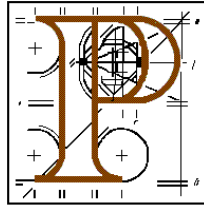


An Bord Pleanála



Inspector's Report

Development: 10 year permission for the erection of 8 no wind turbines, overall height up to 127metres, crane hardstands, 1 no meteorological mast up to 80 metres in height with wind measuring equipment attached, access roads, electrical cabling, electrical substation compound, substation equipment and control building, visitor carpark, borrow pits, ancillary drainage system and ancillary site works,.

Location: Townlands of Bawnfune, Sillaheens, Curraheenavoher, Russellstown, Boolabrien Upper, Russeltown New, Ballymacarbry, Co Waterford.

Planning Application

Planning Authority	Waterford City & County Council
Planning Authority Register Ref.	15/51
Applicant	Ecopower Developments Ltd.
Type of Application	Permission
Planning Authority Decision	Refuse Permission

Planning Appeal

Appellants	(1) Ecopower Developments Limited (2) Giancarla Alen - Buckley (3) Comeragh Community Wind Farm Awareness Group. (CCWGAG)
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Type of Appeals	(1) First Party v Refusal (2)&(3)Third Party v Refusal Reason
Observer(s)	Pinewood Healthcare Conor O Brien Mountaineering Ireland Cathal O Donoghue
Date of site inspection	19 th November 2015
Inspector:	Bríd Maxwell

1.0 INTRODUCTION

- 1.1 This is a multiple appeal case including a first party appeal of a decision by Waterford City and County Councils to refuse permission for the development of an 8 turbine windfarm with a capacity of 25mW at Bawnfune, Sillaheens, Curraheenavoher, Russellstown, Boolabrien Upper Russelstown New, Ballymarbry, Co Waterford on grounds related to its potential visual impact. Additionally two third party appeals relate to the grounds for refusal. Both third party appellants contend that the grounds of appeal are arbitrarily and inappropriately restricted and that the proposed windfarm development should be refused on a number of additional grounds.

2.0 SITE LOCATION AND DESCRIPTION

- 2.1 The appeal site is located in an upland area in the north-western foothills of the Comeragh Mountains. The site lies approximately 3.4km to the north of the village of Ballymacarbry Co Waterford and 4.8km south of Clonmel, Co Tipperary. The appeal site has a stated area of 51.74 hectares and overlooks the valley of the River Suir. The elevation of the site ranges from 305m – 405mOD and is presently largely under commercial coniferous forestry at various stages of rotation. There is an extensive access road network and manmade drainage systems on use for ongoing forestry operations. The site drains to the north into the Glenary River and to the south to the River Nire.
- 2.2 The landscape is aptly described within the submitted documentation as rich diverse and complex. The Comeragh mountain range occupies most of the south-eastern quarter of broader landscape in conjunction with the Monavullagh range, which is the southern extent of this upland spine. The Knockmealdown Mountains occupy the south-western extents of the landscape. North-west across a broad fissured valley are the Galtee Mountains. Slievenamon is a distinct and somewhat isolated conical shaped mountain to the north-east. The River Suir skirts around the site as it approaches from near the Galtee Mountains and briefly turns north around the Comeragh foothills before it finally heads east away from the area. The River Nire runs from the Comeragh range a short distance to the south of the site and joins the River Suir near Newcastle. The Glenary River runs from the north-western foothills of the Comeragh range a short distance to the north of the site and joins the River Suir near Kilmanahan. The Suir is joined from the north by the Anner River just north east of Clonmel.

- 2.3 The highest slopes and ridges of the Knockmealdown, Monavullagh and Comeragh Mountains have a naturalistic mountain moorland land cover while commercial conifer plantations emerge on lower slopes along with a transitional zone of rough grazing. In the lowland valleys pastoral farmland takes over as the predominant land cover along with some tillage.

3 THE PROPOSED DEVELOPMENT

- 3.1 The application as set out in the public notices describes the proposed development as follows:
The erection of 8 no wind turbines, overall height of up to 127 metres, crane hardstands, 1 no meteorological mast up to 80 metres in height with wind measuring equipment attached, access roads, electrical cabling, electrical substation compound, substation equipment and control building, visitor car park, borrow pits, ancillary drainage system, and ancillary site works. The application is for a 10 year permission.
- 3.2 The wind regime on site was measured from September 2013 to January 2014. Measurements indicate that the prevailing winds on the site are from the south – south west and that the mean wind speed is 8.5m per second. The turbines are proposed for the townlands of Boolabrien Upper and Russelstown New. The substation is proposed for the centre of the site in Russelstown New. Access to the site is proposed from a local public road at Bawnfune circa 1km northwest of Ballydonagh Crossroads on Regional Road R671. (Clonmel to Youghal Road). The proposed access will pass eastwards through Silleheens, Curragheenavoher, Russelstown and Boolabrien Upper townlands. The townlands are in the barony of Glenahiry and the proposed development is referred to as the ***Glenahiry Winfarm***.
- 3.3 Windfarm access roads will comprise mostly existing forestry roads widened to 4,5m with additional drainage installed. Access roads will be capped with a layer of hard wearing aggregate to minimise sediment. Two borrow pits are proposed for the construction phase. A visitor's car park will be constructed following the construction phase on Boolabrien Upper. The proposed turbine is indicated to be of the generic three bladed, horizontal axis tubular tower variable speed upwind turbines, typical turbine elevation is shown on drawing GWF-PA1-06.
- 3.4 The proposal includes a 38kV electrical substation compound which includes a control building comprising a switch room, control room, ESB room and store with office canteen facilities and toilet and washing facilities. Application details indicate that the applicant has secured a grid connection to the National Grid for 25MW capacity to the 38kV ESB sub-

station at Clonmel under the Gate 3 Grid Connection process operated by ESB Networks. It is planned to connect by underground cables from the windfarm electrical substation to the ESB substation at Spa Road, Clonmel.

- 3.5 It is estimated that the Glenahiry windfarm will take 9-12 months to construct and the turbines have a design life of 25 years.

4.0 PLANNING POLICY

4.1 National Policy and Guidelines

4.1.1 *Delivering a Sustainable Energy Future for Ireland – The Energy Policy Framework 2007-2020*

This is a Government White Paper. The overriding objective is to ensure that energy is consistently available at competitive prices, with minimal risk of supply disruption. It is an objective to achieve 15% of electricity consumption, on a national basis, from renewable energy sources by 2010, and 33% by 2020 (target increased to 40% in Government budget speech of 2009).

4.1.2 *National Renewable Energy Action Plan 2010*

This Plan implements EU Directive 2009/28/EC on the promotion of the use of energy from renewable sources, which sets out agreed new climate and energy targets- 20-20-20 by 2020 – 20% reduction in greenhouse gas emissions; 20% energy efficiency, and 20% of the EU's energy consumption to be from renewable sources. In relation to the electricity sector, the plan has set a target of 40% electricity consumption from renewable sources by 2020.

4.1.3 *Strategy for Renewable Energy, 2012–2020*

The Strategy for Renewable Energy, 2012–2020 is the most recent policy statement on renewable energy. It reiterates the Government's view that the development of sources of renewable energy is critical to reducing dependency on fossil fuel imports, securing sustainable and competitive energy supplies and underpinning the move towards a low-carbon economy. The Strategy sets out specific actions the Government will take to accelerate the development of wind, ocean and bio-energy, R&D, sustainable transport energy, and supporting energy infrastructure. Strategic Goal 1 aims to achieve progressively more renewable electricity from onshore and offshore wind power for the domestic and export markets.

4.1.4 *Ireland's Second National Energy Efficiency Action Plan to 2020 (March 2013)*

This Plan sets out strategy to reduce Ireland's dependence on imported fossil fuels, improve energy efficiency across a number of sectors and ensure a sustainable energy future.

4.1.5 Guidelines for Planning Authorities on Wind Farm Development and Wind Energy Development 2006

The Guidelines offer advice on planning for wind energy through the Development Plan process, and in determining applications for planning permission, and are intended to ensure consistency of approach in the identification of suitable locations for wind energy developments, and acknowledge that locational considerations are important. These considerations include ease of vehicular access and connection to the electricity grid. It is acknowledged that visual impact is amongst the more important issues when deciding a particular application. Whilst there is no set-back distance specified, it is indicated at section 5.6 that noise is likely to be a problem at less than 500m. In relation to shadow flicker, section 5.12 states that impact at neighbouring offices and dwellings within 500m should not exceed 30 hours per year or 30 minutes per day. It goes on to state that at distances greater than 10 rotor diameters, the potential for shadow flicker is very low. Section 5.13, dealing with 'windtake', states that distances between turbines will generally be 3 rotor diameters in the crosswind direction and 7 rotor diameters in the prevailing downwind direction. This section goes on to state- 'Bearing in mind the requirements for optimal performance, a distance of not less than two rotor diameters from adjoining property boundaries will generally be acceptable, unless by written agreement of adjoining landowners to a lesser distance. However, where permission for wind energy development has been granted on an adjacent site, the principle of the minimum separation distances between turbines in crosswind and downwind directions indicated above should be respected'.

