

PL21.246149

An Bord Pleanála

Development: Ten year permission for wind farm with 2 no. wind turbines and associated equipment and works at Derrinoghran, (ED Killaraght) Barony of Coolavin, Gorteen, Co. Sligo.

Planning Application

Planning Authority:	Sligo County Council
Planning Authority Reg. Ref:	15/399
Applicant:	Curlew Energy Ltd.
Type of Application:	Permission
EIS:	Yes
NIS:	No
Planning Authority Decision:	Refusal

Planning Appeal

Appellant(s):	Curlew Energy Ltd
Type of Appeal:	1st-v-Refusal
Observations:	Peter Sweetman

Site Inspection:	6th May 2016
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- Inspector Suzanne Kehely
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1. SITE DESCRIPTION

- 1.1 The development site of 7.09 hectares is part of a 22.3 hectare holding and is located in the townland of Derrinoghran, an upland area on the Sligo Roscommon border on the western edge of the Curlew Mountains in County Roscommon and approximately 5km south west of Lough Arrow and 3.5km north of Lough Gara. It is located 6km west of Boyle in an elevated setting encircled by a network of local tertiary roads between the R295 and R295.While access is proposed to the north within the development site, the overall holding has separate road frontages on to local roads north and south of the site.
- 1.2 The site is at an elevation of between 180 and 228m OD (Malin) on a hillside that rises to 225m. The adjacent hills and mountains rise higher to the west of the site.
- 1.3 The site is partly under forestry to the North West. The road along the north boundary cuts though a small dip between in the shoulder of the curlew Mountains to the North East. There is no obvious vehicular access to the development site. There is an access road to the forestry lands to the east of the proposed site entrance but through access to the development site was fairly impenetrable by foot. The eastern part of the site is relatively undisturbed and covered by peatland with varying habitats including Blanket, Bog, Wet Heath and Dry Heath. The peat depth typically ranges in depth from .8mto 1.8m. The site is stated to be drained by tributaries to the Owenmore River and Boyle River.
- 1.4 There are 15 no dwellings within a 1km distance of the site concentrated in clusters mainly to the south of the site. There is one to the north of the site on the opposite side of the road. The nearest dwelling is about 515m from the proposed development.
- 1.5 The site is not located on or adjacent to a European Site. The nearest is 3.5km away. There are 14 European Sites within a 15 km radius of the site. The road network to the south is a designated scenic route and Wynne's view point is located in the vicinity of the site to the south. There is a parking bay on the southern side of the road at this point from where panoramic views can be enjoyed. Lough Gara forms a strong focal point in the open and expansive landscape to the south. The ancient route Bothar an Chorainn is located in forestry lands on the far side of the road to the north of the site.
- 1.6 Lands in this location are stated to benefit from an above average mean wind speed of 8.75m/s at an elevation of 75m above ground level which is considered satisfactory for wind energy development.
- 1.7 The sites of the grid connection routes both extend in a south east direction in the direction of Boyle and are each in the order of 8km in length. They are through substantially open ground before traversing the north western railway and the River Boyle one upstream of the small Lough Gara and one downstream. There are high voltage overhead lines extending across these lands presently.

2. PROPOSED DEVELOPMENT

- 2.1 Permission is sought for 2 no. wind turbines of hub height up to 70m and a rotor diameter of 82m with an overall tip height of 112m and associated site works including hard standing, site cabling, substation building, road and site works. It is planned to connect to the national grid at Boyle in Roscommon via overhead lines and this is not part of the application.
- 2.2 The application is accompanied by an EIS, the scope of which extends to include the grid connection although this is not part of the planning application. Chapter 2 gives a detailed description of the project context and its evolution and the main elements as a finalised project Chapter 3 describes the construction stage of the proposed.
- 2.3 A screening report has also been submitted as part of the application to the planning authority and is further supplemented with data survey from April 2016 as part of submission to the Board.

3. PLANNING AUTHORITY ASSESSMENT

3.1 Internal Reports

Area Engineer: No objection subject to conditions. In addition to standard conditions regarding road and drainage works (design and materials) specification a Bond of 50,000 for repair of road/haulage route is required. Traffic management plan is also required to be submitted – this must also be agreed with Roscommon County Council prior to works.

Environment: Further information required regarding surface water and watercourses, drainage, storage areas and noise.

3.2 External Consultation and submissions

3.2.1 Consultation

The planning authority referred the application to the following bodies and received responses as per table below.

Roscommon	No response
County	
Council	
DAU – NPWS	Natural Heritage issues – but no comment
Inland	Refers to location of site within two catchments of the Uppr.
fisheries	Shannon RBD. 1)Eastern side of site in the River Boyle sub catchment
	2)Western side is in Finisclin sub catchment. Potential impacts to fisheries must be mitigated.

	 Site drains to tributaries of the Owenmore River and Boyle River (both Salmonid with healthy stocks of brown trout. Also white-clawed crayfish. Works must not have deleterious effect on spawning ground. No aspect should have a deleterious impact or polluting way on biological criteria set out in Annex V Monitoring of nutrient levels in the streams and Q values for invertebrates should be part of the monitoring programme Buffer zones could be required for clear felling to attenuate loss of nutrients to the drainage watercourse. Transporting material must not have an affect Need appropriate measures and drainage system to attenuate run-off A method statement for construction and transport should be agreed (should address cement, concrete and spoil areas) Crossing tributary streams should be avoided – where its occurs should comply with IFI's specific requirements Should be monitored by suitable qualified person
	occurs should comply with IFI's specific requirements
An Taisce	No response
Heritage Council	No response
Irish Aviation Authority/ Sligo airport	No significant issues

3.2.2 Third Party Objections

Kevin Deering and Peter Crossan

Issues of concern relate to:

- inadequacy of flora and fauna surveys
- impact on bats.
- Habitat value of site
- Precedence for more development and erosion of Annex 1 Habitat

David and Ann Byrne

Issues of concern relate to:

- Lack on consultation
- Road safety Brishlagh Road very narrow

- Visual dominance of an area where strict criteria apply for houses
- Discourage housing
- Consent from landowners not resident
- Forestry clearance and grid connection unsightly
- Health effects of sound
- Crime attraction
- Too close to dwellings at distances of 400m and 550-700m given that 700m may be new standard distance.
- Not referred to Health Services

3.3 Planning considerations and issues

- The planning authority report refers to the following matters in some detail:
- The pre-planning discussion further to which the planning authority flagged objection to location and concerns that it is not in cluster format.
- Visual Amenity: In the context of the development plan the site is along a scenic route no.70 and is also in the zone of influence of views of Lough Gara to the south as viewed form a number of scenic routes and protected views.
- There are accordingly concerns about impact on landscape character and siting within a sensitive rural landscape
- Wind energy policy and considerations in respect of environment, access and construction.
- Statutory guidance and submissions
- Planning history
- EIA: While sub-threshold an EIS has been submitted and is bound by the provision fo section 172(1) of the Act. The EIS is considered to comply with Schedule 6 of the PDR 2001 as amended. The conclusions of the EIS are accepted with the exception of the significance of visual impact on the landscape over the long-term. The IFI concerns are considered to be addressed by mitigation measures. The issues raised by the Environment Department regarding drainage can be addressed by conditions as can the road network issues.
- Appropriate Assessment: Given the nature and scale of developemtn its distance with the EU deisngated sites in the Natura 2000 netowrk it is ocnisder tha the proposed evelopemnt on its own or in combination with other projects including the grid connection works will nto have any impact on such sites. A spate stage 1 Screen assemsent Matrix forms the basis of this dtermination.

4. DECISION OF THE PLANNING AUTHORITY

4.1 By order dated 18th January 2016 the planning authority issued a decision to refuse permission for one reason:

The proposed turbines are to be located on an elevated and exposed site in an area designated as Sensitive Rural Landscape in accordance with the Sligo County Development Plan 2011-2017. It is an objective of the Development Plan to strictly control development in designated Sensitive Rural Landscapes in order to protect the character, integrity, distinctiveness and scenic value of such areas. Furthermore the surrounding receiving environment is open and substantial in area and includes many sensitive receptors including designated scenic routes, Sensitive Rural Landscape and a large Visually Vulnerable Area around Lough Gara. In this regard it is considered that the subject site and surrounding landscape lacks the adequate capacity and features to successfully assimilate the proposed development which would create a significant visual intrusion in the landscape and would be excessively dominant and visually obtrusive when viewed from the surrounding landscape. The proposed development would therefore be seriously injurious to the visual amenities of the area and would be contrary to the proper planning and sustainable development of the area.

