts; and assessed interactions. The main conclusions are summarised below.

Flora, fauna and fisheries:

- Surveys undertaken to determine the presence of Annex 1 habitats and Annex 11 species in the vicinity of the site (including hen harrier, Whooper swan, Greenland white-fronted goose, Freshwater pearl mussel and Otter).
- Disturbed site not covered by any sensitive environmental designations but several European sites nearby.
- Localised loss of cutover bog and acid grassland habitats due to construction of hard-standings and access roads - minor impact predicted
- Site located within the Doonbeg river catchment (which supports Freshwater pearl mussel, salmon and otter) - mitigation measures will be applied during construction to protect water quality.
- Wintering flocks of Whooper swan and Greenland white-fronted geese use several sites in the vicinity but not the turbine locations, there are no recorded flight paths over the site and both flocks will rapidly habituate to the turbines; Hen harrier, Peregrine falcon and Merlin occasionally forage over the site in winter but do not use the area for breeding – no impact predicted.

Soils and geology:

- Field surveys and desk studies undertaken for geology and hydrogeology.
- Area comprises sandstone and siltstones overlaid with unconsolidated glacial deposits, clay and raised bog peat deposits with no exposed bedrock; slope gradients range from 0-2 degrees; humification values are between H4 and H8 and shear vane tests indicate a range of 8kPa to 40kPa (indicative of very soft to moderate strength peat); no historic records of land or peat slides within a 20km radius and no sign of stressing or instability.

- *Potential impacts include:*
 - Poorly managed construction activity could destabilise areas of blanket and cutover bog with severe impacts on soils and geology.
 - Handling, storage and re-use of excavated soils could have negative direct impacts on slope stability and indirect impacts on water quality.
 - There is a negligible risk of slope failure and mitigation measures are required for the construction phase to prevent ground stressing.

- *Mitigation measures include:*
 - Ground preparation in advance of excavation works with adherence to guidelines, monitoring, and expert supervision to prevent instability.
 - Use of peat handling measures (for living and non-living peat) to ensure safe storage of temporary stockpiles and excavation piles away from drains, streams, high slope gradients and break of slopes.
 - Adherence to best practice mitigation measures to avoid instability.
 - Excavated soils and equipment must be either re-used or removed from the site at the end of the construction phase.
 - Retention of an independent peat geotechnical engineer throughout the construction phase.

- *Predicted impacts following mitigation include:*
 - There will be a localised change in ground conditions due to hard-standings and access roads.
 - On-going monitoring of ground conditions at an agreed frequency during the operation phase is recommended.

Water:

- Field surveys and desk studies undertaken for water and hydrology.

- The N part of the site is drained by tributaries of the Doonbeg River which flows E-W c.1km N and NE of the site and the S part of the site is drained by a small river that drains into the Shannon Estuary to the S; underlying bedrock

is classified as LI (locally important aquifer, generally moderately productive only in local zones) and there are 7 wells within 2km of the site boundary.

- *Potential **construction phase** impacts include:*
 - Increased surface water runoff from developed sections with potential for a significant negative impact if not controlled or mitigated.
 - Release of suspended solids has the potential to have a short to medium term, temporary but significant negative impact on receiving surface waters.
 - Pollution from hydrocarbons (plant equipment etc) has the potential to have significant to severe impacts and controls are required.
 - Groundwater seepage during excavations has the potential to have a short term negative impact that can be controlled by interceptor drains.
 - Low risk of aquifer pollution due to poor aquifer properties and low permeability of overburden.

- *Construction phase mitigation measures include:*
 - Installation of a constructed drainage design to include:
 - Buffered outfall fans along the roads to disperse runoff across the site in a diffuse manner that mimics baseline hydrology.
 - A 2-tier stilling pond system to control runoff discharge and attenuate suspended solids.
 - Install drainage and pollution control measures before construction commences and during dry ground conditions.
 - Implement measures to prevent peat erosion.
 - Provide a 50km buffer zone around site drainage.
 - Implement a site specific discharge and water chemistry monitoring programme.
 - Prepare an environmental management plan to include regular checking and maintenance of pollution control measures related to water quality monitoring.

- No storage or transferral of hydrocarbons on site and all refuelling should take place off site.
- Provide a temporary self-contained port-a-loo with integrated waste holding tank.
- Any groundwater seepage should be intercepted by an interceptor drain and diverted to the constructed drainage system for pollution control attenuation prior to discharge.
- *Potential **operation** impacts include:*
 - Potential for damage to surface water mitigation measures with continued risk of suspended solids entering surface water network.
- *Operational mitigation measures include:*
 - Preparation of an environmental monitoring and audit programme.
- *Predicted impacts following mitigation include:*
 - Some localised changes to how water flows at the site.
 - Some short term deterioration of the quality of runoff waters.
 - Compliance with licence requirements and on-going monitoring of water discharge and water quality at an agreed frequency during the operation phase is recommended.
 - The hydrological impacts will be negative, slight and temporary overall.
 - Increased runoff will be a negative, slight and permanent impact.

Air and climate:

- Field surveys and desk studies undertaken for air and climate.
- Air quality is good.
- No long term negative impacts on air quality predicted but some short term dust impacts during the construction phase.
- Reduction in greenhouse gas emissions and a carbon sequestration calculation undertaken.

Noise:

- Field surveys and desk studies undertaken to prepare a Noise Impact Assessment for surrounding houses.
- Predicted noise levels will meet the 40dbA limit for day and night and operational and cumulative levels in compliance with the Targeted Review (2013) noise levels.
- Operational noise levels at the 10 closest houses will be marginally higher.
- Operational low frequency noise and vibration will have a negligible impact on residents and local properties.

Shadow flicker:

- Worst case shadow flicker impacts were calculated.
- As this only occurs during specific times of the year and at specific times of day, the turbine can be pre-programmed to turn off and remove the impact.
- 50 houses were recorded within 1.2km of the windfarm, 44 will experience shadow flicker impacts but no houses experience over 10 hours of flicker.
- No houses are located within 500m of a turbine in line with the Guidelines and it is not necessary to condition the non-operation of turbines.

Landscape:

- Field surveys and desk studies undertaken to prepare a Landscape and Visual Impact Assessment.
- Site is located within a low-lying flat basin contained to the E, S and W by gently rising terrain with the coast to the N, settlements to the N and NW, and the area is windswept and poorly drained.
- Proposal is located within the Loop Head LCA and it is acceptable in principle for windfarms as per the Council's Wind Energy Strategy.
- *Potential impacts include:*
 - *Landscape:* The central study area landscape has a low sensitivity rating, the magnitude of the impact is low as the windfarm will be

assimilated into the broad and open landscape and the resultant impact is predicted to be slight to imperceptible.

- *Visual*: 18 visual receptor locations and impact rates varied from High to Low; more than half registered as Medium while most of the remaining rated as High and mainly at elevated locations with broad panoramic coastal vistas and along the tourist routes; the windfarm can be comfortably assimilated into the landscape.
- *Cumulative*: is predicted to be medium when viewed with other windfarms in the area.
- *Overall significance*: the predicted range of impact significance is confined to the mid to low end of the spectrum.

Electromagnetic interference:

- Consultations undertaken with existing radio, TV and mobile phone operators to determine if the windfarm would have any impact on these utilities, minimal impact predicted other than some TV aerials may have to be repositioned.

Material assets:

- The potential impact on agriculture, forestry, natural resources of economic value, the road network, telecommunications and air traffic was assessed. No impacts predicted except for minor impacts along the haul route which will require road upgrades along certain sections.
- *Grid infrastructure network*: there are several interconnections through this section of W Clare however the connection method, cost and timeline should only be viewed as indicative as it is difficult to suggest connection methods for a post Gate 3 project.
- *Property value*: No negative long terms impacts predicted.
- *Air navigation*: No negative impacts predicted subject to compliance with aeronautical lighting and positional data requirements.

Cultural heritage:

- Field surveys and desk studies undertaken to assess cultural heritage constraints and no sites or structures of archaeological, agricultural or local heritage value are located within the sites or nearby.

Interactions:

- Interactions between the foregoing will take place but with no significant adverse impacts on the environment predicted subject to compliance with the mitigation measures.

1.7 The Screening Report and Natura Impact Statement

This report states that consultations took place with the NPWS, IFI and Clare County Council in relation to the previously proposed 45 turbine windfarm and that a data request was made to the NPWS (2010) in relation to Whooper Swan, Greenland White-fronted Goose and Hen Harrier.

The Stage 1 Screening Report listed several European sites within a 10km radius of the proposed windfarm, it identified the potential impacts and concluded there is a risk of potential impacts to several species listed as qualifying interests for some of the sites and that a Stage 2 NIS is required.

The Stage 2 NIS described the European sites and listed their Conservation Objectives; described the proposed development; identified the potential impacts on two of the sites and their qualifying interests; undertook an analysis of in-combination effects; listed the mitigation measures; and concluded that the proposal would not have a significant negative impact on any of the European sites or their qualifying interests. The report was informed by surveys of Greenland White-fronted Geese (2009-2014) and Hen Harriers (2010-2011).

Stage 2A: European sites:

- *Tullagher Lough and Bog SAC* which is listed as important for overwintering Greenland White-fronted Geese which regularly use the grasslands to the W, and Whooper Swan which are both Annex 1 species but not qualifying interests.
- *River Shannon and Fergus Estuaries SPA* which regularly supports c.55,000 wintering birds including a nationally important number of Whooper swan which uses areas outside the site for feeding

Stage 2B: Project description:

- Previous reasons for refusal considered and turbines sited to:
 - Reduce visual impacts at sensitive receptors.
 - Avoid risks to water quality and freshwater pearl mussel.