4.1.6 Proposed Revisions to Wind Energy Development Guidelines 2006

These Draft Guidelines were introduced by the Department of Environment, Community and Local Government, in December 2013, to deal with limited aspects of wind farm developments. A consultation period was allowed – up to 21st February 2014. The revisions proposed are-

- A more stringent absolute outdoor noise limit (day and night) of 40 dB for future wind energy developments.
- A mandatory setback of 500m between a wind turbine and the curtilage of the nearest dwelling, for amenity considerations.
- A condition to be attached to all future planning permissions for wind farms to ensure that there will be no shadow flicker at any dwelling within 10 rotor diameters of a wind turbine. If shadow flicker does occur, the wind energy developer/operator should be required to take necessary measures, such as turbine shutdown for the period necessary to eliminate the shadow flicker. There is no

indication to date as to proposed changes, if any, to the 2006 Guidelines.

4.2 Waterford County Development Plan 2009-2015

4.2.1 The site is within an unzoned area and therefore assumed to have an agricultural zoning where the relevant objective is “to provide for the development of agriculture and to protect and improve rural amenity.”

4.2.2 Policy ENV 5. Objective to encourage, where appropriate proposals for renewable energy development and ancillary facilities. To promote and facilitate wind energy production in the County in accordance with the County Wind Energy Strategy and Wind Energy Guidelines 2004 produced by the Department of the Environment Heritage and Local Government.

Policy ENV 10 To facilitate and encourage sustainable development proposals for alternative energy sources and energy efficient technologies.

Policy ENV 11. To promote and facilitate the sustainable development and use of wind energy in the County and to ensure all wind energy developments comply with the Waterford County Wind Energy Strategy and the DoEHLG guidance document on Wind Energy.

4.2.3 Policy INF 26. To facilitate improvements in energy infrastructure and encourage the expansion of the infrastructure at appropriate locations within the county. To facilitate where appropriate, future alternative renewable energy developments throughout the County that are located in close proximity to the National Grid Strategy improvements so as to minimise the length and visual impact of grid connections.

4.2.4 Landscape Character Assessment is addressed in Chapter 8 where a proactive approach to landscape protection is promoted.

Policy ENV 2 To support provisions of the National Landscape Strategy and provide for the sustainable management of all of County Waterford’s landscapes including archaeological landscapes, coastal, upland, rural and peri-urban landscapes.

Policy ENV 3 To develop the Comeragh Area into a National amenity and to promote the heritage and recreational features of the area for all users while conserving its natural habitats, protected species, flora, fauna, archaeology and landscape, and as a sustainable area for the local community.

Objective ENV 1 To prepare a landscape character assessment of County Waterford in accordance with National guidance on landscape from the Department of Environment Heritage and Local Government.

4.2.5 Appendix A9: Scenic Landscape Evaluation. This evaluation details landscape sensitivity based on the capacity of the environment to absorb development and under various classifications (Degraded, robust, normal, sensitive, vulnerable.)

The main body of the site is within an area designated as normal while the eastern part is designated sensitive areas and uplands. A visually vulnerable ridge runs east west through the site itself and there is a vulnerable ridge to the north east of the site.

There are a number of scenic routes in the vicinity including route no 8 which leads along the R671 from Ballymacarbry to Clonmel, along the R678 from Clonmel to Rathgormuck and along a local road at Barravakeen southwards to Ballymacarbry.

Policy 6.1(a) Policy with regard to areas designated as vulnerable

Policy 6.6(b) Policy with regard to Scenic Routes.

4.2.6 Appendix A8 in the Wind Energy Strategy for County Waterford. Wind Energy Map categorises areas within the county into four classes based on the appropriateness of developments in those landscapes. The site falls within an area that is identified as a preferred location for wind farm development. The area to the east is designated as a no go area. Standards for wind farm developments are set out and include the following:

- No turbines shall be positioned within 400m of a habitable house;
- No wind farm projects shall be at variance with the safe operations of Waterford Regional Airport
- Wind farms shall be developed in accordance with recommendations in the Wind Energy Development Guidelines by the Department of the Environment Heritage and local Government.

The Class boundaries outlined in the Wind Energy Map are indicative. A flexible approach may be taken by the Planning Authority where a Wind Farm application is proposed in an area that contains two contrasting zonings as per the Wind Energy Map.

(Relevant Extracts from the County Development Plan 20 are attached in appendices to this report.)

5 PLANNING HISTORY

5.1 **PL.24.239522** (11.273) Refusal for development of a windfarm comprising nine number wind turbines with hub height up to 85 metres, rotor blade diameters of up to 90 metres and overall tip heights of up to 126.5metres, access roads, electrical substation compound and ancillary site works on a proximate site Russelstown New, Russelstown Silaheens, Bawnfune Boolabrien Upper Curraheenavoher, Glenabby for the following reasons :

“Notwithstanding the site location in a preferred area for wind energy in the Waterford County Development Plan 2011-2017, having regard to the following deficiencies in the EIS and documents submitted by the applicant in the course of the application and appeal:

- inadequate assessment of visual impacts and potential impacts on tourism,*
- inadequate assessment of potential impacts on water quality and proposals in relation to drainage management,*
- inadequate assessment in relation to transportation and local road improvements (including potential impacts on architectural heritage and ecology), and*
- inadequate assessment of potential ecological impacts including on bird species and on the Natura 2000 network in the wider area,*

the Board is not satisfied that the proposed development would not have significant adverse effects on the environment. The proposed development would, therefore, be contrary to the proper planning and sustainable development of the area.”

Notably within the Board’s direction which issued with the decision it was noted that the Board did not agree with the reporting Inspector’s analysis in paragraph 9.26.10 which was as follows:

“It is considered that notwithstanding any misleading inference which could be drawn from the wind energy strategy, section of the County Development Plan in relation to indicating that this area is a ‘preferred’ area for wind farm development, the Scenic Landscape Evaluation, which is also part of the County Development Plan, clearly signals that this east west ridge, which comprises a skyline ridge, is a vulnerable area where development must be shown not to impose a significant impact on the landscape. Most of the subject site has therefore a very limited capacity to absorb development, and development of the scale proposed would clearly impact on the character integrity and uniformity of the landscape of the area when viewed from the surroundings; and in particular as viewed from the scenic route and walking route. It is considered therefore that the proposed development is unacceptable in principle, on the basis of the landscape setting and its impact thereon.”

- 5.2 08/1293** Permission granted for the erection of 2 no 60m high masts with wind measuring equipment attached. Following third party appeal PL24.233136 the application withdrawn by the developer in October 2009 following amendment to the Planning and Development Act SI 235 and resultant exempted development provisions for temporary meteorological masts

6.0 PLANNING AUTHORITY’S DELIBERATIONS AND DECISION

6.1 Submissions

6.1.1 A significant number of submissions from local residents and other third party groups objected to the local authority on various grounds which I have summarised as follows:

- Negative Impact on a number of water supplies. Sensitive water balance. EIS inadequate.
- Impact on water quality and pollution potential
- Excavation to bedrock gives rise to potential for contamination of water supply
- Negative impact on fishery.
- Legitimate concerns have not been addressed
- Insufficient photomontage particularly from R671, East Munster Way. Strategically biased and not impartial.
- Impact on an area of outstanding beauty
- Impact on wildlife including endangered species, peregrine falcon and hen harrier
- Negative impact on tourism
Project splitting. Application is incomplete and invalid. Grid connection not included.
- Negative impact on archaeology. Assessment inadequate. No reference to potential children's burial ground, souterrains.
- Noise, shadow flicker and negative impact on residential amenity.
- Health and safety concerns.
- Habitat Flora and Fauna assessment inadequate. Baseline information inadequate
- Archaeological assessment inadequate, Potential children's burial ground not considered, Souterrains not mentioned.
- Legal ownership issues. Sufficient legal interest not demonstrated.
- Detrimental impact on property values.
- Flood risk.
- Lack of proper public consultation.
- Ecopower's Development History precedent for expansion. Assurances unreliable.
- Impact on Lower River Suir SAC (Site Code 002137) and Comeragh Mountains SAAC (001952)
- Set back distances inadequate.
- Impact on roads and traffic
- Industrial turbines inappropriate in rural area
- Previous refusal by the Board PL239522. Reasons remain valid.
- Impact on established amenity groups including walkers, war re-enactment club.
- Developer has failed to provide categorical assurances that no pollution will occur within the Glenary River, Glenkeal Stream and Nire River
- Significant gaps exist in the quality of the EIS.