5. PLANNING HISTORY

- 5.1 PA ref.14/134 refers to refusal of permission for a domestic dwelling on grounds of visual obtrusiveness among other engineering issues.
- 5.2 PA ref. 09/517 refers to a decision to refuse permission for 15m antennae support structure on grounds of impact on scenic amenity. This was granted on appeal.
- 5.3 PA ref 96/288 refers to refusal of permission for 26m high telecommunications support structure on grounds of elevated nature of site.

6. PLANNING POLICY

6.1 The relevant plan is the Sligo County Development Plan 2011-2017

The pressure for wind energy in sensitive areas including upland areas and its economic benefits for local communities as a sustainable source of energy is acknowledged

It is a challenge for the Council to achieve a reasonable balance between: (a) responding to government policy on renewable energy; and (b) enabling the wind energy resources of the County to be harnessed in an environmentally sustainable manner.

Pressure for future wind farm development is likely to be concentrated in upland and coastal areas and in offshore locations, particularly where energy providers can access the national electricity grid. The siting of wind turbines requires careful consideration. While turbines located on elevated sites tend to have a higher output, they also have a significant visual impact. Visual obtrusiveness depends on the location, layout, size, number, design and colour of the turbines, as well as the subjective perceptions of the viewer.

Proposals will generally be discouraged in or close to pNHAs, cSACs, SPAs, designated Sensitive Rural Landscapes, Visually Vulnerable Areas, Scenic Routes, and protected views, Zones of Archaeological Potential.

6.2 For the purposes of landscape character four classifications are provided under the County Development Plan. These classifications are: Normal Rural Landscape, Sensitive Rural Landscape, Visually Vulnerable Areas and Scenic Routes.

Part of the site is located in a Normal Rural Landscape and part is located within an area classified as Sensitive Rural Landscape which is described as having an 'intrinsic scenic quality'. New developments which are to be situated within Sensitive Rural Areas must ensure that they:

- Do not impinge in any significant way on the character, integrity and distinctiveness of the area.
- Do not detract from the scenic value of the area.
- Meet high standards of siting and design.
- Satisfy all other criteria with regard to, inter alia, servicing, public safety and prevention of pollution.

Proposals will generally be discouraged in or close to pNHAs, cSACs, SPAs, designated Sensitive Rural Landscapes, Visually Vulnerable Areas, Scenic Routes, and protected views, Zones of Archaeological Potential.

Appendix G regarding County Landscape Designations notes that Sensitive Rural Landscapes have a low capacity to absorb new development – e.g. uplands, headlands. They are described as generally support insufficient vegetative cover for screening purposes and most sites are seen against the sky or water. As a result, even a small development in such an area has the potential to create an impact on the appearance and character of an extensive part of the landscape.

To preserve the integrity of designated Sensitive Rural Landscapes, while endeavouring to sustain local communities, only a limited range of appropriate new developments can be accommodated. Any such proposal must demonstrate a high standard of siting, layout and design and may be required to consider ecological, archaeological, water quality and other factors.

The site is located near the Derrinoghran loop which is described as being from the junction off R294 west of Cloonloogh onto L5707 turning north on to L5708 then east onto L5705 and proceeding south to L6=5706 to join-up with start. The stated scenic view to be preserved is' Views of Lough Gara.'

The site is partially within a Scenic Rural Landscape. The scale and detail of the development mapping makes it difficult to accurately identify extent of overlap.

7. NATIONAL POLICY

7.1 National Energy Policy

Under the National Renewable Energy Action Plan the State is committed to 40% of its electricity consumed in 2020 being generated by renewable energy sources. In order to achieve national targets for renewable electricity by 2020 (40%) it is estimated that 275MW of renewable electricity generation will needed to be built per year up to 2020 in order to meet Ireland's 40% target.

7.2 Wind Energy Guidelines 2006

Strategically, the guidelines advocate that Development Plans 'Achieve a reasonable balance between (a) responding to overall Government Policy on renewable energy and (b) enabling the wind energy resources of the planning authority area to be harnessed in a manner that is consistent with proper planning and sustainable development' and 'the assessment of individual wind energy development proposals needs to be conducted within the context of a 'plan led approach'. In terms of assessing development proposals the guidelines outline the main criteria to be used which includes:

- environmental impact effects on landscape, natural and archaeological heritage;
- seeking visual harmony and balance choice of turbines/towers, colour and siting;
- keeping secondary structures to a minimum buried on-site cabling, minimal fencing, transformers placed inside towers where possible;
- keeping access roads to a minimum using established roads where possible and following natural contours if roads are necessary;
- managing the building site removing waste, avoiding erosion, replanting the land.

Section 3.7 states that designation of an area for protection of natural or built heritage or as an amenity area does not automatically preclude wind energy development' and similarly section 3.8 states that 'Visibility of a proposed wind farm from designated views or prospects will not automatically preclude an area from future wind energy development but the inclusion of such objectives in a development plan is a material factor. This will be taken into consideration in the assessment of a planning application.'

Chapter 5 refers to other **Environmental Implications** including natural heritage, geology, archaeology, built heritage, noise, safety, electromagnetic interference and shadow flicker. The guidelines also refer to the relevant national policy documents.

Section 5.2 refers to Natural Heritage and states that:

'In coming to a decision, planning authorities should also consider the importance of the development of wind energy projects, including those proposed on designated sites, in view of their strategic importance in contributing significantly to the achievement of targets set out in the National Climate Change Strategy by decreasing dependence on fossil fuels, with subsequent reductions in greenhouse gas emissions.'

Section 5.3 states that a planning application must be accompanied by information on such issues as slope stability.

Chapter 6 refers to **Aesthetic Considerations in Siting and Design** of wind energy developments including aesthetic considerations, landscape sensitivity, siting and location, design and landscape character types. The factors to be assessed comprise landscape sensitivity, visual presence of the wind farm, its aesthetic impact on the landscape and the significance of that impact.

Appendix 4 of the guidelines provides details of best practice for Wind Energy Development in peatlands.

Section 6.9.1 refers to **Mountain Moorland** and states that: 'Mountain Moorland may be inappropriate for wind energy development for reasons of natural heritage and the fact that some of these landscapes are of rare scenic quality and/or support some of the last wilderness areas of relatively pristine, unspoilt and remote landscapes.'

In addition 'the open expanse of such landscapes can absorb a number of wind energy developments, depending on their proximity. The cumulative impact will also depend on the actual visual complexity of landform, whether steeply rolling, undulating or gently sweeping. The more varied and undulating an area is topographically, the greater its ability to absorb and screen wind energy developments. The aesthetic effect of wind energy developments in these landscapes is acceptable where each one is discrete, standing in relative isolation.'

8. GROUNDS OF APPEAL

- 8.1 The applicant has lodged an appeal against the decision of the planning authority and this based on the following grounds:
 - It is demonstrated how the proposal complies with Development Plan policies in section 11.1.4
 - The development provides an alternative energy sources to fossil fuels and held Ireland reach its targets with the benefit of economic stimulus in the area
 - The EIS demonstrates potential impacts and mitigation in relation to visual impact, noise levels, electromagnetic interference, ecological impact, safety and land use.
 - The site is not subject to statutory designations

Visual Impact

- While it is acknowledged that the site comes with a Sensitive Rural area it is also within a normal Rural Landscape
- Out of 10 selected viewpoints on balance the impact is in the mid order of magnitude the majority being of moderate to lower significance
- As viewed from the other side of Lough Gara the proposed development would not be excessively prominent (ref figures 11.7 and 11.8 of the Visual booklet submitted)
- Figure 11.10 shows the view of the proposed wind farm from the Derrinoghran Scenic Route. While the view is prominent from the route, the partial forestry surroundings to the north and east offer a degree of buffering and screening.
- The Normal Landscape has a high capacity to absorb new developments without detracting from its landscape quality and is suitable for the proposed development
- Adherence to the criteria for sensitive landscape is demonstrated in chapter 11 of the EIS.
- Mitigation measures such as; blade arrangement (three), tower design (tapering), Colour (grey/white to match sky), sunlight reflection control, avoidance of counter rotation, positioning to have small spatial extent.
- The 112m blade tip is relatively small
- As Largan Hill wind farm at a distance of 11.km to the south west and Geevagh windfarm at a distance of 15km to North cumulative visual impact will not arise.