- Avoid areas of sensitive peatland habitat.
 - Avoid bird roosting and foraging habitats.
 - Minimise risks of intercepting flight lines for any bird species.
- Surplus peat will be deposited at 3 re-instatement areas within humid acid grassland which have been selected so as not to be within:
 - 100m of a natural watercourse.
 - 20m of a major arterial drain or 10m of a minor drain containing dry water flows greater than 1lt/sec.
 - Areas of gradient greater than 1:20.
 - Gully channels, hags, pool system and wet flushes.
 - Areas of deep peat and containing little fibrous content and high humification values.
 - Areas designated as sensitive habitat (intact bog).
 - Other works:
 - SUDS will be applied to drainage and sediment control during construction and operation.
 - Silting ponds will be constructed at each turbine location to provide for settlement of suspended solids in surface water run-off with a 12 hour retention time.
 - A series of silt traps will be installed at 250m intervals along all surface drains which will have buffered outfalls.

Stage 2C: Potential impacts:

- *Greenland White-fronted Goose:*
 - Not present on site for feeding or roosting.
 - Uses Tullagher Lough and Bog SAC and adjacent grassland to the W for roosting and foraging.
 - No regular movement of geese across the site.
 - Numbers using the SAC have fallen since the 1990s.
 - No records of nearby sites been used in recent years.
 - The distance between the windfarm and the current preferred feeding area is c.1km with a minimal insignificant risk of disturbance.
 - No potential flight paths would be intercepted.

- *Whooper swan:*
 - Not present on site for feeding or roosting.
 - Regular foraging in the wider area and along Doonbeg River to the E.
 - Mainly use Tullagher Lough and Farrow Lough for roosting to the W.
 - C.79 swans forage and feed in the surrounding area.
 - The main flight path is to the W of the site along a N-S axis.

- *Collision impacts:*
 - Site does not attract larger raptors that fly at rotor blade height or high densities of other birds that fly at rotor blade height.
 - Site does not intercept regularly used flight paths for geese or swans.
 - Habituation with the location of turbines is likely to occur as evidenced by the lack of mortality at the neighbouring Moanmore windfarm.
 - Some swan mortality may occur but the risk is insignificant.

- *Displacement impacts:*
 - The nearest swan foraging sites are at a sufficient distance (500m to 2km) so as not to cause disturbance.
 - Research indicates that geese and swans may approach between 100-600m from turbines and that habituation occurs between 40-100m.
 - Overall risk of displacement is insignificant.

Stage 2D: In-combination effects

- *Potential impacts on:*
 - Tullagher Lough and Bog SAC.
 - The River Shannon and Fergus Estuaries SPA.

- *Other projects:*
 - Moanmore windfarm – 7 existing turbines c.2km to the SE (with no bird strikes over the past 10 years).
 - Tullabrack windfarm – 6 permitted turbines c.2km to the E

- *Conclusion:* In-combination effects not significant.

Stage 2E: Impact mitigation

- *Mitigation through avoidance*

- *Greenland White-fronted geese*: avoidance of any known feeding and roosting sites, site does not intersect any of the obvious flight paths between feeding and roosting sites and no mitigation required.
- *Whooper swan*: site avoids any known feeding and roosting sites, and no known flight paths will be intercepted by the turbines.
- *Scaup duck*: potential flight paths are to the S of the site.
- *Mitigation during construction*:
 - Swans will rapidly familiarise with new landscape features with minimal risk of collision.
 - Turbines will only be erected over a summer period and be in place when birds arrive on their wintering grounds in October/November.
 - Long term post construction winter monitoring of geese and swans for 3 years post construction comprising 4 monthly visits.
 - Submit monitoring reports to NPWS for review and publication.
 - Vegetation clearance will only take place outside of the bird breeding season (March –August).

NIS Conclusion:

- Proposal does not impact directly or indirectly on any European sites.
- Proposed windfarm will result in no significant negative impact on any European site or on the qualifying interests for any site.

2.0 NATIONAL AND REGIONAL POLICIES

2.1 National Spatial Strategy 2002-2020

The NSS sets out a national planning framework to co-ordinate future development and planning throughout the country in a sustainable manner and it seeks to promote reliable and effective energy systems as key prerequisites for effective regional development.

2.2 National Development Plan 2007-2013

The NDP identifies environmental protection as one of the main considerations in relation to sustainable energy policy.

2.3 Mid-West Regional Planning Guidelines 2010-2022

The Guidelines provide a long term planning framework for the overall development of the region. Section 2.2.3 notes that the region has a wide range of renewable energy resources and section 6.6.1 states that favourable consideration should be given to renewable energy proposals subject to consideration of the environmental and social impacts as well as potential landscape impacts.

2.4 Wind Energy Development Guidelines - Guidelines for Planning Authorities, June 2006.

These Guidelines provide advice to Planning Authorities in relation to the preparation of Development Plan policies for wind energy including the identification of suitable locations for windfarms and in dealing with planning applications. A reasonable balance must be achieved between meeting Government Policy on renewable energy and the proper planning and sustainable development of an area.

The Guidelines provide advice on the type of information that should be submitted with planning applications which includes ground conditions (including peat stability); site drainage and hydrological works; size, scale and site layout; impact on natural/cultural heritage; landscape/visual impact; local environmental impacts; local road network and internal access tracks; cumulative effects; location of quarries to be used as burrow pits during construction; waste disposal and decommissioning. They recommend that the noise impacts should be assessed particularly for residential amenity and shadow flicker is addressed.

Chapter 5 addresses Natural Heritage and PAs must ensure that a proposal, which is likely to have a significant effect on an SAC or other designated area, is authorised only to the extent that the planning authority is satisfied it will not adversely affect the integrity of the area. In relation to birds it is noted that the extent to which birds will be impacted by wind energy developments will vary depending on species, season and location and these impacts may be temporary or permanent. The main potential impacts to birds from wind energy developments have been identified as:

- Disturbance during construction and operational phases leading to the temporary or permanent displacement of birds from the site and its environs.
- Collision mortality, although studies have shown this to be low risk.
- Barrier to movement, although studies have indicated that the response by birds to wind energy development may be variable and related to species and/or season.

- Direct loss or degradation of habitats for breeding, feeding and/or roosting purposes, particularly in wetland sites.

2.5 Other policy documents

- EU Directive on Electricity from Renewables and associated national targets for renewable energy by sector.
- National Climate Change Strategy.
- White Paper on Energy 2007
- Mid-West Energy Balance and Climate Change Strategy.
- EU Final Draft Guidance (March 2010) Wind Energy Developments and Natura 2000.
- EU Directives on Flooding and the Water Framework Directive.
- The Planning System and Flood Risk Management, 2009.

2.6 NPWS Nature Conservation designations

The Department of the Environment, Heritage and Local Government is responsible for the designation of conservation sites throughout the country. The three main types of designation are Natural Heritage Areas (NHA), Special Areas of Conservation (SACs) and Special Protection Area (SPAs) and latter two form part of the European Natura 2000 Network. There are 5 European sites within 1-5km:

- Tullagher Lough & Bog SAC
- River Shannon & River Fergus Estuaries SPA
- Lower River Shannon SAC
- Carrowmore Dunes SAC
- Mid-Clare Coast SPA

2.7 Appropriate Assessment Guidance for Planning Authorities, 2009.

SAC and SPA sites are subject to the requirements of Article 6(3) of the Habitats Directive in relation to screening for an Appropriate Assessment of the potential impacts of a plan or project, both on their own and/or in combination with other plans or projects in the wider area. Applicants are required to submit a Natura 2000 Impact Statement to enable the competent authority to carry out the Appropriate Assessment of the proposal. The DoEH&LG have provided guidance in relation to this requirement.

3.0 LOCAL PLANNING POLICY

3.1 County Clare Development Plan 2011-2017

Renewable energy objectives:

Objective CDP 10.2: seeks to “encourage and favourably consider proposals for renewable energy developments and ancillary facilities in order to meet national, regional and local renewable energy targets...”

Objective CDP 10.3 seeks to:

- (a) Promote and facilitate wind energy production in the county and to “strike an appropriate balance between facilitating wind energy development and protecting the residential amenity of neighbouring property in respect of noise proliferation and visual impact”
- (b) Promote and facilitate wind energy and that proposals for the development of infrastructure will be determined having regard with reference to the Wind Energy Strategy.
- (c) Ensure wind energy proposals are fully compliant with the Habitats Directive.

Renewable Energy Strategy 2014-2020 (Variation No.1 & Volume 8)

This Strategy outlines the renewable energy resource that is deliverable in County Clare up to 2020, Ch.9 deals with onshore wind and summaries the key objectives of the Wind Energy Strategy (WES). The main points are summarised below:

- The renewable energy resource targets for 2020 are as follows:

| Type of energy | Renewable energy resource | MW |
|----------------------|---|--------------|
| Thermal | Wood, crops, geo-thermal, micro-thermal | 177.0 |
| AD-CHP thermal | Silage, animal & municipal waste, biomass | 66.6 |
| Electric | On & off-shore wind, hydro, wave, tidal | 720.8 |
| <i>Onshore wind</i> | <i>Wind turbines</i> | <i>550.0</i> |
| Transport | | 2.0 |
| Overall total | | 966.4 |

- The Strategy sets out 4 area where windfarms may or may not be permissible and the appeal site is located within an Acceptable in Principle area.

- The objective for the Acceptable in Principle areas (WES9) states that these areas are considered suitable for wind farm development and notes their sufficient wind speeds, access to grid and established patterns of inquiries.
- A target of 150MW from these areas is identified. WES9 outlines key issues as being compliance with the 2006 Wind Energy Guidelines, environmental protection and avoidance of visual clutter.
- Protection is afforded to NHAs and pNHAs in relation to the potential adverse impact of windfarms their conservation value, and any proposed wind energy development that could have significant effects on an NHA is likely to require an EIA and the preparation of an EIS.
- The changing nature of SPAs, SACs and NHAs boundaries is noted and the assessment of any windfarm applications will have regard to the most up to date nature designation boundaries and the consequent requirements and obligations under the Habitat Directive and associated Regulations.