- Tourism and Visual Impact Section of EIS shows significant gaps and presents a biased assessment regarding the tourism impacts. Developer fails to adequately assess the visual impact on the sensitive landscape.
- EIS is deficient in failure to analyse likely noise generated over a range of operational wind speeds.
- Public consultation entirely inadequate. Developer did not accept an invitation to attend a public meeting to discuss the community's legitimate concerns.

6.1.2. Following the submission of further information to the local authority the third party submissions reiterated objections on basis of:

- Application invalid based on revision of site to include grid connection,
- Applicant's account of and interpretation of the O Grianna judgement is incomplete and legally unsound. Applicant has applied for only part of the development. Proper route for the applicant is to withdraw the current application and submit a comprehensive application for the entire development.
- Council cannot conduct an EIA on part of the development which is not before it.
- New section of the community negatively impacted by the proposed grid connection route have had no opportunity to comment
- Alternatives in relation to grid connection inadequate. Only attempt at alternatives is overhead vs underground.
- In relation to air and Climate. Failure to identify significant noise and dust on connection with road opening works, within built up area in Clonmel.
- Visual impact, impact on water supply, socio economic impacts not considered.
- Flora and fauna section acknowledges that further survey work is required.
- No serious consideration of alternative site, alternative layouts or alternative turbine heights.
- The proposed development would impact negatively on existing tourism and the development of new tourism products in the Comeragh area.
- Landscape assessment, 3 additional photomontages insufficient.
- Inaccurate to suggest that the ridgeline is cloaked in commercial conifer forest. Assessment of landscape impacts are understated and driven by commercial considerations.
- No guarantees provided in relation to the safety of all vulnerable water supplies.
- Fundamental errors in relation to noise assessment. Problems of complex terrain have been oversimplified by suggesting that the +3dB is only deserved for cases of sound reflection from a valley floor. In a still atmosphere this may be true, but sound propagation is as much to do with wind velocity air density and air temperature as for simple reflections.
- The topography is sufficiently complex and there are significant unknowns and simplistic estimations are not credible.

- Rhythmic quality of wind turbines should not be averaged out. No reference is made to ISO 1996-1:2003 which categorises different types of noise, and which recommends adjustments depending on factors such as impulsiveness, tonality and low frequency content.
- In relation to shadow flicker note ambiguity in relation to model of turbine to be used.

6.1.3 A submission from **Fáilte Ireland** compiled by AOS Planning is summarised as follows:

- Commend the content and profile of the tourism sector presented in the EIS which forms an excellent baseline against which to measure impacts. Note surveys on visitor attitude to wind farm development indicating that there have been major changes in views towards windfarms between 2007 and 2012.
- Wind Energy Strategy designation must be interpreted in parallel with the landscape classification and other development management policies.
- Assessing the impact of the proposed development against the policies for vulnerable landscapes and scenic routes it is clear that the siting of these tall structures on this elevated site changes the character of the landscape, the identified vulnerable ridges and the designated scenic views. The views of the landscape will be altered from local roads, walking trails and other locations in the area in a way that is not permitted by the County Development Plan.
- The EIS has concluded that these are low impact and of slight significance, however this is based on the consideration of the landscape as being of only of medium sensitivity which does not truly reflect the policies of the Scenic Landscape Evaluation as well as the strong planning precedent on the site.
- Based on the comments made by the previous Board Inspector and as noted by the Board in their final decision, the visual impact of the proposed development is therefore not in compliance with the policies of the Development Plan, notwithstanding the location of the site within a preferred area.
- From a tourism point of view the significance of changes to the character of a landscape as experienced by a visitor also depends on the context from which they are viewed. Notably even moderate changes to upland landscapes such as this illicit disproportionately negative reactions among tourists so their significance in real terms is magnified.
- The receiving locality contains a network of well used walking, cycling and driving routes which provide visitors and the local community to enjoy the upland landscape. Arising from the scale of the structures proposed and their location on an elevated site the experience of these routes will be permanently altered. Moreover proposal will alter views from tourist accommodation – with views of the development seen at Glasha Farmhouse and approximately half of the rooms in the Clonmel Park Hotel

having a view of the proposed development. Research has shown that views of windfarm developments from tourism accommodation illicit negative reactions.

- From a tourism point of view the proposed development would cause some minor temporary impacts during the construction phase and longer term more significant albeit moderate impacts on the landscape character of the area. Judging the acceptability of these impacts solely against the prevailing county development plan for the area, it would appear that these impacts are not in conformance with those policies and that the application for permission should be refused for this reason. .

6.1.4 Geological Survey of Ireland The submission is summarised as follows:

- Note in relation to soils and geology this section of the EIA should consider information about the soils and geology of the existing environment. Description of the bedrock and lithologies (types of strata) quaternary geology and existence of geological heritage in the area should be included and use of maps is recommended where appropriate, Maps and datasets available at GSI website <http://spatial.dcenr.gov.ie>
- In relation to surface water and groundwater relevant information about groundwater such as aquifer vulnerability, aquifer recharge areas, and details of local groundwater protection schemes should be described and accompanied by maps. Groundwater maps and datasets are available on the GSI website.

6.1.5 Tipperary County Council submission asserts that the council will rely on Waterford County Council as the competent authority to abide by the Waterford County Development Plan, Section 28 Guidelines and Best Practice when assessing this proposal. Regard also to the relevant policies and objectives of the South Tipperary County Development Plan 2009 and Clonmel and Environs Development Plan 2014. Note potential risk to Glenary Public Water Supply. Three turbines are located within the designated source protection zone for this water supply. The development of grid connection presents potential risks to the Glenary stream and spring both of which are sources of public water supply for Clonmel. The grid route runs along the Glenary twin trunk mains that directly feed the scheme reservoir and networks and presents a risk to this supply.

6.1.6 Irish Aviation Authority submission recommends that in the event of permission the applicants be required by condition to provide an agreed scheme of aviation obstacle warning lights for the wind turbines, co-ordinates and elevation details of the built turbines. IAA to be notified at least 30 days prior to the erection of the development.

6.1.7 Department of Arts, Heritage and the Gaeltacht submission recommends that Archaeological Monitoring of topsoil stripping and groundworks be carried out at the site,

6.2 Internal Reports

6.2.1 Initial report of Conservation Officer's report notes concern that additional information required in relation to the visual impact on Cultural Heritage of Clonmel, Potential impact on vernacular features such as historic bridges stone walls etc. with regard to the carriage of construction materials.

6.2.2 Heritage Officer's report considers that the NIS is comprehensive in detail on size, scale, area and land take, details of physical changes that will take place and description of resources and waste arising from construction and operation of the proposed development. The conclusion of the NIS is considered a fair assessment stating that residual impacts will not be significant provided that the mitigation measures are effectively implemented. It is anticipated that construction of the proposed development will cause temporary adverse impacts on local ecology (largely disturbance) but considered that full implementation of the mitigation measures will avoid adverse impact on the conservation objectives and integrity of the River Suir SAC and longer term impacts on the general ecology of the area. Implementation in full of the proposed Environmental Operating Plan, sediment and erosion control plan and habitat enhancement plan will mitigate for any potential impacts on water quality and the aquatic environment. Based on review of flora and fauna sections of the EIS and NIS and provided full implementation of the mitigation measures as detailed in the EIS is implemented – no objection for this environmental receptor.

6.2.3 Water Services report noted that Waterford City and County council looks after a small number of water supplies in the vicinity of the proposed windfarm. These are ground water sources and no adverse impact is anticipated. Tipperary County Council have surface water abstractions down gradient from the proposed site which could be impacted upon during construction stage and for a period afterwards until the ground has settled and revegetated. Councils should be informed immediately if there is any threat to public water supplies in the area due to construction activities or weather events. Developer to liaise with water services departments of local authority. Private water supplies in the area should be identified.

6.2.4 Planner's initial report notes submission of Fáilte Ireland recommending refusal. In relation to visual impact site is visible from a number of scenic routes, T7 and T8 are located in visually vulnerable areas. T1 is in a

designated sensitive area and T6 is in an area designated visually vulnerable and sensitive. Furthermore as the development is located at the edge / lower slopes of the Comeragh Mountains and will be visible from large sections of the mountains, the development has the potential to impact on the policy to develop the Comeragh area into a national amenity. Notwithstanding the site designation as a preferred area in the Wind Energy Strategy, having regard to the size of the proposed turbines in designated visually vulnerable and sensitive area, the proposed development will have significant impact on character integrity or uniformity of the area. Further information relating to a number of issues to be addressed.