Site suitability

- The site is suitable due to
 - Availability of wind. According to the Wind Atlas (SEAI) the site has mean speed of 8.25m/s and 8.5m/s at the lower elevation of 75m and this considered a suitable wind speed for wind energy development.
 - Environment: The site does not fall within any National or International Environmental Designation for conservation. Only two sites: the Bricklieve Mountains and Keishcorran SAC/pNHA and Lough Gara SPA/pNHA are within 5km.
 - There are no archaeological features within the overall boundary. The nearest site of such interest is a feature Bothar an Chorainn which is about 450m north east of the nearest turbine.

Development Control regarding residential amenity and stability:

- Distance from dwelling: none within 500. Boyle town is 6.3km to the south east of the site.
- Electromagnetic Interference The proposed development will have little or no effect on existing electromagnetic conditions. The closet mast for telecommunication is 4km east of the proposed development site.
- The terrain is generally suitable given the elevated nature but with a gentle gradient.

Tourism

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• From a tourism perspective Research by SEI indicates 80% of people favour wide farms. it is submitted that just 1 in 4 believing wind farm to be negative on sensitive landscape

Wider benefits - Compliance with Energy Strategy

- Overall positive impact contributing to Ireland's indigenous energy supply.
- Climatic change and impact on environment: The proposed development will contribute to the government's commitment to reduce global warming, carbon emission and climatic changes arising from human activities
- It will generate 12,089MWhr of electricity per year which will potentially supply 2400 households and would avoid 3,041 tonnes of Carbon Dioxide and also 56 tonnes of Sulphur Dioxide, 6 tonnes of Nitrous Oxide and 200 tonnes of ash. A total of 4,901 tonnes of CO₂ equivalent would be potentially removed and thereby contribute to Ireland's renewable energy targets and its commitment to combating climatic change.

9. RESPONSES TO GROUNDS OF APPEAL

9.1 Response by Sligo County Council

In a letter dated 3rd March the planning authority notes the reference by the applicant to the development plan policy to generally discourage wind energy proposals in areas designated as sensitive rural landscape and on this basis refutes the grounds of appeal:.

- The statement that the development would be highly obscured and being the opposite direction of any protected views is refuted as it is considered that the development would be obtrusive by reference to section 11.1.4 of the Development Plan as it would be on an exposed landscape and could not be integrated into the landscape successfully and would have a significant negative visual impact
- It is submitted by the planning authority that the proposed turbines as seen from all viewpoints including points on scenic routes would not be visible with any other wind farms and would stand out as a singular element in the landscape. There are no other landscape features to lessen the impact this would have on the surrounding area. The proposed wind farm cannot be viewed in conjunction with other wind farms as the nearest 13km away. It was considered by the planning authority that the development would have a negative aesthetic impact on the landscape and two standalone turbines as proposed cannot be assimilated successfully into the landscape and has a major adverse impact.
- In conclusion the overall impact would be negative when assessed under the WEG headings for 'Estimation of the Likely Degree of Impact on the Landscape'. Having regard to it location in an exposed landscape the visual impact would be significant and would be seriously injurious to the visual amenities of the area.

10.0 THIRD PARTY SUBMISSIONS/OBSERVATIONS

10.1 Peter Sweetman

- It is submitted that it is not possible to conclude based on the information submitted that the proposal complies with the requirements of the European Directive (for appropriate assessment) by reference to the judgement in Finlay Geoghegan J in Kelly v An Bord Pleanala.
- The test, it is submitted is that it is merely necessary to determine that there may be such an effect.
- Indirect effect is still an effect
- It is pointed out that the screening document acknowledges limitation of data in the case of Lough Gara and an absence of significant effect on Callow Bog, yet no update of data has been received by An Bord Pleanala.
- Part of the development is located on a priority habitat and the case of Sweetman v An Bord Pleanala (2013-356JR) is relevant but awaits determination.

11 RESPONSE TO OBSERVATIONS and FURTHER CONSULTATION

11.1 Applicant

Indirect effects

Further surveys have been undertaken in March and April 2016 and confirm aspects in relation to migratory wintering birds and accordingly the screening statement has been updated

11.2 Planning Authority

No further comment

11.3 Other Statutory Bodies

DAU: no response

11. ASSESSMENT

11.1 Issues

This appeal relates to an application for a small wind farm comprising two turbines on the Sligo Roscommon Border. The principal reason for refusal is based on visual impact in a sensitive landscape area. In this context and having regard to the submissions on file and statutory requirements, the salient issues centre on:

- Principle of the proposed development
- Environmental Impact
- Visual Impact and Landscape Character
- Residential Amenity

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- Access/Traffic
- Appropriate Assessment

11.2 Principle of the proposed development:

Both Development Plan policy and National policy are supportive of the generation of renewable energy through wind energy developments as is proposed in this case. The site is located in an elevated location that is classed in landscape terms as Normal Landscape and Sensitive Landscape and accordingly this potentially restricts the scale and extent of development as development is generally discouraged in sensitive landscape areas. Acceptability of the proposal is however predicated on being acceptable in regards to environmental impact, impact on amenities and generally being in accordance with the proper planning and sustainable development of the area.

11.3 Environmental Impact Assessment

The Development Plan as a matter of policy requires an EIS for all Wind farm proposals. The relevant guidance for EIA is contained in 'Guidelines for Planning Authorities and An Bord Pleanala for carrying out Environmental Impact Assessment' (Department of Environment, Community and Local Government, March 2013).

Environmental assessment must include an examination, analysis and evaluation and it must identify, describe and assess in an appropriate manner, in light of each individual case and in accordance with Articles 4 to 11 of the EIA Directive, the direct and indirect effects of a proposed development on the following:

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

Alternatives

In the first instance I note that the EIS as part of the process considered alternatives in terms of sting layout and operation. This approach is evident in the site selection and detailed layout of the scheme which takes account of wind, conservation designations, the County Development Plan provisions, housing, grid connection, accessibility and terrain. In terms of turbines a lower hub height of 70m has been selected rather than the taller alternatives up to 85m.

Human Beings

The EIS Identifies that there is unlikely to be any significant effect with regard to employment settlement patterns, population, health and safety, land use and tourism. I note that an objection refers to potential restriction on future housing

however this is not necessarily the case and moreover the area is rural and outside a designated settlement area and accordingly the development is not unreasonably compromising future planned settlement, On balance I consider the conclusion of the EIS to be reasonable in that there is a potential short and longer term positive impact in the capacity of the development to provide a local stable energy source.

Indirect impacts on socio economic environment by way of impacting on residential amenity relate primarily to the operational stage whereby noise, shadow flicker and electromagnetic interference can potentially have an injurious impact on the habitable accommodation of residents in the area. These matters are addressed below in the assessment of interactions

Flora and Fauna

This section of the EIS has been informed by consultation with statutory bodies and Best Practice guidance such as IEEM, Guidelines for Ecological Impact Assessment. The EIS describes the receiving environment in the context of its habitats and a range of species that are of conservation interest having regard to both previous data and survey work. The scope of the survey work also includes both Grid Connection routes

Habitats

The EIS highlights that the site is not subject to any Natura 2000tion designation. It is dominated by low quality coniferous plantation and to a lesser extent by high value wet heath, dry heath and blanket bog habitats. The EIS identifies the vulnerability of the habitats of international importance and quantifies the extent of loss of habitats. Notably the wet heath habitat is not directly affected.

Table 11.1

Habitats to be altered	% loss due to development footprint - access, turbine/ crane bases, compound, cables	Significance
Coniferous	12	minor due to Low magnitude
plantation		effect and low ecological value
Blanket Bog	3.58	moderate Low magnitude
(PB1)		effect but habitat of
		international significance
Dry Heath	0.4	moderate Low magnitude
(HH1)		effect but of habitat of
		international significance

Mitigation measures have been incorporation by way of avoidance, reduction and a Habitat Management Plan is proposed to offset the loss of any habitat resulting from the footprint of the wind farm. There is particular emphasis on surface water management. Mitigation measures to ensure soil stability and peat management address protection of integrity of underlying habitats conditions.

The biggest impact is at construction stage where road construction and hardstanding will involve loss of habitats. However the footprint of development is quite small and coniferous plantation is the most affected. There will be 3% loss of blanket bog habitat which is an Annex I habitat and there will a small loss of dry heath habitats. The proposed layout and access is concentrated in the coniferous area where the underlying blanket bog is degraded.