Wind Energy Strategy (Volume 5):

This Strategy facilitates the development of onshore wind farms by maximising the wind resources of the County having regard to technological advances in turbine design, information on wind speeds, proximity and availability to grid connection and to changing energy and grid connection regulations while minimising any environmental and visual impacts.

The main points are summarised below:

- That the working target for wind energy within the county is 550 MW.
- The 550MW target will be accommodated within:
 - Strategic Areas - 400MW
 - Acceptable in Principle areas - 150MW
- In 2011, c.101MW of wind energy was approved in the county.
- The main area of permitted development to date is to the E of the site in an area located to the W of Ennis bounded by the RN68, R484, N67 and R474.
- The Strategy has 4 categorisations of area based on their appropriateness for wind energy developments, the site is located partially within an area that is Acceptable in Principle and partially in an area that is Open for Consideration.

- The council seeks to accommodate wind energy developments in areas identified as Strategic or Acceptable in Principle subject to implementation of best practice in siting and design.
- The cumulative impact of wind farms has been considered throughout the county, and particularly in areas identified as Acceptable in Principle.
- The Acceptable in Principle area is located within the Loop Head LCA, Table 4a of the Strategy identifies the overall sensitivity of this area to wind farm development as Medium and appropriate scale (turbine numbers) also as Medium, and that “a second wind farm may be acceptable only at a very great distance with minimal visual presence’.

Landscape and scenic routes:

Chapter 16 and Appendix 7 deal with landscape and scenic routes and these sections which include a Landscape Character Assessment of the county and Landscape Character Areas are identified.

- The site is located within an area that is identified as coastal plain and dunes.
- The site is also located within areas covered by the Malbay Coastal Farmland and Loop Head Landscape Character Areas.
- The county is divided into three character types (heritage, working and settled landscape) and the site is located within an area identified as a settled landscape where the uses envisaged include energy (16.4.3).

Objective 16.2 states that it is an objective within settled landscape areas to permit development that would sustain and enhance the quality of life and residential amenity and promote economic activity subject to, inter alia, conformity with other relevant plan provisions, appropriate sites, avoidance of intrusions on scenic routes, ridges or shorelines, avoidance of visually prominent locations and reduction in visual impact by design, form and finish. Scenic routes within the site are located:

- To the N of the site on the N67 S of Milton Malbay and the regional road (R474 that runs E from Milton Malbay.
- Scenic routes are identified to the S of Kilrush and on routes to the SW of Kilkee and within Loop Head peninsula.

Natural heritage:

Chapter 17 deals with Biodiversity and this section contains a range of policies and objectives that protect:

- Natura 2000 sites (Objective CDP 17.3 and 17.4)
- Non-designated sites (Policy CDP 17.8)
- Inland waters (Objective CDP 17.10)
- Peatland areas (Objective CDP 17.11)

Objective CDP 17.3 deals with European sites and seeks:

- (a) To afford the highest level of protection to all designated Natura 2000 sites in accordance with the relevant Directives and legislation on such matters;
- (b) To require all planning applications for development within, adjacent to, or with the potential to affect a Natura 2000 site to submit a Natura Impact Statement in accordance with the Habitats Directive (1992);
- (c) To recognise and afford appropriate protection to any new or modified SPAs or SACs that are identified during the lifetime of this Plan.

Objectives 8.1, 8.2 and 8.3 relate to water and seek the protection of ground and surface waters and to ensure that development that have an unacceptable impact on the water environment will not be permitted.

Objective 8.3 specifically states that developments that infringe on a river boundary or their associated habitat will only be considered where there will be no impact on the ecological or aquatic or fishing potential of the waters.

Objective 9.1 requires compliance with the provisions of the Water Framework Directive and the relevant river basin management plan.

Objective 9.2 requires the protection of the water resource in any proposal.

Tourism and leisure objectives:

Objective 12.11 seeks to promote the development of tourism and leisure activities in Loop Head and the wider West Clare area.

3.2 West Clare Local Area Plan, 2012-2018

This plan notes the setting of Doonbeg and specifically the views of Doonbeg Bay especially on the approaches to the village from the W, such views are an integral part of the of the character and setting and should be protected. The general objectives for the village include a requirement that future development reflects the distinctive character of the area in terms of the scale, design and location.

4.0 APPEAL

4.1 Summary

There are two appeals against the decision of the Council to refuse planning permission:

- First Party appeal from Clare Coastal Wind Power Ltd (Jennings O'Donovan).
- Third Party appeal from Mrs K H Gorman (Peter Sweetman and Associates).

4.1.1 First party appeal by Clare Coastal Wind Power Ltd

Refusal reason no.1: Excessive scale for area and visual impact

- The Wind Energy Strategy (WES) identifies 4 classifications and the site is included within an “Acceptable in Principle” area which is considered suitable because of sufficient wind speeds and access to the grid network.
- The site is located within the “North of Kilrush close to Moanmore” area and the WES states that a second windfarm may be acceptable only at a very great distance with minimal visual presence.
- Projects within such areas must conform with existing and approved wind farms to avoid visual clutter; be developed in line with guidelines in terms of siting, layout and environmental studies; and undertake an AA if relevant.
- Proposal complies with the 2006 Guidelines for medium sized windfarms and the WES for this area in relation to size.
- Although the proposal would be the third windfarm in the area it could be viewed as a second windfarm because:

- Tullabrack windfarm was permitted prior to the publication of the WES which acknowledges Tullabrack as a permitted windfarm and Moanmore as an existing windfarm and the recommendation relating to a second windfarm post-dated the granting of 3 windfarms in the area.
- The closest distance between the operational Moanmore and consented Tullabrack windfarms is c.640m and the average space at Tullabrack is c.400m and the 2 windfarms could be viewed as one with.
- The shortest distances between the proposal and the consented Tullabrack and operational Moanmore windfarms is 2km and 2.4km.
- The N sections of the area are unsuitable due to their proximity to Doonbeg Village, the golf club and Doonbeg River.
- Submission supported by a consultant's report (Appendix B & C)

Refusal reason no.2: Injury to residential and tourist amenities.

- The 9 windfarm proposal is more acceptable than the previously refused 45 turbine proposal because:
 - Significant reduction in scale
 - 54 houses are within 1200m (reduced from 375)
 - 26 houses are within 10 rotor blade diameters (reduced from 146)
 - 2km separation with Doonbeg Village (increased from 1km)
 - 4km separation from the golf club (increased from 2km)
- None of the Council's designated scenic routes lie in the immediate vicinity or have their principle views obstructed or intruded upon as the views are generally oriented towards the coast.
- Submission supported by a consultant's report (Appendix B & C – Mosart Landscape)

Refusal reason no.3: Risk of water pollution and fresh water pearl mussel.

- A process of mitigation by avoidance has been adopted:
 - The 9 turbines are located adjacent to existing site roads and the required length of road is c. 0.67km (reduced from 7.7km).
 - The anticipated peat excavation is 2,950m³ (reduced from 91,000m³).
 - The peat will be placed into peat reinstatement areas.

- Separation distance to Doonbeg River is c.1.2km (increased from 0.25km)
 - The bridge crossing has been removed.
 - The drainage plan includes silt traps in all drains, silting pods and buffered outfalls which will reduce water flow velocities and improve surface water quality and peat erosion.
 - Temporary storage tanks will be provided to store water from turbine base excavations.
- Hard-standings and site roads will be a floated design and turbine bases will be constructed in sequence.
 - No increase in peak flows during storm events or flood water levels and there will be a reduction in peak flood flows to the Doonbeg River.
 - Silting and attenuation ponds will improve water quality flowing into the river.
 - Water pumped during construction will be disposed of elsewhere.
 - All impermeable surfaces will drain into a double pond system.
 - No evidence to suggest the site is within Flood Zone A, Flood Zone B, or within a pluvial flood risk area and the turbines are not located within a mapped flood risk zone.
 - Submission supported by a consultant's report (Appendix D & E - EirEco Ecological).

Refusal reason no.4: Impact on European sites and material contravention.

- A process of mitigation by avoidance has been adopted.
- The turbine sites avoid areas in which Whooper swan have been observed in flight or roosting.
- Observed feeding sites around the Doonbeg River have been avoided.
- The closest turbines to Moanmore Lough have been removed.
- Submission supported by a consultant's report (Appendix D & E - EirEco Ecological).

4.4.2 Third party appeal by Mrs K H Gorman

- The decision to appeal the grant of permission for the proposed windfarm is based on Article 6 of the Habitats Directive (*please note that the Council decided to refuse permission*).
- The judgements of the CJEU Case 258/11 and the High Court v ABP clearly show that an AA under the Directive is a separate entity from the P&D Acts.
- Reason for refusal no.3 concludes that “the proposed development would, therefore, be contrary to the proper planning and development of the area.”
- Reason for refusal no.4 concludes that the Council “considers that the proposal would materially contravene objective CDP 17.3 of the Development Plan, 2011, as varied, and would be contrary to the proper planning and sustainable development of the area.”
- The above reason may fulfil the requirements of the EIA Directive but not the Habitats and Birds Directive.

4.2 Observers

A total of 9 letters received from the following local residents, businesses and environmental groups, and their collective concerns have summarised below.