6.2.5 A request for additional information issued seeking a number of items including

- Request to address the matter of grid connection route and its potential direct and indirect impacts.
- Issue of alternatives. Consideration of smaller windfarm layout and smaller turbine,
- Audit of the tourism product in the Comeragh Area along with an assessment of the vulnerability of these products if any caused by the proposed turbines
- Revised zone of theoretical visibility and photomontages for turbines with a hub height of 60m.
- Indicate the length of the East Munster way and driving R671 (scenic route) where one or more of the turbines will be visible
- Photomontages to demonstrate views on a clear day.
- Identify all private water supplies in the area and ensure these are not impacted on. Identify location of Russelstown New water supply and explain omission from EIS.
- With regard to noise propagation model and input parameters submit detailed reasoning and confirmation that the noise modelling took full account of the topography of the area between the proposed turbines and the nearest noise sensitive locations.
- Revised analysis which provides information on sound levels at all noise sensitive locations within 900m of the proposed turbines from winds from all directions. Additional noise monitoring
- Clarification of noise prediction assessment (worst case scenario) for 9m/s wind speed only.
- Provide details on “corrected to factor in percentage shadow flicker occurrence” and demonstrate best practice.
- Clarify whether there are 12 dwellings only within 1.2km of the site.
- Detailed written account of the visual impact of the proposed turbines on the built heritage of Clonmel. Liaison with Tipperary County Council.
- Detailed measures to safeguard / repair stone walls, bridges and vernacular features along the routes to the site.

- Settlement pond capacity relative to hardstand areas, rainfall predictions and other factors.
- Liaise with Irish Water in respect of impact and mitigation with regard to Glenary River the source for Clonmel Town water supply.
- Land registry details for the entirety of the landholding. Composite map illustrating land ownership details.

6.2.6 Heritage Officer's Report following additional information asserts that based on the review of the flora and fauna section of the EIS and NIS and FI response and subject to full implementation of mitigation measures there is no objection to the proposed development.

6.2.7 Conservation Officer's report indicates satisfaction with further information response.

6.2.8 Planner's report notes items of further information response. On the issue of grid connection, the report asserts that the grid connection, although not included in the development description or redline boundary, formed part of the EIS and has not been introduced as a new element of the EIS or overall project at further information stage. Although a separate application for planning permission is required for the grid connection a full assessment of the impacts of the connection can be undertaken. In the event of a permission a condition of permission will attach for a separate application for planning permission for the grid connection. Report recommends refusal on grounds of visual impact in a vulnerable scenic rural landscape.

6.2.9 Senior Planner's report notes that the zone of visibility is extensive extending into parts of Tipperary (Caher, Sliabh na mBan, Knockmealdowns, Kilronan, Ardfinnan, Clogheen, Rosegreen. From extended views it is plausible that views are extendable to Cashel. It is accepted that new generation wind turbines by reason of height and scale are not easily hidden. It is of concern that they have become a dominant element on the horizon and turbines in Cork, Waterford, Kilkenny and Wexford are viewable across county boundaries. Proposal will be visible from and to exceptional landscapes in Waterford and Tipperary and will impact on the sensitivity of such landscapes. Significant concerns remain regarding detrimental impact on Nire Valley tourism offer. The area is a preferred area for wind farm development in the County Development Plan 2011-2017 however this wind policy was developed at a time when turbine height was about half it is now and the mass of the turbines supplied approximately 750KW as compared with 3MW of the proposed turbines. The ever increasing height and size of turbines is becoming difficult for Planning authorities to assess in the context of their impact on the visual landscape and in the wider context, sustainable development. Location of

the development is not suitable when weighed against the detrimental visual impact it will impose on important landscapes in Waterford and surrounding counties and the probable detrimental impact it will have on the tourism product in the Nire Valley, the community dependent on this tourism enterprises and the general diminution of the landscape quality of the area. Refusal recommended and second and third reason for refusal (as outlined in decision below) given to amplify the Area Planner's recommendation.

6.3 Decision

6.3.1 By Order dated 21st July 2015 Waterford City and County Council issued a Notification of decision to refuse permission for 3 reasons as follows:

1. *Notwithstanding the site location in a preferred area for wind energy in the Waterford County Development Plan 2011-2017, the proposed development would constitute a visually dominant feature in a vulnerable scenic rural landscape and based on the submitted information, the Planning Authority is not satisfied that the development would not significantly compromise the policy to develop the Comeragh Area as a National amenity and would not have significant adverse effects on the environment. The development would contravene the policies of the development plan in this regard and would therefore be contrary to the proper planning and sustainable development of the area.*
2. *The Nire, characterised by fertile agricultural lands and drained by the Nire River, is flanked by the Monavullagh Mountains to the South and rigid Comeragh Mountains to the East and North. The Nire valley is renowned for its scenic landscape and supports a thriving tourism product based on hill walking trekking and river fishing and guest accommodation. The proposed wind farm will intrude onto the landscape becoming a dominant feature and likely impact detrimentally on the environmental quality and scenic landscape of the Nire Valley and contrary to the proper development and sustainability of the area.*
3. *The location of the Windfarm, on the western flank of the Comeragh Mountain, at elevation above 300mm OD will impact on Ballymacarbry Village and nearby settlements and the Nire Valley. Furthermore the windfarm location affords panoramic views extending in a wide arc beyond 20km distance, impacting on important and iconic landscapes and features in Counties Waterford and Tipperary, giving rise to general obtrusion, contrary to proper planning and sustainability principles."*

7 GROUNDS OF APPEAL

7.1 First Party Appeal

7.1.1 The First party appeal which includes a landscape and visual statement prepared by Richard Barker, principle landscape architect with Macro works addresses the three reasons for refusal as follows:

- Proposed windfarm development is neither visually dominant or located in a vulnerable landscape context. The ridge passing through the site is set to commercial conifer forest and the proposed turbines are seldom viewed in the same context as the Comeragh uplands, but when they area, they are clearly perceived to be a part of the productive cultural landscape rather than the pristine naturalistic one.
- With regard to trekking in the Nire Valley, an exhaustive process of route screening analysis was undertaken from all such routes within the Nire Valley in the response to request for additional information. The results were mapped and statistically analysed and show a remarkable low degree of scheme visibility occurs from these roads and trails overall. The nearest point of the Nire Valley trail network is over 8km from the proposed windfarm.
- The proposed windfarm is not on the western flank of the Comeragh mountain. It is located within the undulating and gradually dissipating foothills at the western extent of this range. The fact that the proposal is located 300m above sea level is absolutely irrelevant given its inland location and absence of any views of the sea. Perceived turbine height and wind farm prominence is not a factor of elevation above sea level, it is only relative to the specific viewing context.
- With regard to tourists perceptions of an area, as acknowledged by Fáilte Ireland some types of new large scale infrastructure such as wind turbines can convey a sense of environmental responsibility.
- There will be some visibility of the windfarm from the outskirts of the village of Ballmacarbry, but the degree of impact is slight due to the high degree of terrain and vegetative screening. Also the proposed wind farm may be visible albeit in good weather conditions from a small number of locations at distances extending beyond 20km from a northwesterly direction. Views at such distances from within an anthropogenic rural landscape are not considered to result in significant visual impacts.
- Site is within a “preferred area” in the Waterford County Development Plan Wind Energy Strategy “These areas are suitable for wind farm development and should normally be granted planning permission unless specific local planning circumstances would support a decision to refuse permission in the context of the development plan
- This favourable zoning has applied to the Glenahiry area since the Wind energy strategy was adopted.

- EDL as a wind farm developer, seeks to develop windfarms in areas that are identified by the local authority as favourable for that class of development.
- Within the Board's previous decision PL24.239522, the Board Direction noted that the Board did not agree with the Inspector's analysis in paragraph 9.26.10 which read:
"It is considered that notwithstanding any misleading inference which could be drawn from the wind energy strategy section of the County Development Plan in relation to indicating that this area is a 'preferred' area for wind farm development, the scenic Landscape Evaluation, which is also part of the County Development Plan, clearly signals that this east west ridge, which comprises a skyline ridge, is a vulnerable area where development must be shown not to impose a significant impact on the landscape. Most of the subject site has therefore very limited capacity to absorb development, and development of the scale proposed would clearly impact on the character, integrity and uniformity of the landscape of the area when viewed from the surroundings; and in particular as viewed from the scenic route and walking route. It is considered therefore that the proposed development is unacceptable in principle, on the basis of the landscape setting and its impact thereon."
- The current application addresses the Board's reasons for refusal of the first application and also takes into consideration Waterford County Council's reason for refusal, planner's report, Inspector's report and third party submissions.
- Many suitable characteristics and few constraints exist to development of a windfarm on the Glenahiry site summarised as
 - (i) The site is set to commercial forestry and thus presents an anthropogenic setting.
 - (ii) The site avoids sensitive Annex I habitats.
 - (iii) No overlap with any SAC, SPA or NHA designated sites.
 - (iv) The site is screened by topography to the east.
 - (v) Greater than 880m separation distance between a turbine location and the nearest house, with only 6 dwelling within 1km
 - (vi) Within 5km of the electrical transmission grid at Spa Road, Clonmel.
- The proposed 8 turbines at Glenahiry windfarm will provide over 74million kWh of green electricity supplying approximately 33% of the homes in Waterford City and County. The production of 74 million kWh per annum of green electricity would avoid the emission of 47,952 tonnes of greenhouse gases per annum which would result from generating the same amount of electricity by fossil fuel plant. Glenahiry windfarm can connect by underground cable to the National Grid under the ESB Gate 3 process and will make a positive contribution to the government's 2020 Renewable energy target for 40% electricity from renewable resources.
- The windfarm can be built without a lasting adverse impact on the local environment, while delivering a long term benefit to the global economic wellbeing of the country.