The EIS also identifies potential impacts on the above habitats in addition to the aquatic habitat of Mweelrow Stream (fronting the site) arising from haul routes, construction traffic and activities, excavation and associated impacts of, for example coniferous clearing, sedimentation and peat slippage. These impacts potentially range from being of minor to moderate significance. The aquatic conditions of the Stream is poor due to choking and water bodies (ditches/drains) within the site provide for a limited range of species and are of limited conservation interest. Contamination of surface water however presents the greatest risk being a pathway to more sensitive receptors such as the Boyle River downstream which contains more species such as Lamprey and Brown Trout. The stream feeds into this river downstream of Lough Gara, The stream is also a tributary of the Owenmore River which is a tributary of the Ballysadare River which is an important salmon and trout fishery. A section of the Owenmore has a high ecological status and a range of issues are listed for consideration in the development approach. The mapping in the EIS does not fully plot the course from the site to the precise tributary connection. Although upon examination of the most detailed ordnance survey maps (see appendix) and noting the river catchments and terrain I have no and the plotting of the stream in the vicinity of the site these catchments make sense. The proposed mitigation measures provide for a layout that incorporates a buffer zone in the first instance from identified watercourses. Water bodies are proposed to be protected by a range of design and management measures.

While the IPPC has objected to the principle of loss of habitats there is no specific comment in relation to this amount of loss of blanket bog. In the context of the size of this habitat, the location in coniferous plantation and also having regard to the bird and flora and fauna survey generally, which indicates low dependency on the site, in addition to a limited range of species supported by the site, I consider loss of 3% of blanket bog to be minor and that impact would not be significant. I am also satisfied that the aquatic habitats will not be significantly affected having regard to the 6 months duration of construction activity, containment of area and integrated surface water management over the longer term.

Fauna – birds and bats

The site supports a restricted range of fauna species. Bat activity in the vicinity of the site was low and aside for the meadow pipit no sensitive bird species were recorded breeding in the vicinity of the site. There was no record of any flight activity of Whooper Swan or Greenland White-fronted Geese. The special conservation interest species of Lough Gara SPA were not at or in the vicinity of the site. These findings were further supported by survey work conducted in March April 2016 and submitted in response to the objection. The results of this later work are incorporated in the Screening Report for Appropriate Assessment which is cross referenced with the EIS in terms of overall impact on flora and fauna. These

further survey results substantially confirm the conclusions of the EIS. The bird surveys included both Grid Connection routes of 9 to 10 kilometres in length and in particular focus on the gird overhead crossing of the River Boyle – a wildlife corridor. The range of species and locations are plotted on the aerial images at the back of the updated screening report. Notably the Kestrel, Buzzard and Golden Plover species were spotted outside the site but pathways did not traverse the site.

In relation to Birds, surveys were conducted in intervals from 2012 through to April 2016 - the latter surveys were conducted after the lodgement of the planning application. The Kestrel remains the only raptor in the area but is not typical in the habitat.

The main risks for bird species in the area are displacement/disturbance and collision with overhead equipment. In terms of displacement it is pointed out that the coniferous planation is only part of such a habitat in a wider setting and accordingly the partial loss of such a habitat at this location is not significant. In terms of collision it is pointed out that the potential impact is of relative insignificance based on species and flight paths of birds of conservation interest.

With respect to the grid connection route crossing the Boyle River which is a potential but limited flight path corridor for sensitive species measures such as markers have been outlined to avoid the limited potential for collision with the overhead grid connection line. In the first instance however the siting of crossing can be co-located with existing overhead cross and thereby provide a low risk collision path.

The EIS rules out the risks to a range of Bat species due to the low levels of activity recorded in the vicinity of the proposed site, the high fidelity shown by these species to habitat edges and the presence of separation distance which satisfied the recommended buffer (50m distance at both turbine locations, the altitudes of flight, foraging patterns, it is concluded that no significant effect on bats population are likely to arise.

Other species

Amphibians and reptile: as the loss of habitat is very small this is not considered significant.

Otters – no records on site but downstream may be an issues if pollution occurs within site,

Badgers- site unsuitable for this species

Hares – not present on site

White clawed crayfish - no records of being on site

Freshwater Pearl Mussels - no records of being on site

Marsh Frittera – no impact due to unsupporting habitat. (The amended screening report table explains this)

I am satisfied with the scope and level of detail provided by the applicant in regard to bat and bird species in the area. I am also satisfied that based on the information submitted and having regard to the scale of the development and consequent limited duration of construction activities, and the limited scale and range of particular sensitive habitats and species together with the measures proposed to monitor and mitigate potential ecological threats, that the proposal would have no significant or adverse impact on flora and fauna. This is however contingent on adherence to an Environmental Management programme, a Habitat Management Plan and a Surface Water Management Plan as proposed at construction phase in particular and as subsequently managed at the operation phase. Mitigation measures in regard to fauna such as no construction work during breeding season and controlling activities to minimise disturbance on site are likely to be effective and implementable and when taken in conjunction with the other proposed mitigation measures which have been substantially designed in the scheme the proposal would have ne unlikely to have any significant or adverse impact upon flora and fauna

Soil and Geology

The majority of the site is peat based with some poorly drained mineral soil. The main impact in regards to soil relates to excavation on site during the construction phase and peat stability as part of the site is located on blanket bog. However, the footprint is limited due to the single 500m access and provision for two turbines. The peat depth is relatively shallow generally ranging from .8 to 1.8m and the deepest parts have been avoided. Although page 154 refers to exceedance of these parameters with 2m in a very limited area of the track footprint and a depth of 0.3m and 0.6m at the turbine bases. (This I note is the range of peat stripping proposed). It is noted that the majority of the site has been disturbed by commercial forestry.

Chapter 3 includes information regarding the level of excavation works required on site and includes the excavation of 5,542m3 of peat/subsoil on site. Details are provided for spoil and peat storage (in designated peat repository areas). The information indicates that the site is only at a low risk of peat slide however it is proposed that a geotechnical engineer will be contracted for a detailed design phase prior to works.

The survey work does cover the impact on soil in the proposed grid connection corridors works. It is suggested that this can be addressed by mitigation.

I note the Irish Peatland Council object in principle to loss of peatland priority habitat in the construction of wind farms particularly where peat depth is high. I am satisfied that the layout has been informed by this and a precautionary approach has been taken in the mitigation measures proposed such that the impact of the proposed development on soil and slope stability would be acceptable. Conditions to ensure such is the case would further ensure this.

Water

The site is drained by two separate catchments. A stream to the north of the site drains the location of the access and location around turbine 1 and is a tributary of the Owenmore River which flows into the Ballisodare River before reaching Sligo Bay. Another stream drains the southern side of the site and location around

Turbine 2 and this is a tributary of the River Boyle which flows into Lough Key, before reaching the river Shannon north of Carrick on Shannon. There are no large rivers within the development site although the grid connection traverses the River Boyle in addition to artificial drains which also drain to the River.

The EIS is based on field work in 2012 and more recently in July 2015 although baseline data dates from the earlier date.

Risks are identified at both Construction and Operation stages. Construction mitigation measures include

- management of road drainage through design and materials e.g grading to avoid soil erosion and safeguarding water quality
- a constructed drainage incorporating buffer outfall fans along the road to disperse run-off that mimes baseline hydrology and a tiered stilling pond system
- measures to resolve any peat erosion and remediate the condition of blanket bog vegetative cover so as to reduce surface water run-off and potential suspended solids loading.
- Riparian buffer zones of 50m
- An Environmental Management Plan to include a checking a monitoring and maintenance of pollution control measures
- No storage of hydrocarbons on site
- Temporary self-contained sanitation facilities
- Use of interceptor drain to collect groundwater seepage or ingress and channel to controlled attenuation before discharge.

Following mitigation measures it is anticipated there will be some minor local changes to water flows at the site. A regular monitoring of water quality and discharge is recommended. It is anticipated that the hydrological impacts of the development will be negative, slight and temporary overall with increased run-off being a negative but slight and permanent impact.

Notably in relation to ground water the risk is identified as being of a low magnitude and short term that can easily be controlled by an appropriate interceptor. Accordingly the risk to potential wells within a few hundred metres is limited. I also note that mitigation measures such as no storing or fuel or refuelling on site among a range of other precautionary measures that would I consider significantly reduce the vulnerability of the ground water during construction stage.

While the mitigation measures are comprehensive they are not site specific. However in view of the size of the site and identification of drainage channels I am satisfied that these measures are substantially achievable. I note however that the Drainage Division sought further information in respect of drainage details. Arguably these measures should be sought for their prior approval however I am of the opinion that these can be reasonably addressed by conditions, I say this in the context of the absence of a significant water body within the site and the suboptimal ecological value of the stream which is to be crossed and also having regard to the considerations of Inland Fisheries and the limited scale of the development and associated construction activity.

Air

The air is stated to be of good quality as indicated by desk studies. Dust during construction stage is identified as having a potential affect but this is short-term and can be mitigated through damping down of track among other measures.