Observers:

- Kevin Deering & Peter Crossan
- Patricia & Peter Dillon
 - Petition,
 - Freshwater pearl mussel report
 - Hydrology report
 - Bird survey
- Paul & Eileen O’Dea
- Dr Simon Berrow
- Nuala Moreau
- Colm Dillon
- David T Gorman
- TIGL Ireland Enterprises Ltd
 - Environmental report
 - Failte Irelands “Visitor Attitudes on The Environment – Wind farms”
 - Landscape and Visual Assessment report
- An Taisce

Issues and concerns:

Principle of development:

- Non-compliance with Habitats and Birds Directive.
- Non-compliance with EU, national and local policy for wind energy and biodiversity.
- Non-compliance with “Acceptable in principle” zoning of the area for a medium windfarm where two may be permitted provided if they are separated a very great distance, and a second windfarm has already been permitted.
- The provision of a 9 turbines adjacent to 13 permitted turbines does not comply with Council requirements.
- The WES identifies an overall target of 550MW of wind energy and the “Acceptable in Principle” areas should only accommodate 150MW of energy with the remaining directed towards “Strategic” zones.
- Appeal site constitutes a very small proportion of the total “Acceptable in Principle” lands in the County and the proposed and permitted farms will generate 49MW of energy or 1/3rd of the overall permissible output.
- Inequitable distribution of windfarms through the County.
- Cumulative impact of proposed, existing and permitted windfarms with minimal separation distance.
- The issues raised in previously refused application still apply.

Visual impacts:

- Significant visual impacts along the Wild Atlantic Way, Doonbeg Village, Trump Golf Resort and walking trails.
- Adverse visual impact on the existing landscape which represents a unique complex mosaic of lands.
- Two permitted and one proposed windfarm could create an industrial landscape.
- Cumulative visual impacts and close proximity of existing and permitted windfarms will read as one large windfarm.

- The EIS views from Doonbeg Golf resort do not give a full picture or true indication of the potential visual impact of the proposal.
- The applicant has not assessed the visual impact from the beach at Doonbeg to the rear of the golf course or the neighbouring headlands.
- Proposal will be clearly visible from the golf resort and it will create a negative visual impact from the suites which surround the courtyard.

Environment and ecology:

- Adverse impacts on nearby European sites and protected species.
- Adverse impacts on Doonbeg River and the freshwater pearl mussel.
- Applicant did not submit a specialist report into the freshwater pearl mussel.

- An expert report prepared by Dr Evelyn Moorkens:
 - Confirms presence of substantial freshwater pearl mussel populations along several sections of the Doonbeg River.
 - Identifies a serious threat to the potential for recovery of an important freshwater pearl mussel population of at least 7,000 individuals.
 - States that this is the most ecologically important population in Clare and of high importance to the maintenance of the Irish range of this Annex II species between Connemara and Kerry.

- An expert report prepared by Dr Pamela Bartley raised concerns in relation to the adverse effects of sediment flow and particle size arising from peat excavations on water quality in the Doonbeg River and the subsequent effects on the freshwater pearl mussel.

- Loss of peatland, flooding and flood risk.
- Adverse impact on water table, hydrology and active blanket bog.
- C.6km of underground cabling would be required to reach the Tullabrack 110kv substation.

- Negative impact on bird feeding grounds and flight paths, collision risk with turbines and inadequate survey data.
- Adverse impacts on River Fergus SPA, Whooper swans and Greenland White-fronted Geese with no credible assessment of flight paths and a recent report confirms that both species feed in Shragh Bog and the Doonbeg River.
- Adverse impacts on Hen Harrier, Peregrine Falcon, Merlin and Sparrow hawk.
- Inadequate assessment of direct, indirect and cumulative effects on protected bird species.

- Loss of terrestrial habitats, wildlife and protected species.

Traffic and infrastructure:

- Inadequate infrastructure comprising network of bog roads which are unsuitable for carrying heavy loads.
- Traffic generation and hazard.
- Adverse impact on existing roadside drains.

- Location of Turbine no.9 very close to public road.
- Inadequate details for haul route and quarry haul routes not indicated.
- Inadequate technical data in relation to road upgrades and turning capacity.
- Inadequate details of underground cabling.

Residential amenity and health:

- Adverse impact on residential amenity.
- Visual intrusion.
- Noise, dust, shadow flicker and health impacts.
- Property devaluation.
- Undesirable precedent.

Tourism and employment:

- Adverse impact on tourism and local economy.
- Detrimental impact on tourism related jobs.
- Unsustainable employment generation.
- Doonbeg Golf Resort is a major tourist attraction, it employs c.230 people and it draws a large number of overseas visitors.
- The resort recorded over 27,000 bed nights, 41,000 sleepers and 22,000 golfers in 2013.
- A loss of business will have direct impacts on local employment.
- Proposed windfarm will have a detrimental impact on the viability of the golf resort and tourism in the area as evidence in the Failte Ireland report.

Miscellaneous:

- Inadequacies in the EIS and NIS.
- Anomalies in in the peat extraction figures.
- No details of where water pumped from turbine bases will be treated.
- Inadequate public consultations and in breach of Arrhus Convention.
- Inappropriate community benefits by way of cash incentives.
- Health and safety concerns for turbary owners.

Procedural matters:

- Insufficient information in the EIS to assess the proposed development.
- Inaccurate list of landholders.
- No consent from owner of Folio 52255F.
- No consent from existing turbary owners.
- Query applicant's legal interest.

- Planning applications and documents do not fully describe the works.
- Non-compliance with S.22 (4) (a) and (g) of the P&D Regulations 2001.

4.3 Prescribed Bodies

No further submissions.

4.4 County Council Response submissions

No new issues were raised.

4.5 Further correspondence

None received

5.0 REVIEW OF ISSUES AND ASSESSMENT

The main issues arising in this case are:

1. Material contravention
2. Compliance with renewable energy and planning policy
3. Design, layout and visual amenity
4. Movement, access and haul routes
5. Hydrology, drainage and peat stability
6. Ecology and wildlife
7. Other issues.

5.1 Material contravention

Reason number 4 of the Planning Authority's decision to refuse planning permission stated that the proposed development would materially contravene Objective CDP 17.3 of the County Development Plan which deals with European sites and seeks to:

- (a) Afford the highest level of protection to all designated Natura 2000 sites in accordance with the relevant Directives and legislation on such matters;
- (b) *Require all planning applications for development within, adjacent to, or with the potential to affect a Natura 2000 site to submit a Natura Impact Statement in accordance with the Habitats Directive (1992);*
- (c) Recognise and afford appropriate protection to any new or modified SPAs or SACs that are identified during the lifetime of this Plan.

Reason number 4 also stated that the NIS was inadequate, that it contained insufficient information to assess the implications for the adjoining River Shannon and River Fergus Estuaries SPA and Tullaher Lough and Bog cSAC in relation to Greenland White Fronted Geese and other conservation objectives for these sites, that it failed to comply with the EU Habitats Directive (Article 6(3)) and the Planning Act 2000 (Section 177T(2)), and that there would be a significant impact on the adjoining Natura 2000 sites.

Article 6(3) of the EU Habitats Directive 1992 states:

Any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to appropriate assessment of its implications for the site in view of the site's conservation objectives. In the light of the conclusions of the assessment of the implications for the site and subject to the provisions of paragraph 4, the

competent national authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned and, if appropriate, after having obtained the opinion of the general public.

Section 177T (2) of the P&D Act 2000 as amended states:

Without prejudice to the generality of subsection (1), a Natura impact report or a Natura impact statement, as the case may be, shall include a report of a scientific examination of evidence and data, carried out by competent persons to identify and classify any implications for one or more than one Natura 2000 site in view of the conservation objectives of the site or sites.

In relation to subsection (b) of Objective CDP 17.3 of the Development Plan (as outlined above) the applicant submitted a Natura Impact Statement in line with this requirement.

When material contravention of the Development Plan has been given as a reason for refusal by the Planning Authority, the Board is only permitted to grant planning permission in exceptional circumstances under section 37 of the 2000 Act where:-

- The proposal is of national or strategic importance;
- The proposal is in keeping with regional planning guidelines, other guidelines and policy directives;
- There are conflicting objectives in the Development Plan; or
- A precedent has been set by similar developments in the area which have been granted planning permission since the making of the last Development Plan.

The proposed development in its own right is not of national or regional importance however it does fall within the broad remit of national renewable energy policy and it could contribute to the overall achievement of national renewable energy targets (subject to compliance with all other planning requirements).

The proposed development is in keeping with the relevant Regional Planning Guidelines and other relevant guidance and policy documents related to the environment and renewable energy.

The objectives of the County Development Plan and West Clare Local Area Plan are clearly stated with respect to the environment, ecology, biodiversity and renewable energy and there are no conflicting objectives.

According to the information on the Council's planning website no other similar developments have been permitted in this area since the making of the current Development Plan (2011) and current West Clare Local Area Plan (2012).

Having regard to all of the above I am satisfied that the proposed development would constitute an exception under section 37 of the 2000 Act as it complies with national and regional renewable energy policy.

5.2 Compliance with renewable energy and planning policy

The proposed development would be broadly compatible with European, national and regional planning and renewable energy policy as set out in section 2.0 above, subject to the consideration of environmental, landscape and social impacts. The 2006 Wind Energy Development Guidelines advise that a reasonable balance must be achieved between meeting Government Policy on renewable energy and the proper planning and sustainable development of an area, and projects should not adversely affect the integrity of European sites or have an adverse impact on birds.

The proposed development would be located within in a rural area that is covered by the Clare County Development Plan 2011 to 2015. This plan includes the Wind Energy Strategy (Volume 5) and the Renewable Energy Strategy 2014 to 2020 (Volume 8) that was incorporated into the Development Plan by way of Variation No.1 on 12th May 2014. The proposed development would be broadly compatible with the Councils planning and renewable energy policy objectives for the County as set out in section 3.0 above. Overall, the Council seeks to encourage projects which help meet national, regional and local renewable energy targets (Objective CDP 10.2) while balancing the need to protect residential amenities from noise and visual intrusion and to protect European sites (Objective CDP 10.3).

The Wind Energy Strategy (WES) provides detailed site specific locational guidance for windfarms by identifying areas suitable for windfarms based on prevailing wind speeds and existing grid connections, classifying Landscape Character Areas which have varying degrees of sensitivity to windfarms, and sub-dividing the County into areas where windfarms are not Normally not Permissible, Open for Consideration, Acceptable in Principle or Strategic Areas.