- It is important to reiterate that in EIA terms there is a fundamental difference between simply generating an impact and generating a significant impact. This is not reflected in the Council's third reason which could be applied to almost any windfarm development in the country.

7.2 Third Party Appeals

7.2.1 The first third party appeal is submitted by Reid Associates, Chartered Town Planners, Planning and Development Consultants on behalf of Mrs Giancarla Alen Buckley, Strancally Castle, Knockanore, Tallow, Co Waterford. Grounds of appeal are summarised as follows:

- The three reasons for refusal cited by Waterford City and County Council are insufficient. There are further substantive reasons for refusal of permission.
- Application should have been refused outright and is invalid on the basis that it does not include grid connection. Description and public notice inadequate.
- Principle of the development in this location is contrary to proper planning and sustainable development
- The planning history and precedent for refusal
- Site unsuitable for scale of the proposed wind farm development
- AA and EIA inadequate
- Adverse impact on ground water,
- Adverse impact on tourism.
- Inadequate assessment of the impact of the development on demesne landscape and protected structures.
- Importance of protection of demesne landscape ratified by the Board in previous decisions PL25.237728 and PL17.244357
- Richness of the sylvan landscape at Strancally Castle is offset by the bare hills of the Comeraghs and the Drumhills. The relationship is critical. Proposal materially contravenes national policy to enhance the landscape. National Landscape Strategy 2015.
- Significant risk to public water supplies as identified by Tipperary County Council
- Location of a major part of the grid connection route within a separate planning jurisdiction calls into question the validity of the planning application and the adequacy of the description of the development and the public notice ab initio.
- Fundamental flaws in the description of the development cannot be remedied as the application is for part only of the overall project which is to be assessed for EIA purposes.
- Proposal represents project splitting in the avoidance of a holistic environmental and planning assessment.

- Full extent of environmental impact of the works for the proposed haul road has not been substantiated. Haul road extends beyond the applicant's legal ownership and may affect third party lands which have not been publicly notified not given consent a mandatory requirement under Article 22(2)(g)
- The application amounts to an application for outline permission on basis of the indicative plans of the turbines and absence of specific make of turbines, generic structure, absence of detail. Article 96(1) of the Planning and Development Regulations 2001 preclude an outline application for development which requires the submission of an EIS.
- There is an inherent conflict between the development plan zoning objectives for the land for agricultural use, the heritage and environmental and landscape objectives of the plan and the identification of the subject lands as a preferred area in the context of the County Wind Energy Strategy.
- Proximity of the wind farm to the Munster Way poses an incompatible land use conflict with a high amenity tourism and amenity walking route.
- Final layout shows the unsustainable length of access road over 8.8km and implication must be that this will generate further applications for future development. Layout comprises random ad hoc layout facilitating ribbon development of wind turbines on the ridgeline which would set an adverse planning precedent within this high amenity scenic area.
- Significant density of residential development in the vicinity of the site. The EIS suggests there are 65 houses within 2km giving rise to a significant rural population of 175 persons on standard household formation rates which will be materially and adversely affected.
- Noise impact assessment is inadequate and methodology for control of noise ineffectual.
- Assessment of noise emissions against the Wind Energy Guidelines 2006 s the guidance is under review and no longer tenable or acceptable.
- No attempt to identify, describe or assess the direct and indirect significant effects of the project on the human health of the population who are living in close proximity. Low frequency infrasonic noise.
- Wind Energy Strategy adopted as a variation to the 2005-2011 County Development Plan. No reference to any further evaluation or updating of the strategy in the context of the current Waterford City and County Development Plan 2011-2017 or independent specific appropriate assessment of the strategy or the revised requirements within that strategy as a result of the AA of the Development Plan. The legal status of the County Wind Strategy is questionable and cannot stand up to scrutiny in the context of the Habitats Directive.
- County Wind Strategy and DoEHLG Wind Guidelines were not subject to AA screening or SEA.
- Negative impact on Lower River Suir SAC cannot be ruled out. NIS does not provide adequate scientific evidence or information on which the

competent authority could make a reliable determination as to whether or not the wind farm is likely to have significant effects on the integrity of the Natura 2000 sites. (Kelly v An Bord Pleanála)

7.2.2 Second Third Party Appeal

7.2.2.1 The second third party appeal also submitted by Reid Associates, Chartered Town Planners Planning & Development Consultants on behalf of Comeragh Community Wind Farm Awareness Group. (CCWFAG). The grounds of appeal which are outlined in detail in the submission raise common issues with the first third party appeal and assert that the three reasons cited by Waterford City and County Council are insufficient on basis of

- Inadequate description of the development for the purpose of EIA and for the purposes of the planning process.
- Prematurity on basis that the application does not include the grid connection as part of the application
- Impact of the development on neighbouring planning jurisdiction of Tipperary County Council
- Inadequate EIS and NIS do not provide adequate scientific evidence on which the competent authority can make a reliable determination.
- Inappropriate industrial type structures giving rise to disproportionate effects on the community.
- Contravention of development plan zoning objective for agricultural use.
- Legal ownership issues in relation to haul road and grid connection route not substantiated.
- Potential for pollution.

8.0 Observer's Submissions

8.1 Submission by Pinewood Healthcare, Ballmacarbry is summarised as follows:

- Significant concerns in relation to potential for impact on water supply were not addressed and should have been included in the refusal reason
- Pinewood Laboratories Ltd T/A Pinewood Healthcare is the largest oral liquid manufacturer in Ireland in Ballymacarbry since 1978. Employing approximately 350 people in Ireland approximately 280 at Ballymacarbry site which was chosen on basis of water quality which satisfies test for endoxins for use in manufacture of dialysis solutions. Water is main ingredient in finished products liquid medicines and daily water usage is 160,000 litres.
- In response to request for additional information developer proposes that water supply is outside the scope of the proposed development however gives no evidence that water source will not be negatively affected. No

evidence was provided that the groundwater contribution zone extends only 500m from the water source.

- The appeal site is directly uphill to the north of Pinewood lands so in addition to concern in respect of the risk of damage to the aquifer, the developer has to consider that the streams from the hills drain into the Nire river. These streams and rivers contribute to the water table supplying the most valuable raw material.
- A pollution incident could have major impact on water quality of the surface and groundwaters of the area.
- Request that the Board refuse permission on the basis of significant risk of continuity and pollution of the water supply.

8.2 Observations submitted by Conor O'Brien, Russelstown New, Clonmel, Co Waterford.

- In addition to visual grounds for refusal of permission, there are other fundamental reasons for refusal on basis of impact on Water Supply including Clonmel Town Water Supply, Russelstown New Group Water Scheme.
- Identification of area as preferred area for wind development cannot be override specific aspects of the site and visual vulnerability of the area
- Proposed development has been squeezed too tightly between two significant communities Russelstown New and Boolabrien Upper.
- Claims that nuisance from noise and flicker will fall within current guidelines are both suspect and flawed. The terrain and layout mean that there will be a greater risk of real nuisance compared to a flat non elevated scenario. EDL elected not to apply the +3dB correction normally associated with a complex terrain and only considered the prevailing wind in isolation of the actual terrain.
- Incorrect mathematics used to predict noise levels for successive distances. Specifically the application of the inverse-square law rather than the inverse-proportion law to sound pressure levels. As a result table of noise predictions in the EIS are flawed.
- Liberties have been taken with relation to the technical information regarding the turbines to be used. Quoted models do not exist and have been used to address nuisance distance guidelines.
- Elevated turbine location extends the effects of shadow flicker beyond that of a simple calculation based on solar inclination.
- EDL's suggestion that only one house will suffer any visual nuisance is based on a suspect rotor size.
- Access field from local road at Bawnfune onto the forestry track has historically important soutterains. Field is also location of the "Fair of Windgap" (Aonach Barr na Gaoithe, or Aonach Bhearna na Gaoithe), still mentioned in Irish songs and literature.
- Haste with which the supplemental EIS was completed is of concern.