Climate

It is estimated that emission will be removed by some 51,000 tonnes of carbon dioxide equivalent per annum which will have a positive impact on air quality.

Noise

There are 15 dwellings in the vicinity of the site. Noise levels at all 15 residential properties are predicted to be well within a 40dBA limit for both day and night times (as set in the 2013 targeted review of the WEG 2006) and accordingly within the greater value of 45dBA in the WEG 2006. It is noted that this based on a worst case scenario assuming downwind receptors and attribution of an uncertainty value (1dBA) for turbine power. The low frequency noise and vibration from the proposed operation is predicted to be of negligible impact. I consider this to be a reasonable conclusion.

Shadow Flicker

Shadow flicker was quantified for 15 houses within 1km of the proposed turbines. This distance is in excess of 10 rotor blade diameters. Based on a worst case scenario, whereby there are no trees and constant sunlight, two houses will experience no shadow flicker and no house would be exposed to more than 30 minutes of shadow flicker as calculated on a mean rate per day. The maximum exposure in a worst case scenario is a duration of .67 of an hour for 139 days and this averages at .47hours per day but rises to 64.7 hours per year. The Wind Energy Guidelines recommend that shadow flicker at neighbouring dwellings within 500m should not exceed 30 hours per year or 30 minutes per day. While total hour rate is breached the main daily rate is well with acceptable limits. The developer is open to mitigation measures if shadow flicker is an occurrence. I am aware that turbines can be programmed to be shutdown to prevent shadow flicker. I am satisfied that subject to an appropriate condition the issue of shadow flicker can dealt with in a satisfactory manner.

There are no predicted adverse impacts in regards to existing electromagnetic conditions within the area as a result of the proposed development. I am satisfied that interference with such conditions is not a major issue of concern and that a condition in this regard would be sufficient.

Landscape

Chapter 11 of the EIS describes the impact on landscape by reference to the development plan landscape classification and policies and with the benefit of wire frames, Zones of Theoretical Visibility and photomontages based from 10 different locations within the surrounding landscape. The viewpoints chosen are roads

within the surrounding areas including designated scenic routes, settlements and points of note within the surrounding landscape. The assessment also considers the impact in the wider context of climatic change and landscape. The issue of cumulative impact is ruled out having regard to the separation distances between wind farms which I consider to be reasonable.

The ZVI mapping of the proposed development shows potentially visibility over 59% of a 10km radius. The photomontages are considered to illustrate the obstruction of this potential visibility due to topographical features. The applicant states that additional measures will be implemented to reduce visual impact including blade and tower design, choice of colour, a non-reflective finish and rotating blades in one direction.

The assessment concludes that the proposed development which is modest in scale is deemed to have an acceptable visual impact in a working landscape and at acceptable distance from scenic views and is therefore not contrary to Development Plan policy in regards to protecting landscape character.

I consider the information submitted provides a fair presentation of the visual impact in the near, mid and distant views and fro\m a range of sensitive locations. It is quite apparent that the turbines will be an obvious and prominent feature in the landscape in certain views. While the EIS describes the impact as being acceptable this is a matter of dispute among the appellant parties. The planning authority is of the opinion that expansive nature of the site and surrounding lands offers limited natural mitigation which is unacceptable in a designated sensitive landscape and as viewed from Lough Gara vicinity. The merits of this aspect of the development in a wider policy context are separately addressed in the assessment of the visual impact in this report.

Material Assets

The EIS concludes that the proposed development would have no significant impact upon agricultural, natural resources, forestry, infrastructure or air traffic given that these elements of the environment will be unaffected or will only experience minor negative or positive effects. In view of the limited footprint, the haul route on a reasonable road network and the scale of the development I consider this to be reasonable.

In respect of traffic impact I note the haul route is proposed from either Dublin Port or Killybegs either of which are feasible and both of which substantially rely on the national road network to Boyle from different directions. From there the regional route will provide access within about 5.3km of the site entrance. The third class road from this location appears in good condition. The assessment identifies restrictive alignments. The auto track analysis demonstrates feasible manoeuvres subject to remediation works at for example Kings Cross chicane, Boyle, the N61 roundabout in Boyle and the bridge over the Shannon in Carrick-on--Shannon. Road widening work in addition to road strengthening and widening to L1701. I note the comments of the Area Engineers in respect of contributions and consultation with the Roscommon County council. A financial contribution (normally as a condition of permission) is appropriate as a mitigation in this case.

The main impact of the grid route relates to underground works for 1km along the /r261 and N61 for a distance of about 1km. The linear grid connection routes will traverse other linear corridors and the potential intersection points may give rise to impact. These relate to existing overhead power line and the Railway corridor. As the power lines will be operated under the same governance of the grid connection the intersection of power lines is not a significant issue

Site clearance will operation will require tree felling and consequent impact on the forestry use of the site, although the precise proportion relative to the surrounding area is presented in varying ways in the EIS. For example 7% stated to be lost but on summing the individual elements it amounts to 12% - this may be explained by double counting but it is best to assume the higher value as in overall terms in a commercial forestry context it remains small. The forestry area is described as 10.16 hectares but this relates to the overall holding. On page 277 it is stated that 1.75 hectares of forestry in the 22 hectare holding is to be felled. On page 259 the actual amount is stated to be 1.1 hectare which appears to be accurate as it was broken down but this would amount to a loss of 15.5% of forestry. In the wider context of forestry plantation it is a small area. In its commercial context it is a temporal rather fundamental change. In addition to habitat loss the EIS addresses impacts of felling on traffic, noise and most significantly the issue of water quality due to nutrient release. A range of forestry guidelines are proposed to be adhered to in relation to best ecological practices. Accordingly no significant impact is anticipated to arise. The grid connection is not likely to lead to felling in forestry areas. Detailed design would minimise this within the 200m wide corridor.

Cultural Heritage

A rigorous desk top study and field inspection was undertaken and while there is no obvious evidence of archaeological features on site nor are there any recorded monuments or national monuments within the curtilage of the wind farm site, the site is of low archaeological importance. The nearest site is the ancient route 450m to the north of the site. Notwithstanding EIS findings a programme of archaeological monitoring is recommended well in advance of works to allow for adequate monitoring and recording by a licensed archaeologist should this be required. I consider this to be appropriate to the heritage value of the site.

With respect to the potential grid connection routes, Corridor B is identified as being a particularly rich area of archaeological interest. However detailed mitigation measures cannot be proposed in the absence of further details. In view of the potential for overhead lines for the grid connection and the options between and within the delineated corridor I consider there is likely to be ample scope to address this in detail at application stage for such works. In any event the need for consultation with the National Monument Services will control the more sensitive aspects in this case. Accordingly it is reasonable to conclude that there are no likely significant impacts on cultural heritage arising from the proposed development. As a matter of precaution however a standard condition would be appropriate requiring monitoring to address potential substrata material of interest.

Interactions

The EIS identifies critical links between impacts on different elements of the environment

In terms of Human Beings and interaction with all elements it is concluded in the final analysis that the interaction as a consequence of the wind farm will be positive insofar that there will be a reduction in the reliance on fossil fuels.

The interrelationship between flora and fauna and elements such as soils and geology water is identified as potentially negative if the quality of one element is adversely affected. For example reduced soil stability may have serious consequences for water quality due to contaminated run-off. The construction stage is identified as being critical and micro stages and site specific locations are identified to troubleshoot risks and eliminate pathways to sensitive receptors. In cognisance of this more, detailed design is anticipated at grid route planning and implementation stage. There is particular emphasis on management of movement of vehicles and protection of water quality.

The interaction between soils and landscape is identified as potential issue. However in view of the qualities of peat and soil removal the impact arising should not be visible. Any impact by the proposed gird connection is tempered by the presence of overhead lines in the already altered landscape.

The EIS concludes that no significant negative impact are predicted and that the mitigation measures outlined for each of the headings are sufficient to prevent adverse environmental impact in isolation or in conjunction with others. This is, I consider, reasonable.

11.4 Visual Impact and Landscape Character

Impact on visual amenity is the core issue in this application as it the central to the reason for refusal of permission by the planning authority. There are two aspects to the objection; one relates to the location of the site in a Sensitive Landscape area and by its very nature and capacity to absorb development is not considered as a suitable location for the proposed development in the opinion of the planning authority. The second relates to impact on a designated scenic route.