The Renewable Energy Strategy (RES) describes the various categories of renewable energy that can be harnessed in County Clare and it outlines the targets for each type of energy resource up to 2020 with a total output from all resources of 966.4MW. The RES states that that 550MW or c.57% of the renewable energy target will be provided by wind power and the Wind Energy Strategy (WES) states that this 550MW target will be accommodated within Strategic Areas (400MW) and Acceptable in Principle areas (150MW). According to the WES, some 101MW of wind energy was approved in the county by 2011, mainly to the E of the appeal site in an area located to the W of Ennis and N of the N67 which is designated as a Strategic Area for wind energy in the Development Plan (which incorporates the RES and WES).

The Acceptable in Principle areas are mainly located in the middle of the County along N-S axis which runs from a point to the E of Miltown Malbay to along the Shannon Estuary (Refer to Map 9.1) with two small areas located in the NE and SW parts of the County. The proposed development would be located within the SW Acceptable in Principle area located between Doonbeg and Kilrush. This area represents a very small proportion of the overall Acceptable in Principle lands as it constitutes less than 10% of the overall designated area. The proposed 9 turbine windfarm would generate 27MW of electricity. The existing 7 turbine operational windfarm at Moanmore South and the permitted 6 turbine windfarm at Tullabrack would generate a total of 26.4MW of electricity. The total wind energy output for the area would be in the region of 53.4MW which equates to c.35% of the overall target of 150MW for Acceptable in Principle areas in the County.

Having regard to the above figures, I would concur with the concerns raised by the Observers in relation to the over concentration of wind farms in this area. The proposed development would give rise to an inequitable distribution and over concentration of wind energy developments in this part of the County. This would be incompatible with the plan-led approach to development of renewable energy resources adopted by the Council in the current Development Plan, Renewable Energy Strategy and Wind Energy Strategy.

The proposed development would be located within a Landscape Character Area (LCA) designated as being Acceptable in Principle and which is described in the WES as being "Part of the Loop Head north of Kilrush close to Moanmore"). The WES states that this particular Acceptable in Principle designation relates to the area around the existing windfarm at Moanmore South which has become an established land use and contributes to landscape character. The overall sensitivity of this LCA to windfarm development is described as Medium and it could support a medium number of turbines (5-10) however a second wind farm may be acceptable only at a very great distance with minimal visual interference. The 2006 Windfarm Guidelines also advise against visual clutter in the landscape.

The proposed 9 turbine windfarm would be located in the approximate centre of the Accepted in Principle area which is c.10km long and c.2km wide and forms part of a flat, low-lying, and exposed landscape in close proximity to the coast. The existing 7 turbine operational windfarm at Moanmore is located to the S of the proposed development with a narrow separation distance between the nearest existing and proposed turbines. The permitted 6 turbine operational windfarm at Tullabrack is located to the SE of the proposed development with an equally narrow separation distance between the nearest permitted and proposed turbines. The existing Moanmore and permitted Tullabrack windfarms would be separated from each other by a distance of c.1km between the nearest existing and permitted turbines.

The First Party submits that both the Moanmore and Tullabrack windfarms should read as one x 13 turbine windfarm and not two separate developments and that the proposed windfarm should constitute a second windfarm in the area and not a third. They submit that this should be the case given the proximity of the existing and permitted windfarms to one another, they predate the adoption of the WES into the current Development Plan and that the WES acknowledges the Moanmore windfarm as an existing windfarm in the area.

Notwithstanding the applicant's submission, I am satisfied that the proposed development does in fact constitute a third windfarm in the area. Even if the existing and permitted windfarms were viewed as one development and the proposal was viewed as a second windfarm, the narrow separation between the two sites could not be interpreted as providing a "very great distance between the two sites with minimal visual interference". Particularly when regard is had to the low-lying, open and exposed character of the surrounding area taken in combination with the overall height of the existing, permitted and proposed turbines. The proposed development would therefore be incompatible with Objective CDP 10.3 and in particular sub section (b) of this Objective which requires that proposals be determined with regard to the provisions of the Council's Wind Energy Strategy.

5.2 Design, layout and visual amenity

The proposed development would comprise the construction of a 9 turbine windfarm along with an electrical compound, control building and permanent meteorological mast on a c.30.52ha site. The 9 turbines would have a hub height of 85m, a rotor diameter of 82m and an overall height of 126m and the meteorological mast would be 80m high. The Board refused planning permission for a 45 turbine windfarm under PA0025 in 2013 for 3 reasons related to non-compliance with wind energy policy, visual intrusion and water quality. Reason no.2 related to adverse visual impacts on residential, scenic and tourism amenities. It should be noted that the number of turbines has been reduced from 45 to 9 under the current application and that the separation distance between the turbines and Doonbeg Village and Golf Resort has increased by c.1km and c.2km respectively.

The low-lying site is located within a bog land area to the S of Doonbeg Village and N of Kilrush town. The area is characterised by a mix of active and cutover blanket bog, reclaimed agricultural land and small forestry plantations. There is a 7 turbine operational windfarm to the S at Moanmore South and a 6 turbine permitted windfarm to the SE at Tullabrack which are located in close proximity to one another and to the proposed windfarm. There are also several farms and detached houses in the vicinity.

The proposed development would be located within the Loop Head Peninsula Landscape Character Area (LCA) as designated in the Development Plan. The Wild Atlantic Way (WAW) strategic scenic route runs along the N67 to the S, W and N of the site and it extends along the Loop Head Peninsula to the W into slightly more elevated lands. There are several important viewpoints in the vicinity of the site at Lurga Point Beach, Doonbeg Village and Doonbeg Golf Club to the N, Scattery Island to the S and from various points along the N67 to the S, W and N.

The applicant carried out a Landscape Impact Assessment and a Visual Impact Assessment and Zones of Theoretical Visibility were identified in line with the 2006 Wind Energy Guidelines. Viewshed Reference Points were selected from key visual receptors which related to the Development Plan's Landscape Character Areas and a Landscape Value and Sensitivity index was devised within which potential impacts can range from very high to negligible.

The Applicant assessed the visual impact of the proposed windfarm from a range of locations along the local road at the centre of the site; the surrounding coastal towns and rural villages; several points along the N67 (WAW) and the local road network; Lurga Point Beach, Doonbeg Village, Doonbeg Golf Course and Scattery Island. The assessment concluded that the Significance of Visual Impact would be Slight in most areas, Moderate at Doonbeg Village and Lurga Point Beach, and Slight to Moderate at Doonbeg Golf Course and Scattery Island. However based on my assessment of the proposed development and the surrounding area I am not convinced that the visual impact would be so unobtrusive.

Notwithstanding the reduction in the number of turbines from and the increased separation distance with Doonbeg Village and Golf Course, the proposed development would continue be highly visible from several important viewpoints in the vicinity. These viewpoints include Scattery Island to the S; the SE and E sections of the Loop Head Peninsula; and several points along the N67 (WAW) from Kilrush to Kilkeel to Doonbeg Village to Spanish Point, including the Doonbeg Golf Resort to the E of Doonbeg Village which is also a major tourist attraction and an important source of local employment. This is also evidenced by the prominence of the existing Moanmore windfarm on the landscape when viewed from similar locations. (Photographs in Appendix 1 describe these relationships in more detail).

Failte Ireland raised concerns in relation to potential visual impacts within the coastal setting and that the incremental proliferation of windfarms will detract from the WAW and other tourism initiatives in the area, although the reduced scale of the current proposal was noted.

Having regard to the open, exposed and low-lying character of the landscape and the location of the site at the E end of the Loop Head Peninsula (which is c.12km wide at this point from N to S) and its close proximity to the coast, the proposed development, when considered in combination with existing and permitted windfarms in the area (22 turbines in total) would be visually obtrusive and it would have a visual adverse impact on the residential, scenic and tourist amenities of the area.

5.3 Movement, access and haul routes

The proposed windfarm would not have a significant long term impact on traffic movement in the surrounding area and the proposed development, which includes a widened access off the local road (L2034), would not give rise to a traffic hazard or endanger the safety of other road users.

The impact of the proposed 9 turbine development on the internal network of bog roads would be substantially less than that of the previously refused proposal for 45 turbines under PA0025 as no new river crossings would be required and almost of the proposed turbines would be located adjacent to existing tracks. Concerns related to drainage and peat stability will be addressed in the following sections.

The Applicant referred to minor local impacts along the haul route that may require road upgrades along certain sections to accommodate the wide and heavy loads. The Council's Engineering Department also raised a number of concerns in relation to the capacity of existing infrastructure to carry the intended loads, the adequacy of the proposed haulage route along narrow sections of Lower Moore and Crawford Streets in Kilrush and the lack of clarity in relation to quarries in the area and quarry haul routes. These concerns could be addressed by way of a planning condition which requires the Applicant to secure the written agreement of the Planning Authority in respect of these outstanding matters prior to development commencing. The Council's request for a Special Contribution of one million Euro could also be attached as a condition in respect of infrastructural works and the Board should also consider attaching the standard Bond condition to encourage the completion of the works to an acceptable standard.

5.4. Hydrology, drainage peat stability

The proposed windfarm would be located within an area characterised by active and cutover blanket bog and reclaimed agricultural land. The area is low-lying and flat, the depth of the peat is mainly in the region of 2.0m although it is deeper in certain sections, slope gradients in the area and around the proposed turbines range from 0 to 2 degrees, humification values are between H4 and H8, and shear vane tests across the site indicate a range of between 8kPa and 40kPa, which is indicative of soft to moderate strength peat. Most of the peat is laid over silt or sand although in

some locations it lies directly on rock and a substantial number of natural and manmade drains and streams are located within the area that mainly discharge to the Doonbeg River to the N and E.