- Detrimental impact on ecology.
- A petition (617 signatures) objecting to the development on multiple grounds is included as an attachment.
- Legal entitlements in respect of the site and grid connection route have not been demonstrated.

8.3 Observations by Mountaineering Ireland, Irish Sports HQ, National Sports Campus, Blanchardstown is summarised as follows:

- Urge An Bord Pleanála to uphold the decision to refuse.
- Refute the argument that the turbines would be part of a productive cultural landscape rather than a pristine naturalistic one.
- Proposal would represent an industrialisation of a scenic rural landscape. Such development is not akin to the current productive use of the landscape through agriculture and forestry.
- Appellants submit that there is a low degree of scheme visibility to walkers from roads and trails in the Nire Valley. This fails to recognise the way in which hillwalkers engage with the landscape. There are many points closer to the development site than the Nire Valley trail network which are used regularly by hillwalkers including the northern end of the Knockanaffrin ridge and the summit of Laghnafranke.
- Local area provides significant amenity and recreation.
- Current scale and rate of windfarm developments, particularly those in upland areas which have prominence across a wider landscape is eroding the quality of Ireland's scenery. Research from Scotland (MCoS, 2014) has shown that walkers and climbers are avoiding areas that are damaged by windfarm development.
- Note the Inspector's analysis (para 9.26.10) in report PL239522 and support Inspector's assessment regarding the very limited capacity of the site to absorb development. Development of the scale proposed would clearly impact on the character, integrity and uniformity of the landscape.
- Appellant's claims that the generation of electricity from the wind does not pollute the physical environment overlooks the fact that the construction of this industrial energy generation plant in a rural setting will result in irreversible damage to the natural environment and the road network. Significant environmental cost attached to the concrete and other materials required to construct the windfarm.

8.4 Cathal O Donoghue, Gleann Caol, Russelstown New.

- First Party Appeal disregards Development Plan policies with respect to vulnerable landscapes and protection of scenic routes.
- Scenic route R671 between Ballymacarbry and Clonmel would be significantly impacted by the proposed development.
- Significant impact on East Munster way from visual and noise perspective.
- Significant negative impact on tourism

- Landscape Character Assessment is a concept designed to acknowledge more than just the look of the physical landscape. It includes wildlife, heritage and natural amenities as well as its way of life and identity all of which contribute to its established tourism and micro economy.
- Tourism audit report is biased
- As Macroworks were the consultants engaged in the development of the Wind Energy strategy their independence is questioned.

8.5 RESPONSE SUBMISSIONS

8.5.1 Planning Authority.

8.5.1.1 The Planning Authority response to the first party appeal is summarised as follows:

- The Planning Authority would not agree with the perception that the proposed turbines will be viewed as ‘part of the productive cultural landscape rather than the pristine naturalistic one’. The site is partially located in a visually vulnerable and sensitive area as designated in the County Development Plan. The proposal will affect the character of the area over an extended area.
- Notwithstanding the wind energy policy as set out in the County Development Plan and while accepting that development may be permitted within visually sensitive and vulnerable areas this must be considered in the context of scale and impact.
- It is the policy of the Local authority to develop the Comeragh Area into a National amenity and to promote the heritage and recreational features of the area for all users while conserving its natural habitats, protected species, flora, fauna, archaeology and landscape as a sustainable area for the local community. The proposed development contravenes this policy.
- The Council of Europe’s European Landscape Convention (2000) of which Ireland is a member recognises the importance of all landscapes including both ‘pristine and naturalistic’ and ‘productive rural’ ones.
- Reasons for refusal cited are clear as are the planning reports, conclusions and recommendations on file. The decision supports the thrust of both the Convention and the National Landscape Strategy.
- Reference to ‘temporary adverse impact on local ecology’ and to ‘full implementation of the mitigation measures’ in the planning report was made in the context of the ecology of the area and impact on the River Suir SAC
- Refusal reason noted in the context of the overall Nire Valley and its tourism product of which river fishing is one aspect.
- Note submission from Bord Fáilte which is not supportive.

- In relation to the third party appeals the Planning Authority would note that the local authority had regard to the points raised in the assessment of the application.

8.5.2 Response of the Third Party Appellant's to the appeals

8.5.2.1 Response by Reid Associates on behalf of Comeragh Community Wind Farm Awareness Group (CCWFAG) and Mr & Mrs Alen Buckley, Strancally Castle Co Waterford is summarised as follows:

- Mutually support third party appeals.
- First party appeal is unsustainable and should be dismissed.
- Notably the experience of Macrowork in the area of visual impact assessment appears mainly concentrated in the assessment of on-shore windfarms.
- Extent of the empirical adverse visual impact arising from windfarms which have been recently constructed and which communities did not expect at the outset underlies the fact that the extent of impact has not been properly assessed and there is a tendency to give wind turbines preferential treatment over other forms of development.
- Photomontages are not an objective basis for decision making. The human eye is much more perceptive. The visual impact of the proposed development in reality is much more profound than demonstrated in the series of photomontages.
- Methodology for landscape assessment and visual impact are not based on appropriate methodology in Ireland and is unsound, Scottish Natural Heritage Guidelines are not appropriate. Rather EPA "Guidelines on the information to be contained in Environmental Impact Statements (2002) and accompanying "Advice notes on Current Practice in the Preparation of Environmental Impact Statements.
- In reviewing the views and photomontages submitted with the application and EIS on the basis of the EPA terminology all views show long-term significant negative impacts. visual Intrusion and visual obstruction.
- Wind Energy Strategy of the Development Plan is purely indicative and not a zoning map. It is subservient and subsidiary to the landscape strategy and specific development plan objective to develop the Comeragh Area as a national amenity.
- The upland skyline of Curraheenavoher Hill is designated as a vulnerable skyline. Currenavoher is designated as a Sensitive Area within the statutory plan as is Russelstown, while the lower areas of Boolabrien and Curraheenavoher Hill are designated as normal because of the coniferous plantations, the siting of the proposed development is upland of the coniferous area within the heathland on the ridgeline which is the vulnerable skyline area. The issue of visual dominance is a matter of fact.

- Masts will become the dominant feature and the Steeple, the natural landscape feature of the area is overwhelmed by the scale and intensity of the windfarm development.
- Intrusion of the turbines in the skyline gives rise to a significant long term negative impact.
- The visual impact assessment on trekking routes undertaken by the applicant fails to acknowledge that the proposed development materially and significantly intrudes directly on the East Munster Way which forms part of a European Trail E8 linking Dursey Island in Cork to Dublin through Europe to Istanbul.
- There is a material land use conflict generated by the proposed wind farm development and the recreational use of the Nire Valley and Mountains for trekking, fishing and sustainable tourism and the two uses are not compatible.
- Cumulative visual impact assessment inadequate. The proposed development would exacerbate the cumulative impact of wind farm development within the wider landscape of the Nire valley and the Comeraghs.
- Visual impact of the entrance not identified. No road safety audit of the entrance.
- The rural landscape is currently productive in terms of farming and forestry. The effects of this production on the landscape is generally low lying not reaching above the height of a tree 20m. The introduction of wind turbines of 127m is an incongruent feature in this local landscape.
- Discordant scale of the turbines to human beings. Industrialisation of the countryside for production of wind energy will alienate the human being.
- Prevailing assumptions of sustainability of wind farms are challenged.
- Significant negative impact on Ballymacarbery village the focus and centre for social gathering for hillwalkers and fishermen in the Nire Valley.