Scenic route

There will be some views of the proposed turbines from the north western part of the designated scenic Derrinoghran loop route no.70 but the proposed turbines do not fall within the view shed of Lough Gara to the south of the site. Significantly they do not interfere with southerly panoramic views of the Lake as seen from the designated Wynne's viewing point – an integrated lay-bye for the enjoyment and safety of passing viewers. There will also be some distant views of the proposed

development from the lake side routes nos. 67, 68 and 69 but only one of these incorporates the site at a distance of 8km and views will therefore be intermittent and distant, and would not detract from the principal view of Lough Gara.

Impact on a Sensitive Landscape Area.

While one turbine is located in a forestry area and in a landscape what is classed as a natural landscape the other is more south easterly and is proposed in a more open setting although flanked on each side by forestry plantations and it is this turbine that encroaches into a larger area classed as 'sensitive' and which extends eastwards to the county boundary; I note in this regard there is no such comparable designation in the Roscommon Development plan. While I accept that the structure will be an obvious intrusion in the landscape it is contained by being a particularly small scale wind farm in terms of turbine numbers. The turbines, by current standards, are also of moderate scale with an overall height of 112m where turbines are in the order of 150m. In the context of forestry and undulating terrain and the set back of up to 300m from the road network particular that of the south and the siting relative to other high points in the vicinity, the visual impact is somewhat mitigated.

Accordingly while I accept the limited localised impact on a scenic route, the purposes for which it is designated in the development plan will not, in my opinion, be compromised. Similarly the distant views of the proposed development will not I consider unduly detract from the visual amenities of the Lough which is the focal point of multiple scenic routes and from multiple directions. On balance I consider the degree of visibility from scenic routes and surrounding area to be acceptable on the basis of, the small scale of the development, the limited duration of permission and in the context of the need to accommodate wind energy in the interest of national energy policy and its commitment to renewable energy sources. In these circumstances I consider it to be an acceptable new development in the context of the Development plan and renewable energy policy

Having inspected the site and the surrounding area, I am satisfied with the level of detail included in the visual assessment including the range and accuracy of the photomontages from selected viewpoints. I consider that the overall visual impact of the proposed development to be moderate but within acceptable limits within this predominantly working landscape and would not be unduly detract from scenic amenities of the county. The proposed development would have a moderate impact in limited sections of designated scenic routes to the south of the site. The proposal is modest in scale in comparison to the other wind farms developments in the wider environs. Furthermore due to separation (approx.13km) I am satisfied that the cumulative visual impact of the proposed development and the existing wind turbines would not be an issue this location.

The grid connection routes are through working farms and in a landscape with sporadic housing, railway corridor bridging over roads and electricity infrastructure. The introduction of overhead cables subject to detailed design and siting would not in such a context be significant intervention with the landscape character.

11.5 Impact on Residential Amenity

The most direct and permanent impacts on the nearby residents are apparent in the noise and shadow flicker arising from the operation of the turbines. However these can be managed within acceptable limits.

Strategically the proposed wind farm has the capacity to reduce dependency on fossil fuel and is a positive contribution to humans by enabling continued lifestyle dependant on energy consumption without contributing to carbon emissions. The proposed turbines are located in substantially coniferous woodland and bog in a rural area where there is limited housing. The turbines are proposed to be set back at least 500m from the nearest dwelling which is in accordance with the statutory guidelines. The information contained in the EIS demonstrates that the proposed development can operate within acceptable limits in term so noise and shadow flicker and furthermore, will not give rise to any undue disturbance with utilities and services in the area by way of interference. The main source of nuisance is that arising from construction traffic during site preparation and delivery of material and turbines components. However as this relates to only two turbines the potential for traffic disruption will be short lived and can be addressed at a local level though traffic and construction management plans which is normal procedure.

11.6 Roads and Traffic Safety

The site is served by a good network of roads up to a distance of about 5km of the site. The local road fronting the site to the north from which access is proposed has very few dwellings and very low volumes of traffic. As identified in the EIS the disruption to traffic as a consequence of construction activities will be short lived and can be managed to minimise conflict with local traffic. The main impact is the damage arising from the loading of HGVs. This is a matter of concerns for both Sligo County Council and Roscommon County Council who are both responsible for the roads serving the site. This can be reasonably addressed by a condition for a financial contribution and security of payment towards the maintenance and repair of such roads for normal wear and tear and for more extreme remedial works.

11.7 Appropriate Assessment - screening:

The EU Habitats Directive (92/43/EEC) Article 6 (3) requires that "any plan or project not directly connected with or necessary to the management of the (European) 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".

There are 10 Natura 2000 sites within15km of the appeal site, none of which have a direct hydrological link. Eight of these are SACs namely, Bellanagare Bog, Bricklieve Mt & Keishcorran, Callow Bog, Cloonshanville Bog, Flughany Bog, Lough Arrow, River Moy. The remaining two are Lough Arrow SPA and Lough Gara SPA. (Figures 5.4 and 5.5 of the EIS). All of these are mapped and referred to in the EIS and screening report prepared by the applicant. In addition, from my examination of the NPWS maps, the Templehouse and Cloonacleig SAC Site (no 000636) which is formed by the Owenmore River is I consider worthy of mention as it is downstream of the northern part of the site which is drained by a tributary of this river. However the site is about 20km north west of the site and when measured along the watercourses feeding into it, it is a considerably greater distance.

By reason of distance and remoteness from the development site six of the SAC sites can be ruled out as having any potential risk of impact in light of conservation objectives. The remaining nearest sites to the proposed development site are: Lough Gara SPA, Bricklieve Mountains and Keshcorran SAC, Lough Arrow SAC and Lough Arrow SPA which are described in the following table in terms of key characteristics, current activities posing a risk and the conservation objectives.

Site	Current Risks	Conservation objective
Lough Gara site code: 004048	There are currently no	To maintain the special conservation interests
Lough Gara is a shallow (maximum	activities taking place	for this SPA at favourable conservation status
depth 16 m), medium-sized lake	within the site which	Whooper Swan Greenland White Fronted
which overlies Carboniferous	significantly affect the	Geese, Wetland and Waterbirds
limestones and shales, and Devonian	birds. Part of the site is a	
sandstone. The main inflowing river is	Wildfowl Sanctuary	
the River Lung while the main		
outflow is the Boyle River. There are		
two main sections to the lake, a		
larger northern basin and a smaller		
southern basin, joined by a		
narrow channel. Lough Gara is a		
regularly used site by an		
internationally important Greenland		
White fronted Goose population		
(average flock size of 510 individuals		
over the five winters (1994/95 to		
1998/990). The geese feed mainly on		
intensively-managed grasslands		
bordering the lake. When disturbed		
the geese use an island in the site or		
the lough itself. An important		
Whooper Swan population also use		
the site.		
Bricklieve Mountains and Keshcorran	The main threats to the	To maintain or restore the favourable
SAC site code 001656	diverse flora of this site are	conservation condition of the Annex I
The Bricklieve Mountains and	the application of artificial	habitat(s) and/or the Annex II species for
Keishcorran are located west of	fertilizers, over-grazing by	which the SAC has been selected:
Lough Arrow and approximately 6 km	domestic stock, burning,	Code Description
north-west of the town of Boyle, and	quarrying, turf-cutting and	3180 Turloughs*
are in Co. Sligo. The site is a large	afforestation	6210 Semi-natural dry grasslands and

Table 11.2

isolated block of carboniferous limestone that reaches a height of approximately 300 m. Typical landscape features associated with a karst topography are present, including caves, dry valleys and limestone pavement.		scrubland facies on calcareous substrates (Festuco Brometalia) (* important orchid sites)* 6510 Lowland hay meadows (<i>Alopecurus</i> <i>pratensis, Sanguisorba officinalis</i>) 8120 Calcareous and calcshist screes of the montane to alpine levels (Thlaspietea rotundifolii) * denotes a priority habitat 1065 Marsh Euphydryas aurinia Fritillary 1092 White-clawed Austropotamobius Crayfish pallipes
Lough Arrow SAC site code 001673 (5.5km from site), located in Counties Sligo and Roscommon, is a large limestone lake that conforms to a type listed on Annex I of the E.U. Habitats Directive. The lake is sheltered on three sides by hills and is the source of the Unshin River. Lough Arrow is unusual in being a mesotrophic natural lake which has changed little in the last 40 years. It is largely spring-fed and very sheltered for its size, and, as such, is hydrologically different from most other lakes. Lough Arrow and its environs incorporate a variety of habitats. The site also supports important numbers of birds. The diversity of lakeshore vegetation and the presence of protected species, in particular Otter, adds to the conservation significance of the site.	No threats stated but more surveys needed	To maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected: Code Description 3140 Hard oligo-mesotrophic waters with benthic vegetation of <i>Chara</i> spp.
Lough Arrow SPA 004050 Has a well developed submerged aquatic flora, with a notable charophyte community The shores of the lake are for the most part stony. Supports moderate numbers of wintering waterfowl. Is an excellent site for breeding Great Crested Grebe Is an important game fishery, with good stocks of Brown Trout and Eels. Lough Arrow SPA is at least of regional importance for wintering waterfowl but more regular monitoring of the bird populations is required. It is a prime site for nesting Great Crested Grebe. A range of nesting ducks is found on the lake in	There are no apparent significant threats to the bird populations and the entire site is a Wildfowl Sanctuary. Agricultural intensification within the catchment could have detrimental effects on water quality, which could affect some of the bird species. Feral Mink are a potential threat to nesting birds.	To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA: Bird Common Scientific Name Code Name A004 Little Grebe Tachybaptus ruficollis A061 Tufted Duck Aythya fuligula To maintain or restore the favourable conservation condition of the wetland habitat at Lough Arrow SPA as a resource for the regularly-occurring migratory waterbirds that utilise it.