A substantial amount of peat (c.3, 000m³) would be excavated to accommodate the proposed turbines, hard standings and associated works, and the extracted material would be relocated to four peat re-instatement areas. The proposed development has the potential to affect hydrology and drainage in the area and fine silt particles could be discharged into adjacent watercourses during and after excavation and construction. Given that the site of the proposed windfarm is relatively flat it is unlikely that landslides will occur and there are no historic records of landslides in the area.

The EIS contains a suite of mitigation measures to deal with these issues and the Applicant submits that the drainage plan, which includes silt traps in all drains, silting ponds and buffered outfalls, will reduce water flow velocities and improve surface water quality and peat erosion. Temporary storage tanks will be provided to store water from turbine base excavations, hard-standings and site roads will be a floated design and turbine bases will be constructed in sequence. The Applicant submits that there will be no increase in peak flows during storm events and there will be a reduction in peak flood flows to the Doonbeg River. The silting and attenuation ponds will improve water quality flowing into the river, water pumped during construction will be disposed of elsewhere and all impermeable surfaces will drain into a double pond system.

Notwithstanding the range of mitigation measures outlined above and having regard to my assessment of the site and the surrounding area, I remain concerned that the proposed excavation and construction works would exacerbate the existing waterlogged conditions in the area, contribute to flooding and result in the siltation of watercourses. These concerns are addressed in more detail in the following section.

5.5 Ecology and wildlife

Context:

The appeal site is located within a bogland area which is characterised by a mix of active and cutover blanket bog, reclaimed agricultural land and small forestry plantations. The site is predominantly open, exposed and waterlogged and it is traversed by an intricate network of streams and drains that mainly discharge into the Doonbeg River to the N and E and this river sustains a sizable Freshwater pearl mussel population. The site is not covered by any sensitive environmental designations. However it is located in close proximity to five European sites and there is a direct aquatic connection between the proposed development and some of

these sites via the aforementioned drainage network and the Doonbeg River. Furthermore several protected species of bird, including two species that are associated with the European sites, either use the area around the Doonbeg River for foraging or their flight paths traverse the appeal site and surrounding area between their breeding, roosting, foraging and feeding grounds.

The nearby European sites comprise:

- W: Tullaher Lough & Bog SAC
- S: River Shannon & River Fergus Estuaries SPA
- S: Lower River Shannon SAC
- N: Carrowmore Dunes SAC
- N: Mid-Clare Coast SPA

Protected species in the area include:

- Greenland White-fronted goose
- Whooper Swan
- Golden plover
- Scaup duck
- Hen harrier and Merlin
- Freshwater pearl mussel

Previous application:

The Board previously refused planning permission under PA0025 for a 45 turbine windfarm in this area for three reasons related to non-compliance with wind energy and planning policy; adverse visual impacts on residential and tourism amenity; and serious risk of water pollution to the Doonbeg river system which contains fresh water pearl mussel.

Current application:

The proposed development would comprise the construction of 9 turbines, turbine bases and hard-standings; two small buildings and a meteorological mast; and associated site roads, drainage and site works. The application was accompanied by an EIS and a NIS. Section 5 of the EIS (flora, fauna and fisheries) was informed by surveys to determine the presence of Annex 1 habitats and Annex 11 species in the vicinity. The EIS predicted no adverse impacts on the freshwater pearl mussel (subject to mitigation measures) or birds in the vicinity as flight paths do not cross the turbine locations. The NIS concluded that there would be no significant negative impact on any of the nearby European sites or their conservation objectives.

The Department of Arts, Heritage and the Gaeltacht raised serious concerns in relation to potential adverse impacts on ecology and the adequacy of the NIS. The Department requested Further Information in relation to several matters including the peat reinstatement and storage areas, the EIS mitigation measures and construction methodology details. The Department also raised concerns in relation to the absence of: - a detailed methodology and monitoring programme for freshwater pearl mussel; autumn migration bird surveys that should have been undertaken as potential exists for flight paths to cross the site between feeding and roosting locations; a cumulative impact assessment of other plans and land use changes in the area in addition to windfarms. The Department concluded that a revised NIS informed by robust screening would be required.

The Planning Authority decided to refuse planning permission for 4 reasons related to non-compliance with wind energy and planning policy, adverse impacts on visual amenity and ecology. Reason number 3 stated that the proposal could constitute a serious risk of water pollution to the Doonbeg river system which contains fresh water pearl mussel. Reason no.4 stated that the NIS was inadequate and that insufficient information was provided to assess the implications for the adjoining River Shannon and River Fergus Estuaries SPA and Tullaher Lough and Bog cSAC in relation to Greenland white-fronted geese.

Assessment:

Freshwater pearl mussel:

The Doonbeg River is not covered by any European site designation however it supports a substantial and well documented Annex II population of Freshwater pearl mussel. This species has a very long life cycle and it requires clean, fresh flowing, well oxygenated water with a high ecological status to sustain population growth. It has suffered a European wide decline in recent decades as a result of water pollution although significant populations remain along the W coast of Ireland. All stages of the pearl mussel's life cycle are vulnerable to the adverse effects of water pollution however it is particularly at risk of suffocation or asphyxiation from small silt particles entering watercourses from disturbed land.

The proposed turbines would be located on a mix of cutover blanket bog and reclaimed agricultural land within a predominantly waterlogged environment to the S and E of the Doonbeg River within the Doonbeg River catchment. These lands are traversed by an intricate network of interconnecting streams and drains which mainly discharge to the Doonbeg River and several of the proposed turbines would be located adjacent to watercourses that have a direct aquatic link to the river. Photographs and maps in Appendix 1 describe this relationship in more detail.

The proposed development would result in the excavation of a substantial amount of peat to accommodate the proposed turbines, access tracks and associated site works. The excavated material would be relocated to four peat re-instatement areas in the vicinity. As the peat contains fine particles which could find their way into the surrounding watercourses during and after excavation and reinstatement, the Applicant has proposed a suite of mitigation measures which include the installation of silt traps, silting ponds and buffer zones, which would also be subject to on-going post construction monitoring.

The issue of fine silt particles finding their way into the Doonbeg River via the drainage network within the catchment was examined during the assessment of the previous proposal for a 45 turbine windfarm in the area under PA0025. The adverse effects of fine particles on freshwater pearl mussel populations were identified and it was suggested that chemicals can be used to manage or prevent the release of silt particles into the aquatic environment. However it was concluded that the use of such chemicals could have an adverse effect on freshwater chemistry with a resultant negative and/or unpredictable impact on Freshwater pearl mussel.

Thus the Board's third reason under PA0025 for refusal related to the "location of the proposed development on a site where there is a significant extent of peat material, the scale of the proposed development in proximity to the Doonbeg River, and to the identification of the Doonbeg River as a habitat with a significant concentration of species listed under Annex II of the Habitats Directive, freshwater *Margaritifera margaritifera* (freshwater pearl mussel) as established during the course of the application, the Board is not satisfied that the proposed drainage system would not constitute a serious risk of water pollution in this sensitive river system."

Notwithstanding the reduced scale of the proposed windfarm and the associated site works, the applicant has not provided any significant new information in relation to the management of fine silt particles or the status of the Freshwater pearl mussel in the Doonbeg River although the EIS continued to predict no adverse impacts on this species subject to mitigation measures. Such information could have served to address the concerns raised under PA0025 and the Board's third reason for refusal.

During the Planning Authority's consideration of the current application the DAHG and several members of the public continued to raise concerns in relation to the potential impacts on Freshwater pearl mussel including the absence of a detailed methodology and monitoring programme. The Planning Authority decided to refuse planning permission for four reasons, the third of which related to the risk of water pollution and the potential impact on Freshwater pearl mussel.

Several of the Observers have raised similar concerns in their appeal submissions and expert reports by Dr Evelyn Moorkens and Dr Pamela Bartley were submitted.

Dr Moorkens confirmed the presence of substantial freshwater pearl mussel populations along several sections of the Doonbeg River which comprise c.7, 000 individuals. Dr Moorkens submits that this is the most ecologically important population in County Clare and of high importance to the maintenance of the Irish range of this Annex II species between Connemara and Kerry. Dr Bartley reiterated her concerns in relation to the adverse effects of sediment flow and particle size arising from peat excavations on water quality in the Doonbeg River and the subsequent effects on the freshwater pearl mussel.

The Applicant submits that a process of mitigation by avoidance has been adopted and that the proposed suite of mitigation measures (outlined in section 5.5 above) will ensure that there will be no adverse impacts on water quality or the freshwater pearl mussel during and after construction.

Discussion and conclusions:

As previously stated the appeal site and surrounding lands comprise a mix of active and cutover blanket bog and reclaimed agricultural land. The proposed windfarm would be located within a predominantly waterlogged environment which is drained by an intricate network of interconnecting streams and drains that mainly discharge to the Doonbeg River. Most of the proposed turbines and peat reinstatement areas would be located in close proximity to a drain or stream that has a direct aquatic connection to the Doonbeg River to the N or E.

In particular Turbine no.3 and Turbine no.5 in the E section of the site would be located adjacent to a stream that flows directly into the Doonbeg River to the N. It would also appear that Turbine no.1 and two of the peat re-instatement areas in the E section of the site are located adjacent to drains that connect to the aforementioned stream. This stream flows under the access road that runs between Turbine no.5 and Turbine no.6. The poor structural condition of this road in the vicinity of the stream indicates that the stream is prone to flooding and that the rate of flow is sometimes high. This in turn indicates that fine particle deposition is unlikely to occur until after the stream discharges to the Doonbeg River to the N, particularly during periods of high flow velocity.

Having regard to the above, and notwithstanding the proposed mitigation measures outlined in section 5.5 above, I am not satisfied that the proposed development would not give rise to water pollution in the Doonbeg River catchment and that the population status of the Freshwater pearl mussel would not be adversely affected, during and after construction and throughout the operational phase.