8.6 First Party Response to Appeals.

8.6.1 The First Party response to the third party appeals which includes a number of detailed enclosures addresses the third party grounds of appeal as follows:

- Route for the Glenahiry Windfarm is determined. This grid connection was appraised in the windfarm project EIS and windfarm project Appropriate assessment Stage 1 NIS so that the Local Authority and now Board is in a position to assess all the environmental effects including cumulative effects of the grid connection with the windfarm in accordance with the requirements of O Grianna v An Bord Pleanála, Cork County Council and Framore Ltd.
- An additional assessment of the likely significant impact of the grid connection document was submitted in response to Question 2 of the RFI

- and can be found at Tab3 Volume 1 of the Response to request for additional information.
- The purpose of the RFI response document was to assemble a discrete description of the aspects of the environment likely to be significantly affected by the grid infrastructure to provide the PA with sufficient information, in an easily accessible format, so that a cumulative assessment of the windfarm and its associated grid infrastructure may be carried out.
 - EIS for grid connection and AA stage 1 screening is submitted.
 - Grid connection EIS contains mitigation measures which can form the basis of planning conditions or other conditions which can be imposed on the grid connection works should the Board be minded to grant permission to the windfarm project.
 - There are no 3rd party landowner consents required to install the grid connection works which is predominantly on forested lands and along the public road in Waterford City and County and Tipperary County Council local authority areas.
 - An application for planning permission for grid connection works will be submitted in tandem to Waterford City and County Council and Tipperary County Council.
 - The haul road works do not encroach on 3rd party landowner lands being either on windfarm landowner lands or within the curtilage of the public road.
 - On the issue of detail of the turbine models exact models have not been specified in the dual circumstance where turbine technology is advancing rapidly and Irish Grid code rules. Applicant is committed to constructing the most technologically advanced site compatible and grid code compliant wind turbines within the overall height parameters specified in the application.
 - Refute assertions that issues set out in the reason for refusal of PL239522 have not been addressed.
 - Following the implementation of all mitigation measures no significant impacts are expected from the Glenahiry Winfarm proposal.
 - Proposed development is not in material contravention of the Development Plan. The County Development Plan supports wind farm development in the Plan's Wind Energy Strategy, which does not appear to be overly constrained by the vulnerable and sensitive designations. Site is within a preferred area in the wind energy strategy.
 - Strictly without prejudice to that position if the Board were to determine that there is a material contravention of the development plan the Board has the power to grant permission including under section 37(2)(a) of the Planning and Development Act 2000.
 - EIS assessments sets out summary of residual impact for the East Munster Way.

- Strancally castle lies 28km southwest of the nearest turbine with the intervening high ground of the eastern Knockmealdown Mountains screening views of the proposal. Curraghmore House lies 23.7km to the east of the nearest turbine with the intervening high ground of the Comeragh Mountains screening views of the proposal from the east.
- Visual impact on neighbouring villages assessed in detail.
- Landscape impact evaluation concludes that the proposed development will not give rise to significant landscape or visual impacts. Instead such impacts will be slight or lower in respect of most receptors and only as high as moderate for a couple of the closest receptors.
- Noise impact assessment addresses construction and operational impacts. Scope of the assessment extends to 1.2km from the nearest turbine and is cumulative and worst case scenario. Table 11-10 presents a significance of impact summary where it states that all threshold values are predicted not to be exceeded when unmitigated.
- Project NIS as submitted provides adequate scientific evidence of information on which the competent authority can make a reliable determination in relation to the impact on European Sites.
- NIS concludes that residual impacts from the construction, operational and decommissioning phases of the proposed Glenahiry Windfarm to the Lower River Suir SAC (002147) will not be significant provided that the mitigation measures provided for in the windfarm project NIS are effectively implemented.
- In relation to the issue of human health. Significant effects of the proposal on population and human health have been evaluated in the EIS.
- In relation to grid proximity, the grid connection route of 8.9km would be considered proximate in the context of windfarm locations which are generally in rural upland areas.

8.7 Response of Observer Cathal O Donoghue to First Party response to third party appeals.

- Reiterate objection to the development.
- Continued failure by the developer to acknowledge or respect the policies of the Waterford County Development Plan in relation to vulnerable landscapes and scenic routes. Reiterate objection.

8.8 .Response of Reid Associates on behalf of Comeragh Community Wind Farm Awareness Group and Mr and Mrs Alen Buckley Strancally Castle.

- Appeal response by Ecopower Development is extraordinary and extends the limitations of documentation submitted as response to appeal beyond all reasonable and legal boundaries and should be dismissed.

- Applicant has compounded the errors of procedure by the submission of a separate EIS for a grid connection, which does not and cannot form part of the subject application. Consequently it is not and cannot be a relevant matter for consideration of the Board in this instance.
- Application site boundary was clearly defined. Any alteration to include the grid connection would amount to the most substantive and significant material alteration to the application so as to render any consideration of such a change ultra vires by the Board.
- No provision to tack on an EIS relating to a different application yet to be submitted.
- Applicant has no rights to interfere or undertake any works on the public road. Haul route mitigation measures are proposed on lands outside the applicant's ownership and relevant consents to undertake such work has not been demonstrated.
- Failure to specify exact details of the nature and design of the turbine is a fundamental failure.
- Applicant has not dealt with the land use conflicts arising from the contravention of the zoning objective of the area for agriculture use.
- Development remains in contravention of the plan zoning objective. The power of the Board to grant permission is limited.
- The EIS is fundamentally flawed in terms of the evaluation of the impacts arising and the judgements used in the assessment of the impact are not objective.
- The intrinsic character of the Munster way will be profoundly changed by the industrialisation of the rural landscape, by the noise, shadow flicker and by the visual change to the character of the area.
- Level of visual impact is not within the acceptable range.
- No assessment of low frequency noise or amplitude modulation and intermittent noise on residential amenity.
- Entire validity of the wind energy strategy is open to review on the basis of the fact that it has not been subject to AA or SEA.
- Demesne landscape cannot be preserved in isolation and there is a real danger that the extensive geographic impact of wind farms will devalue our very concept of the rural landscape character.
- Wind turbines should not be afforded preferential treatment over other forms of development in terms of siting on an elevated ridgeline.

8.8 Referrals.

8.8.1 The Board referred the appeal to Tipperary County Council. Response is summarised as follows:

- Request that the Board have regard to the South Tipperary County Development Plan 2009 and Clonmel and Environs Development Plan 2013 in its determination on the application.

- The development presents potential risks to the Glenary Public water supply. Three of the proposed turbines are located within the designated source protection zone for this water supply. The development of the grid connection presents potential risks to the Glenary stream and spring, both of which are sources of public water for Clonmel. The grid route also runs along the Glenary twin trunk mains that directly feed the scheme reservoir and network and presents a risk to this supply.

9.0 ASSESSMENT AND RECOMMENDATION

9.1 Having examined the file, considered the prevailing local and national policies inspected the site and assessed the proposal, the appeal and all submissions, I consider the key issues to be considered in the Board's de novo assessment can be considered under the following broad headings:

- Policy Compliance – Principle of Development
- Impact on the amenities of the area - Shadow Flicker, Noise & Vibration Electromagnetic Radiation and Telecommunications Interference
- Archaeology, Architectural and Cultural Heritage
- Soils and Geology
- Hydrology and Hydrogeology
- Roads & Traffic Impact
- Ecological Impact
- Landscape and Visual Impact & Impact on Tourism
- Grid Connection
- Environmental Impact Assessment.
- Appropriate Assessment.

9.2 Policy Compliance – Principle of Development.

9.2.1 The proposed development is in accordance with national and EU policies which seek to promote the reduction of greenhouse gases and the advancement of renewable energy resources. Within the Waterford County Development Plan 2011-2017 Policy ENV 10 is to facilitate and encourage sustainable development proposals for alternative energy sources and energy efficient technologies. Policy ENV 5 is the objective to encourage where appropriate, proposals for renewable energy developments and ancillary facilities; and to promote and facilitate wind energy production in the County in accordance with the County Wind Energy Strategy and the Wind Energy Guidelines (2004) produced by the Department of the Environment Heritage and Local Government. Policy ENV 11 is to promote and facilitate the sustainable development and use of wind energy in the

County and to ensure all wind energy development comply with the Waterford County Wind Energy Strategy and the DoEHLG guidance document on Wind Energy. Screening for Appropriate Assessment will be carried out where required to ensure that there is no negative impact on the integrity (defined by the structure and function and conservation objectives) of any Natura 2000 site located at or adjacent to a proposed site for wind energy development and that the requirements of Articles 6(3) and (4) of the EU Habitats Directive 92/43/EEC are fully satisfied. The Planning Authority shall have regard to the possible visual impact of a wind farm development on towns and villages, protected views and amenity areas outside of the administrative area of Waterford County Council in the assessment of wind energy applications.

9.2.2 The Waterford Wind Energy Strategy, February 2011, categorises the county into four classes as identified on the wind energy map. The appeal site falls within a preferred area where *“these areas are suitable for wind farm development and should normally be granted planning permission unless specific local planning circumstances would support a decision to refuse permission in the context of the development plan.* The area to the east is identified as a no go area, those are areas that are particularly unsuitable for wind farm development. I note that the Wind Energy Policy of the South Tipperary County Development Plan 2009 designates the rural hinterland around Clonmel as an Area Open for Consideration for Wind Energy Development.