summer, including the very rare		
Common Scoter.		
Templehouse and Cloonacleig Site	Potential threats to the	To maintain or restore the favourable
no 000636	site include: water	conservation condition of the Annex I
This site comprises three shallow,	pollution from domestic	habitat(s) and/or the Annex II species for
hard water lakes - Templehouse	and agricultural sources,	which the SAC has been selected:
Lough, Cloonacleigha Lough and	over-grazing of lough	
Killawee Lough - which are inter-	fringe vegetation +	
connected by the Owenmore river.	woodland ground flora,	[3140] Hard Water Lakes
The lakes are situated on	field drainage, peat	[3260] Floating River Vegetation
Carboniferous limestone, but are	cutting, afforestation. A	
surrounded by low, peat-covered	section of wetland has	
hills.	already been damaged by	
This site is about 20km north west	the construction of several	
and is an SAC	large drains and turbary.	
	Some conifer afforestation	
	has also taken place. A	
	proposed drainage scheme	
	for the Owenmore River, if	
	implemented, would pose	
	a major threat to the area.	

Table 11.3

Table 11.3		
Potential likely and significant	Evaluation of potential	Determination as to whether or not
effects (direct and indirect) on	effects	likely sig effects can be ruled out
European Sites in context of		
conservation objectives		
The construction works, site	1. Sites with a hydrological link could	1.Yes due to absence of hydrological
clearance, felling and management	potentially be affected. The sites	link
of site have potential to pollute	within 15km range which have	2.Yes - receiving waters remote
surface waters. This in turn may	habitats of conservation interest have	from site at over 20km- partial site
And affect aquatic habitats and	no surface water links to development	drainage to an extremely minor
foraging areas downstream	site	tributary. Impact if any due to
	2. Templehouse and Cloonacleigh	mitigation measures would be
	site in the same river basin catchment	likely to be imperceptible -
	of part of the development site	Significant effects can be ruled
	contains aquatic habitat and species of	out.
	conservation interest that are	
	vulnerable to pollution of waters such	
	as by tree felling	
The loss of forestry may be a	1 Bird species such as Whooper	Yes
foraging or nesting ground may	Swan, Greenland White-Fronted	
disturb and displace qualifying bird	Gees, wetland and waterbirds, Little	
species	Grebe, Tufted Duck The bird species	
	Whooper Swans, Greenland Geese,	
	wetland and waterbirds associated	
	with the SPAs within 15km could be	
	impacted by loss of habitat whether	
	as nesting or foraging area. But	
	species not present on or within the	
	vicinity of the site. No evidence of	
	significant supporting habitat. (no	
	evidence of flightpaths through the	
	site. Nor is there evidence that the	
	site supports hen Harrier or Merlin	
	or other raptors.	

Site clearance and construction activities may disturb and displace qualifying species	 Birds species of conservation interest not supported on this site Marsh Fritillary may be vulnerable but this species or its supporting habitat is not recorded on site. 	 Yes Yes. The natural habitat of this species in the SACs at distances of 5.5km and 9.5km from the site is remote from the development site having regard to characteristics of species in terms of mobility range and required supporting habitat
At operational stage the turbines by themselves and in conjunction with the overhead cable may obstruct airborne species of interest.	 No record of flyways of bird species of qualifying interest recorded on or within vicinity of turbine or grid connection route site. (this is supported in further survey work) No record of Marsh Fritillary 	 Yes – absence of species of interest – co-location of grid with existing overhead lines minimise impact if any. There are also two grid options. Yes

While there is technically a hydrologcial link between the site and Templehouse SAC, I consider that on the basis of the proximity of the development to that SAC and having regard to the incorporation of mitigation measures that the pathway is in effect extremely limited to point of have an imperceptible and unlikely significant impact.

It is important to point out that the Mweelroe stream in the site is partly a tributary of the river catchment that feeds into the Boyle River downstream from Lough Gara SAC and into the Shannon. The proposed development could not therefore have a significant impact on the integrity of this SAC due to its hydrological link.

Furthermore, in terms of groundwater, while impacts on the tributaries are outlined in the EIS in terms of discharge of suspended solids to the adjoining watercourse and reducing water quality, interference with groundwater flows which are vital for protected habitats, blanket bog, wet heath and indirectly impact on bird species such impacts are not envisaged and furthermore the development site is too remote from the sites for which conservation objective centre on these habitats. I consider this to be reasonable in view of the scale of the development and the separation distance and the limited scope for pollution having regard to the measures to prevent groundwater pollution during higher risks construction stages.

Having particular regard to

- the spatial distance and remoteness of the site and absence of hydrological links to any European Site within 15km,
- the surveys in relation to mobile species and the absence of bird species namely Whooper Swan, Greenland White-Fronted Geese, Little Grebe and Tufted Duck among other species of conservation interests for European sites within 15km,
- the characteristics of Marsh Fritillary which is limited in mobility range and reliant on food sources absent in the development site
- The distance of the site from Templehouse and Cloonacleig Site no 000636 and to which the site has a fractional hydrological link,
- the overall nature and scale of the development which incorporates preventative measures with respect to water pollution and

• the surface water characteristics within the site which includes minor stream as it main drainage channel and which has limited ecological value

it is reasonable to conclude that on the basis of the information file, including the survey findings submitted directly to the Board by the applicant in response to submissions, which I consider to be adequate in order to issue a screening determination that the proposed development, individually or in combination with other plans or projects would not be likely to have a significant effect on any European Site.

11.7 Conclusion

Arising from the environmental impact assessment and the appropriate assessment screening, the impacts arising from the proposed development on the environment and most notably on flora and fauna, water quality and air are likely to be negligible. Similarly, the impacts with respect to noise and shadow flicker are within acceptable limits and the residential amenities of properties in the vicinity are safeguarded in so far as health and safety aspects are compliant. The long term negative impacts are accordingly confined to visual prominence of the structures at a locally elevated point in the wider landscape which will be most apparent in the more distant views from the vicinity of Lough Gara to the south. There will also be intermittent views in local tertiary routes. While there are glimpsed views from the nearby routes these would be most apparent for a small local population in a rural area. Having regard to the distance of the turbines exceeding 500m and to the limited scale of the development, I consider this to be within acceptable limits. It is also, I consider an acceptable alteration to the local landscape which is substantially a coniferous plantation and could therefore be reasonably considered as part of this evolving landscape in the provision of sustainable energy needs. While there will be an impact on landscape, I consider it to be within an acceptable range in terms of the protection of key views in the area. I refer in particular to the viewing point at Wynne's point from the road to the south of the site and the southern views of the lake and environs from this viewpoint and I am of the opinion that this is an acceptable balance in the context of national policy for renewable energy which is achieved by posing any significant threat to the environment as demonstrated in the EIS and supporting documentation. I do not consider the proposed renewable energy scheme to materially contravene the Development Plan for the area and consider that the proposed development would be consistent with the proper planning and development of the area.