Greenland white-fronted goose:

Greenland white-fronted goose is an overwintering species that uses nearby European sites for roosting and foraging in the winter. This includes Tullagher Lough and Bog SAC and the surrounding agricultural land c.1km to the W of the appeal site and Poulnasherry Bay pNHA to the SW of the site which also forms part of the River Shannon & River Fergus Estuaries SPA. This species is thought to use the area around the proposed development for foraging and feeding and there is a possibility that flight paths could traverse the proposed turbine locations.

The applicant's NIS was informed by winter surveys of Greenland white-fronted Geese carried out between 2009 and 2014. These surveys confirmed the presence of this species at Tullagher Lough and Kileens to the W of the proposed windfarm and at Poulnasherry Bay to the SW of the site. The NIS concluded that there was no evidence of Greenland white-fronted geese using the windfarm site for foraging or roosting; given that they utilise feeding grounds to the W and S of Tullagher Lough, it is unlikely that flight paths between foraging and roosting sites would cross the proposed windfarm site; and rapid habituation would occur in the event of occasional flyovers.

The DAHG raised serious concerns in relation to the NIS conclusions due to the absence of detailed autumn migration bird surveys for Greenland white-fronted geese. The Department submits that potential exists for flight paths to cross the site between roosting and foraging sites. The Planning Authority's fourth reason for refusal reflected this concern and it stated that the Applicant's NIS was inadequate and that insufficient information was provided to assess the implications for the adjoining River Shannon and River Fergus Estuaries SPA and Tullagher Lough and Bog cSAC in relation to this species.

The survey data submitted by the Applicant indicates that the annual winter surveys of Greenland white-fronted geese commenced and concluded on the following dates:

| Year | Start date | End date |
|--------------|-------------------|-----------------|
| 2009 to 2010 | 20/11/09 | 24/03/10 |
| 2010 to 2011 | 19/11/10 | 25/03/11 |
| 2011 to 2012 | 22/12/11 | 11/04/12 |
| 2012 to 2013 | No data | No data |
| 2013 to 2014 | 14/12/13 | 11/01/14 |

It is clear from this data that survey work commenced in either mid to late November or December most years and well after the arrival of this over wintering species to the area. I would concur with the concerns raised by the DAHG and the Planning Authority with respect to the absence of any data in relation to autumnal migration patterns and flight paths between roosting and foraging grounds. It is therefore not possible to assess the potential risks posed by the proposed turbines on Greenland white-fronted geese or the knock on effects on nearby European sites utilised by this species, based on the information provided by the Applicant.

Whooper Swan:

Whooper swan is listed as a qualifying interest for River Shannon & River Fergus Estuaries SPA which is located to the S of the proposed development. It's principle foraging areas are located to the E and W of Poulnasherry Bay pNHA which is located to the SW of the appeal site, and to the N at Tullaher Lough and Bog pNHA and SAC which is located to the W of the site. It's main feeding and roosting areas are located to the E and W of the site and detailed survey results indicate that flight paths do not occur over the site of the proposed development. The NIS predicted no impact on the wintering flocks of Whooper swan that utilise several sites in the vicinity but not the turbine locations. It concluded that there are no recorded flight paths over the site and that swans will rapidly habituate to the turbines in the event of occasional flyovers.

Concerns were raised during the assessment of the 45 turbine windfarm proposed under PA0025 in relation to the impact of the project on Whooper swan. The Board's Inspector recommended a fourth reason for refusal which related to adverse impacts on future bird populations in the area and on the integrity of the River Shannon and River Fergus SPA (site code 004077) in respect of which Whooper Swan which is listed as a conservation objective. The Board decided not to accept this as "the Board agreed that adequate bird survey work had been undertaken and the proposed development would not adversely affect the Whooper Swan population."

As the Board has already made a decision on this matter any further assessment of potential adverse impacts on Whooper Swan would be unwarranted, particularly given the reduced scale of the proposed 9 turbine development relative to the previously refuse 45 turbine development.

Other species:

Other bird species that occasionally fly over or forage in the vicinity of the proposed windfarm include Hen harrier, Peregrine falcon and Merlin however they do not utilise the lands for breeding and the EIS predicted no adverse impact on these species. The Applicant's Hen Harrier survey was carried out between 2010 and 2011, three vantage points were surveyed on each occasion and a total of four birds

were observed over a 15 month period. Two females were observed to be sky dancing and one female was observed hunting along the edge of a conifer plantation in May 2010 and a single male was observed hunting across the bog in March 2011.

5.6 Other issues.

Connection to national grid: The application and appeal documents did not contain any proposals to connect to the national grid. Any such connection should have been considered in the applicant's Environmental Impact Statement so as to enable the Board to carry out an Environmental Impact Assessment of this aspect of the proposed development in line with the recent High Court Judgement (O'Grianna v ABP - 2014). However the Board may wish to seek Further Information in relation to this matter in the event that it is satisfied with all other aspects of the proposal.

Archaeological heritage: There are no recorded national monument sites located within the site although it may contain as yet undiscovered artefacts. The proposed windfarm would not have a significant impact on the archaeological heritage of the area subject to compliance with standard archaeological monitoring conditions.

Architectural heritage: There are no protected structures located either within or in the vicinity of the appeal site although care should be taken by vehicles using the local road network to ensure that no damage occurs to buildings and structures in the wider area along the haulage route.

Aviation: The proposed redesign of the windfarm would not have a significant additional impact on aviation in the area subject to compliance with the requirements of the Irish Aviation Authority.

Noise: The proposed redesigned windfarm would not have a significant additional impact on noise levels at residential dwellings in the surrounding area and the standard noise control and monitoring conditions should be attached.

Shadow flicker: There are several houses located within 1.5km of the proposed turbines that could be slightly affected by winter shadow flicker for short periods of time during particularly sunny conditions in the morning and evening although none are located within 500m of a turbine location.

Residential amenity: The visual impacts have been assessed in section 5.2 above. The proposed windfarm would not have any additional significant impacts on the residential amenities of the area however local residents should be notified in advance of any major construction works including the transport of large pieces of plant and equipment.

Electromagnetic interference: The proposed redesigned windfarm would not have a significant additional impact on the surrounding area.

Carbon sink: Any loss of CO₂ from the bog that that may occur as a result of peat extraction to facilitate the proposed development would be compensated by the generation of carbon neutral energy.

Landownership and turbary rights: The concerns raised by the Observers in relation to these matters are noted.

Financial contributions: The standard and special development contributions conditions should be attached.

6.0 ENVIRONMENTAL IMPACT ASSESSMENT

Compliance with Articles 94 and 111 of the Planning and Development Regulations 2001, as amended

The application is accompanied by an EIS, as required for any application made under Section 37A. The EIS is laid out as follows:

- Non-Technical Summary
- Main Statement
- Figures and Tables
- Appendices
- Photomontages

I have reviewed the application documentation, including the EIS, the written submissions, and the legislative requirements in terms of Environmental Impact Assessment. In particular, I note the requirement of Article 94 of the Planning and Development Regulations 2001, as amended that the EIS shall contain the information specified in paragraph 1 and paragraph 2 of Schedule 6 of the Regulations.

The EIS describes the proposed development, including information on the site and the project size and design. A description of the main alternatives studied by the developer, including the do-nothing scenario and alternative locations considered, is provided and the reasons for the preferred choice. The impact of the proposed development was assessed under all the relevant headings with respect to human beings; flora, fauna and fisheries; soils and geology; water; air quality; noise; shadow flicker; landscape; material assets; and cultural heritage; and interactions and mitigations. The content and scope of the EIS is considered to be acceptable and in compliance with Planning Regulations. No likely significant impacts were identified.

With regard to the requirements of Article 111 of the regulations, I consider that the submissions are generally in accordance with the requirements of Article 94 of the Planning and Development Regulations 2001, as amended. In-combination effects with other plans and projects in the area are not considered likely to be significant.

Likely significant effects arising from the proposed development

Section 5.0 of this report identifies and describes the main likely significant effects arising from the proposed development and regard should be had to this section of the report. The likely significant effects can otherwise be identified as follows:

Human Beings:

Impacts

- *Employment* – Short term construction jobs; potential long term loss of tourism related employment.
- *Residential Amenity*: Construction activity will potentially impact on surrounding residential amenities by area with minor visual, noise and shadow flicker intrusion.
- *Tourism Impacts*: The visual impact of the proposed turbine could have a negative impact for the area.

Mitigation

- Phasing and timing of construction activity.
- Noise emission limit values for day, evening and night and monitoring.
- Compliance with all relevant standards or guidelines for noise, vibration, dust and shadow flicker.

Residual Effects

- There will be some increase in noise emissions during the construction and operational phases however predicted levels are within guidance limit values and residual impacts are not predicted to be significant.

Landscape and Visual:

Impacts

- Significant landscape and visual impacts predicted.

- *Scale, height and extent of visibility:* The development will be visible from along the N67/WAW, coastal towns and villages, Scattery Island and Doonbeg Golf Resort
- *Impact on landscape character:* significant when viewed from outside the immediate area and minor when viewed from inside.
- *Impact on important views or scenic routes:* The works will be visible from several important viewpoints to the S, W and N.

Mitigation

- No realistic mitigation measures proposed.

Residual Effects

- Long term impacts anticipated.

Air, Climate, Noise and shadow flicker:

Impacts

- *Residential noise impacts:* There is potential for negative noise impacts on residential amenities from construction activities and minor noise intrusion during the operational phase.
- *Dust emissions:* Dust and air quality issues arising from the construction phase could result in disturbance.
- *Increased emissions:* Increased traffic volumes during construction have the potential for local air quality impacts.
- *Shadow flicker:* Potential minor disturbance at certain times of the year at particular times of the day under certain weather conditions.
- *Climatic impacts:* Renewable energy generation has the potential to have positive impacts in terms of reducing CO₂ emissions.

Mitigation

- Compliance with published guidance for noise and dust control during construction.
- Phasing and timing of construction works.

- Compliance with day, evening and night-time noise emission limit values.
- Compliance with guidance in relation to the management of shadow flicker.
- Compliance with standard construction management measures.

Residual effects

- Residual impacts are not predicted to be significant.

Soils, geology and hydrology:

Impacts

- *Peat excavation:* The development will require the excavation of a significant amount of peat with potential for localised flooding, small particle siltation in watercourses and water pollution during and after construction.
- *Disposal of excavated peat:* The relocation of peat to peat re-instatement areas has the potential to potential for small particle siltation in watercourses and water pollution during and after construction.

Mitigation

- Avoidance of sensitive areas.
- Phasing, timing and sequencing of excavation and construction works.
- Implementation of drainage plan which includes silt traps in all drains, silting ponds and buffered outfalls to reduce water flow velocities and improve surface water quality and peat erosion.
- Temporary storage tanks will be provided to store water from turbine base excavations and hard-standings.

Residual Effects

- Residual impacts potential include continued potential for localised flooding, small particle siltation in watercourses and water pollution during and after construction.

Flora, Fauna & fisheries

Impacts

- *Loss or deterioration of habitats:* Siltation in the Doonbeg river catchment from fine particles as a result of peat excavation and construction will result in a risk of water pollution in the Doonbeg River with a knock on effect for the Annex II Freshwater pearl mussel.
- *Birds:* Potential risk of turbine collision along bird flight paths and loss of foraging grounds for some species such a Greenland white-fronted goose

Mitigation

- As for soils and hydrology above.

Residual Effects

- Residual impacts on water quality, the Doonbeg River system and smothering/suffocation of the Freshwater pearl mussel are predicted to be significant.
- Not possible to predict effect on Greenland white-fronted goose or other migrants due to absence of autumn migration survey data.

Material Assets:

Impacts

- *Impact on local road network:* Short term disruption during construction but no long term impacts
- *Road safety:* Short term disruption along haul route via Kilrush during construction but no long term impacts

Mitigation

- Compliance with Council requirements.

Residual Effects

- Residual impacts are not predicted to be significant.

Cultural Heritage:

Impacts

- *Features of cultural and archaeological interest:* None predicted.

Mitigation

- Archaeological monitoring during works.

Residual Effects: None predicted.

Summary of Interactions:

Human Beings:

- Noise & shadow flicker
- Air Quality & Climate
- Landscape & Visual
- Material Assets / Traffic congestion and road safety

Cultural Heritage

- Human Beings
- Material Assets / road improvement works

Landscape & Visual

- Human Beings, tourism and employment

Traffic & Transportation:

- Noise, Air Quality & Climate
- Human beings (road safety).

Noise, Air Quality & Climate

- Traffic & Transportation
- Human Beings

Soils, Geology and hydrology:

- Air Quality

- Flora and fauna (birds, fisheries & fresh water pearl mussel)
- Human Beings
- Water environment

Flora, Fauna & Fisheries:

- Water Environment (birds, fisheries & fresh water pearl mussel)
- Human Beings
- Material assets
- Landscape & Visual
- Soils, Geology and Hydrology (siltation and water quality)

Conclusions regarding the acceptability or otherwise of the likely residual effects identified

The main assessment in Section 5.0 outlines the likely main residual effects of this proposal. The impacts on visual amenity, water quality and the Freshwater pearl mussel are considered to be significant while the impacts on Greenland white-fronted geese and other migrant birds are unpredictable due to the lack of survey data in relation to autumn migrations.

7.0 APPROPRIATE ASSESSMENT

Compliance with Articles 6(3) of the EU Habitats Directive

The Habitats Directive deals with the Conservation of Natural Habitats and of Wild Fauna and Flora throughout the European Union. Article 6(3) of this Directive requires that any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects shall be subject to appropriate assessment of its implications for the site in view of the site's conservation objectives. The competent authority must be satisfied that the proposal will not adversely affect the integrity of the European site.

The application was accompanied by a Stage 1 Screening Assessment and a Stage 2 Natura Impact Assessment (NIS). These reports describe the proposed development, the project site and the surrounding area. The NIS states that the proposed development would not be located within an area covered by any European site designation. The NIS identifies 6 European sites within a 10km radius of the proposal that have the potential to be affected by the proposed development and concludes that proposal would not have an adverse effect on any European sites or their conservation objectives.

The NIS assesses 2 of these sites at the River Shannon and River Fergus Estuaries SPA (004077) to the S and SW of the site and Tullagher Bog and Lough SAC (0023453) to the W of the site. The NIS examines the potential impacts on Whooper swan, Greenland white-fronted geese and Scaup duck that are mainly at risk of collision with turbines when flying over the site between their roosting and foraging grounds. Whooper swan and Scaup are Qualifying Interests for the River Shannon and River Fergus Estuaries SPA while the Whooper swan and Greenland white-fronted goose are listed as secondary interests for at Tullagher Bog and Lough SAC.

The NIS outlines the Qualifying Interests and Conservation Objectives for these European sites however it does not assess the proposal in relation to the specific conservation objective criteria for each site and relevant species. The NIS assesses in-combination effects with other existing and proposed windfarms but not with any other plans and projects in the area. The NIS was supported by surveys for Greenland white-fronted goose (2009-2014), Whooper swan (2009-2014) and Hen harrier (2010-2011) however the surveys did not include any data related to autumn migrations for Greenland white-fronted geese, or other migratory birds. The NIS did not carry out any assessment of potential effects on the Carrowmore Dunes SAC which have a direct aquatic connection to the proposed development via the Doonbeg River and the network of drains and streams that traverse the appeal site within the Doonbeg river catchment. Reefs are a Qualifying Interest in this SAC and such communities are very sensitive to the effects of fine particle smothering.

The Department of Arts, Heritage and the Gaeltacht raised serious concerns in relation to the adequacy of the NIS and the information contained therein. Particular concerns related to why a 10km radius (as opposed to 15km) was selected; the exclusion of more distant SPAs and the absence data that could be used to assess potential effects on wider bird migration and passage migrants; the exclusion of site specific conservation objectives and the lack of consideration of generic conservation objectives for other sites including whether Greenland white-fronted Geese is or could be considered a typical Annex 1 habitat of Tullagher Lough and Bog cSAC). The DAHG concluded that a revised NIS informed by robust screening was required, these concerns were reflected in the Planning Authority's fourth reason for refusal and the Board should note that the applicant did not submit a revised NIS as part of their appeal submission.

Having regard to the concerns raised by the DAHG and the various omissions outlined above, I am not satisfied that the NIS contains adequate or sufficient information to enable the Board to carry out an Appropriate Assessment of the potential effects of proposed development on the European sites in the vicinity and their conservation objectives.

8.0 RECOMMENDATION

Arising from my assessment of the appeal case I recommend that planning permission should be refused for the proposed development for the reasons and considerations set down below.

REASONS AND CONSIDERATIONS

1. The site is located in an area that is identified in the County Clare Wind Energy Strategy and as being partially within the Loop Head Landscape Character Area, and in a location where windfarms are Acceptable in Principle where the appropriate scale of development for such areas is identified as medium, and where the cumulative extent of the development is that a “second windfarm may be acceptable only at a very great distance with minimal visual presence”. Having regard to the scale of the proposed development, the proximity of the site to the existing windfarm at Moanmore South and to the site of the permitted windfarm at Tullabrack, the proposed development would give rise to an excessive scale of development, at a location where the appropriate scale of such development is identified as medium in the Wind Energy Strategy. The proposed development would therefore seriously injure the visual amenities of the area, would be contrary to the provisions of the County Clare Wind Energy Strategy and Objective CPD 10.3 of the County Clare Development Plan 2011-2017.
2. Having regard to the height, scale and location of the proposed development within an open, exposed and low-lying landscape, when viewed in combination with existing and permitted turbines in the area, its location relative to several residential properties, Doonbeg Village, the scenic route along the N67 Wild Atlantic Way and tourist amenities in the area, including the Doonbeg Golf Resort, it is considered that the proposed development would seriously injure the amenities of the area by reason of visual intrusion and overbearing visual impact, which would in turn seriously detract from the tourism resource of the area. The proposed development would therefore be contrary to the proper planning and sustainable development of the area.
3. Having regard to the location of the proposed development on a site where there is a significant extent of peat material, the scale of the proposed development in proximity to the Doonbeg River, the presence of a direct aquatic connection between the turbine locations and this river, and to the identification of the Doonbeg River as a habitat with a significant concentration of species listed under Annex II of the Habitats Directive, freshwater *Margaritifera margaritifera* (freshwater pearl mussel), the Board is not satisfied that the proposed drainage system would not constitute a serious

risk of water pollution in this sensitive river system. The proposed development would, therefore, be contrary to the proper planning and sustainable development of the area.

4. The NIS lodged with the application and appeal documentation does not contain sufficient information to enable the Board to undertake an Appropriate Assessment of the potential effects of the proposed development on several European sites in the area and their Conservation objectives. This includes the River Shannon and River Fergus Estuaries SPA (Site code: 004077) and the Tullaher Lough and Bog cSAC (Site code: 002343) particularly in relation to Greenland white-fronted geese, and the Carrowmore Dunes SAC (Site code: 002250). The proposed development could have an adverse effect on the integrity of these European sites, which would therefore, be contrary to the proper planning and sustainable development of the area.
5. On the basis of the information lodged and that of a recent legal ruling (O’Grianna v An Bord Pleanála) it is considered that, as the proposed development does not include as part of the application a proposed connection to the national grid as one project, the EIS lodged is inadequate in that a cumulative assessment of the likely environmental impact cannot be undertaken. It is therefore considered that the proposed development would be contrary to the proper planning and sustainable development of the area.

Karla Mc Bride
Senior Planning Inspector
23rd February 2015