12.0 RECOMMENDATION

I recommend a grant of permission based on the following reasons and considerations and subject the following conditions:

REASONS AND CONSIDERATIONS

Having regard to:-

(a) the national policy with regard to the development of sustainable energy sources,

(b) the Wind Energy Development Guidelines - Guidelines for Planning Authorities issued by the Department of the Environment, Heritage and Local Government (2006),

(c) the character of the landscape in the area and the topography surrounding the site,

(d) the pattern of development in the area,

(e) the provisions as set out in the current Sligo County Development Plan, including those regarding renewable energy development,

(f) the distance to dwellings or other sensitive receptors from the proposed development,

(g) the submissions from the appellants and observers,

(h) the submissions made in connection with the planning application and the appeal, including the Environmental Impact Statement submitted with the planning application (including mitigation measures therein) and the further information submitted by the applicant in the course of the appeal, and

(i) the appropriate assessment screening and supplementary survey data submitted by the applicant in the course of the appeal,

it is considered that, subject to mitigation measures proposed and to compliance with the conditions set out below, the proposed development would not have a significant effect on the environment, would not seriously injure the visual or residential amenities of the area, would be acceptable in terms of its impacts on the landscape character of the area and would be acceptable in terms of traffic safety. Furthermore, it is considered that the proposed development, either individually or in combination with other plans and projects, would not be likely to have a significant effect on any European site. The proposed development would, therefore, be in accordance with the proper planning and sustainable development of the area.

CONDITIONS

1. The development shall be carried out and completed in accordance with the plans and particulars lodged with the application, except as may otherwise be required in order to comply with the following conditions. Where such conditions require details to be agreed with the planning authority, the developer shall agree such details in writing with the planning authority prior to commencement of development and the development shall be carried out and completed in accordance with the agreed particulars. In particular, the mitigation measures described in the Environmental Impact Statement and other details submitted to the planning authority shall be implemented in full during the construction and operation of the development.

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Reason: In the interest of clarity.

2. This permission shall be for a period of 10 years from the date of the commissioning of the wind turbine. The wind turbine and related ancillary structures shall then be decommissioned and removed unless, prior to the end of the period, planning permission shall have been granted for its retention for a further period. On full or partial decommissioning of the wind turbine or if the wind turbine ceases operation for a period of more than one year, the mast and the turbine concerned (including foundations) shall be removed and all decommissioning.

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

3. (a) The wind turbines including masts and blades, shall be finished externally in a colour to be agreed in writing with the planning authority prior to commencement of development.

(b) The wind turbines shall be geared to ensure that the blades rotate in the same direction.

(c) Cables within the site shall be laid underground.

Reason: In the interest of visual amenity.

4. Prior to commencement of development, the developer shall submit to, and agree in writing with, the planning authority, a protocol for assessing any impact on radio or television or other telecommunication reception in the area. In the event of interference occurring, it shall be the responsibility of the developer to mitigate such interference according to a methodology to be agreed with the planning authority.

Reason: In the interest of residential amenity.

5. Shadow flicker at surrounding dwellings shall not exceed 30 hours per annum or 30 minutes per day. In the event of this limit being exceeded, the operation shall cease until mitigation measures have been agreed in writing with the planning authority.

Reason: In the interest of residential amenity.

6. Details of aeronautical requirements shall be submitted to, and agreed in writing with, the planning authority prior to commencement of development. Subsequently the developer shall inform the planning authority and the Irish Aviation Authority of the co-ordinates of the as constructed positions of the turbines and the highest point of the turbines (to the top of the blade spin).

Reason: In the interest of air traffic safety.

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7. All oils and fuels shall be stored in bunded areas. Details in this regard shall be submitted to and agreed in writing with the planning authority prior to commencement of development.

Reason: In the interest of visual amenity and to avoid pollution of ground and surface waters.

8. Prior to commencement of development, the developer shall submit to and agree in writing with the planning authority a comprehensive Construction Stage Management Plan and Construction Stage Drainage Report, incorporating the mitigation and monitoring proposals set out in the Environmental Impact Statement and further information submitted to the planning authority at application stage and shall include:

(a) Construction details of all drainage control measures, including details of settlement ponds and silt traps.

(b) Construction stage details for the control of run-off from temporary spoil and peat storage areas.

(c) Details of storage proposals for hazardous materials, cement leachate and hydrocarbons, storage and filling areas, cement management areas and details of storage of other materials to be used during construction.

(d) Details of proposals to ensure slope stability during construction of access and turbine bases based on the information submitted.

(e) All peat excavation and management measures

(f) A detailed programme for the timing of works.

The works shall be supervised by an engineer with appropriate professional indemnity insurance, who upon completion of the works shall certify the said works.

Reason: In the interest of protecting natural habitats and the prevention of environmental pollution.

9. The developer shall draw up an ecological monitoring plan in relation to the proposed development, to include monitoring for the pre-construction, construction, and post construction periods to include potential impacts on flora and fauna including birds. An annual report on the ecological monitoring shall be submitted to the planning authority, including for five years post commissioning of the project. Post-construction monitoring shall be agreed with the planning authority after consultation in the National Parks and Wildlife Service.

Reason: In the interest of ecological protection.

10. Prior to commencement of development, the developer shall agree in writing with the planning authority, the details of the turbine delivery route within the county. Details of the monitoring of the structural integrity of local roads and bridges shall be agreed between the developer and the planning authority. Where works to roads and bridges are required to facilitate the proposed development the costs of these works shall be as agreed between the developer and the planning authority or in default of agreement shall be as determined by An Bord Pleanála.

Reason: In the interest of road safety and to enable satisfactory re-instatement of the local road network.

11. Wind turbine noise arising from the proposed development, by itself or in combination with other existing or permitted wind energy development in the vicinity, shall not exceed the greater of 5 dB(A) above background noise levels or 43 dB(A) L90, 10 min when measured externally at dwellings or other sensitive receptors. Prior to commencement of development, the developer shall submit to, and agree in writing with, the planning authority a noise compliance monitoring programme for the subject development. All noise measurements shall be carried out in accordance with ISO Recommendation R 1996 "Assessment of Noise with Respect to Community Response," as amended by ISO Recommendations R1996-1. the results of the initial noise compliance monitoring shall be submitted to, and agreed in writing with, the planning authority within six months of commissioning of the wind turbine.

Reason: In the interest of residential amenity.

12. The construction of the development shall be managed in accordance with a Construction Management Plan, which shall be submitted to, and agreed in writing with, the planning authority prior to commencement of development. This plan shall provide details of intended construction practice for the development, including hours of working, noise management measures and off-site disposal of construction/demolition waste.

Reason: In the interests of public safety and residential amenity.

- 13. Archaeological Monitoring shall consist of the following:-
 - (a) The developer shall engage the services of a suitably qualified Archaeologist to monitor all topsoil stripping associated with the development.
 - (b) Should archaeological material be found during the course of monitoring, the Archaeologist may have work on the site stopped, pending a decision as to how best to deal with the archaeology. The developer shall be prepared to be advised by the Local Authority with regard to any necessary mitigating action (for example, preservation in situ, and/or excavation). The developer shall facilitate the archaeologist in recording any material found.
 - (c) The planning authority shall be furnished with a report describing the results of the monitoring.

Reason: To ensure the continued preservation (either in situ or by record) of places, caves, sites, features or other objects of archaeological interest.

14. Prior to commencement of development, the developer shall lodge with the planning authority a cash deposit, a bond of an insurance company, or such other security as may be acceptable to the planning authority, to secure the satisfactory reinstatement of the site upon cessation of the project coupled with an agreement empowering the planning authority to apply such security or part thereof to such reinstatement. The form and amount of the security shall be as agreed between the planning authority and the developer or, in default of agreement, shall be referred to An Bord Pleanála for determination.

Reason: To ensure satisfactory reinstatement of the site.

15. Prior to commencement of development, the developer shall lodge with the planning authority a cash deposit, a bond of an insurance company, or such other security as may be acceptable to the planning authority, to secure the reinstatement of public roads in either or both counties of Sligo and Roscommon, that may be damaged by the transport of materials to the site, coupled with an agreement empowering the planning authority to apply such security or part thereof to the satisfactory reinstatement of the public roads in the vicinity of the site. The form and amount of the security shall be as agreed between the planning authority and the developer or, in default of agreement, shall be referred to An Bord Pleanála for determination.

Reason: To ensure the satisfactory reinstatement of the public road in the vicinity of the site

16. The developer shall pay to the planning authority a financial contribution in respect of public infrastructure and facilities benefiting development in the area of the planning authority that is provided or intended to be provided by or on behalf of the authority in accordance with the terms of the Development Contribution Scheme made under section 48 of the Planning and Development Act 2000. The contribution shall be paid prior to the commencement of development or in such phased payments the planning authority may facilitate and shall be subject to any applicable indexation provisions of the Scheme at the time of payment. Details of the application of the terms of the Scheme shall be referred to the Board to determine the proper application of the terms of the Scheme.

Reason: It is a requirement of the Planning and Development Act 2000 that a condition requiring a contribution in accordance with the Development Contribution Scheme made under section 48 of the Act be applied to the permission.

Suzanne Kehely Senior Planning Inspector 1st September 2016

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