9.2.3 The Scenic Landscape Evaluation which is Appendix A9 of the Waterford County Development Plan explores the Waterford landscape to determine its ability to absorb development. Landscape is classified according to the extent to which it is vulnerable to change in its character. The range of categories assigned are degraded, robust, normal, sensitive and vulnerable. Those which are relevant in the context of the appeal site are normal, sensitive and vulnerable. Normal landscapes are described as ‘a common character type with a potential to absorb a wide range of new developments.’ Sensitive landscapes are described as ‘distinctive character with some capacity to absorb a limited range of appropriate new developments while sustaining its existing character’. Vulnerable landscapes are described as ‘very distinctive features with a very low capacity to absorb new development without significant alterations of existing character over an extended area’. The vulnerable classification comprises skyline ridges, hill and mountain tops, coastlines, promontories, headlands, lake shores and banks of large rivers which are all conspicuous in the landscape. Policy 6.2(a) with regard to areas designated as sensitive requires that applications for development in these areas must demonstrate an awareness of the inherent limitations by having a very high standard of site selection, siting layout, selection of materials and finishes. Applications in these areas may also be required to

consider ecological, archaeological, water quality and noise factors in so far as it affects the preservation of the amenities of the area. The policy 6.1(a) with regard to areas designated as vulnerable provides that to be considered for permission, development in the environs of these vulnerable areas must be shown not to impinge in any significant way upon its character, integrity or uniformity when viewed from the surroundings. Particular attention should be given to the preservation of the character and distinctiveness of these areas as viewed from scenic routes and the environs of archaeological and historic sites.

- 9.2.4 Thus as regards the landscape character designation, detailed matters determine the acceptability or not of a proposal and the range of designations applicable in the case of the appeal site does not preclude the development of a wind farm on the site in principle.
- 9.2.5 The Planning History on the site is of further relevance in terms of the consideration of the question of principle of development of a windfarm at this location. Of some consequence the Board in its determination of PL24.2395222 noted specifically in its direction that it did not concur with the reporting Inspector's analysis in that case that the scenic landscape designation would render the proposed development by its nature unacceptable in principle on the basis of the landscape setting and its impact thereon.
- 9.2.6 The third parties refer to an inherent conflict between development plan zoning objectives for the land for agricultural use, heritage, environmental and landscape objectives and assert that the proposal would constitute a material contravention of the development plan on the basis that it comprises an industrial type development on agricultural land. The allegation of wind farm development gaining preferential treatment over other forms of development, particularly in landscape terms is also raised. I note the unique characteristics of wind farm development which influence the nature of the assessment process of wind energy proposals. I would highlight the recognition within the scenic landscape characterisation and evaluation of the ability of the landscape to accept or absorb development. The issue of material contravention of the development plan does not in my view arise.
- 9.2.7 Having reviewed the relevant policies pertaining to the site and the area I consider that the planning policy context does not preclude the principle of development of a windfarm on the appeal site. I conclude therefore that on the question of the principle of development, it is acceptable having regard to EU, National and local policy considerations. I have noted the significant level of local objection to the proposed development and criticisms raised by third parties in relation to the extent of public consultation in respect of the proposed development. I note that the Wind

Energy Guidelines recommend that public consultation be engaged in however there is no specific detailed requirement in this regard. I consider that there is no policy objection to the principle of a windfarm development on the site which can be determined on its merits having regard to normal planning criteria.

9.3 Impact on the amenities of the area - Shadow Flicker, Noise & Vibration, Electromagnetic Radiation and Telecommunications Interference.

9.3.1 As regards shadow flicker, the Wind Energy Development Guidelines (2006) note that the effect known as shadow flicker occurs where the blades of a wind turbine cast a shadow over a window in a nearby house and the rotation of the blades causes the shadow to flick on and off. This effect lasts only for a short period and happens only in certain specific combined circumstances. It is recommended that shadow flicker at neighbouring dwellings within 500m should not exceed 30 hours per year or 30 minutes per day.

9.3.2 At distances greater than 10 rotor diameters from a turbine, the potential for shadow flicker is very low. Turbine diameter in the appeal case will typically be 90m, such that ten rotor diameters would equate to a maximum distance of 900m. It is outlined within the EIS that there is one house within the 10 rotor diameter zone at 884m, an additional three dwellings within 1.2km and a further eleven dwelling houses within 1.2km. (Total of 15 within 1,2km) ¹ Shadow Flicker assessment is set out in Volume 2 Chapter 11 of the EIS and Tab 8 volume 2 of reply to request for further information. The study shows that in worst case scenario nine dwellings could in theory experience shadow flicker however when the results are corrected to allow for actual sunshine hours and having regard to separation distance and orientation, the proposed windfarm can operate within the recommended shadow flicker guideline values and shadow flicker will not be significant at any location.

9.3.3 As regards noise levels, the wind energy guidelines state that generally noise at receptors should not exceed 45dBA or represent a maximum increase of 5dBA above the background noise level. The closest occupied dwelling to a turbine is located approximately 884m to the west of Turbine T5. Predicted noise levels demonstrate general satisfaction with relevant noise criteria. On the issue of the application of the 3dB penalty for complex topography scenario (valley / concave profile) the first party in response to the request for additional information demonstrates that based on detailed examination of topographical data this penalty should

¹ Number of dwellings identified within 1.2km of the development was revised upward from 12 to 15 in response to the request for additional information.

not apply. As regards construction phase impacts during peak traffic flows, they will be short term in duration and mitigation measures to reduce the impact to below significant will be applied. As regards noise levels along the East Munster Way it is asserted that the wind farm will only potentially be audible for a very small stretch of the overall route under very specific conditions. The first party notes that optimum conditions for walking (fair calm either) coincide with low wind speeds and therefore low noise emissions from the wind turbines. On the basis of the information provided in the EIS, I consider that the proposed development is acceptable in terms of noise impact.

- 9.3.4 Third party submissions criticise the lack of clarity in relation to the exact specification of the wind turbines and potential implications in terms of noise impacts arising. On this issue I note that in the event that the Board decides to grant permission, the final turbine selection will be required to meet the relevant specifications relating to noise to ensure that relevant noise limit value criteria can be achieved. In relation to tonality it is acknowledged that the presence of tones may attract penalties so the final turbine model should be free of tonal content at the nearest receptors.
- 9.3.5 As regards electromagnetic radiation and telecommunications interference potential, appropriate mitigation measures are outlined. No negative impact on aviation is predicted subject to compliance with the lighting and notification requirements of the IAA. .
- 9.3.6 On the basis of the information provided within the EIS, I consider that it has been demonstrated that the development is acceptable in terms of impacts on the amenities of the area relating to noise, shadow flicker, and telecommunications. I note that the developer proposes a community benefit fund of €25,000 annually equating to €650,000 over the lifetime of the windfarm.

9.4 Archaeology, Architectural and Cultural Heritage.

- 9.4.1 Cultural heritage is addressed at Chapter 7 of the EIS compiled by Kilkenny Archaeology, Archaeological consultants. There were a total of 18 cultural heritage sites identified (drawn from RMP files, NIAH database, historical map research and field walking) within 1km of the proposed development area. The assessment finds that there will be no direct impacts on any recorded or protected archaeological cultural heritage sites, features or items. One possible cultural heritage site – *Site 11 Fair Green* which is marked on the first edition Ordnance Survey but is not a recorded monument will be crossed by the proposed access road. Two further potential archaeological sites may be impacted indirectly by the

access road for the development: Site 6 Cairn - Delisted and Site 10 Enclosure – Delisted. The Cairn is 55m from the proposed access road and the enclosure 100m from the access road. The possibility for previously unknown archaeological material to be impacted upon is also addressed.

- 9.4.2 Viewshed analysis of cultural heritage sites (Fig 7,5) shows a high degree of visibility within 12km radius of the site demonstrating that at least part of one turbine will be visible from the majority of the surrounding landscape and in particular the river Suir Valley to the west and north, and valley of the River Nire to the south. Much of the northeast, east and southeast are shielded by the Comeragh and Monavullagh Mountains. Two national monuments fall within a 12km radius. The Courthouse in Clonmel (TS083-019005) does not fall within the zone of theoretical visibility. The Church at Donaghmore lies c 11.2km north of the site and is within the zone of theoretical visibility. However it is asserted that due to the distance from the site and the nature of the intervening topography any visual impact of the monument would be negligible.
- 9.4.3 The visual impact assessment on surrounding country houses and designed demesne landscapes notes that a designed view from the rear (east) of Knocklofy House looks in a south-easterly direction over the River Suir towards the Comeragh Mountains. There is theoretical intervisibility from here to the windfarm and the proposed windfarm is likely to have a moderate impact on the designed view. In relation to Barn Demesne, evidence of a designed view from the principal building towards the windfarm and the demesne also falls within the zone of theoretical intervisibility. Due to the distance to the windfarm and the intervening tree cover the potential visual impact is deemed negligible. In response to the third party appeals it was outlined in the first party response that views from Strancally Castle which is 28km southwest of the nearest turbine will be impeded by intervening high ground of the eastern Knockmealdown Mountains. Similarly intervening high ground of the Comeragh Mountains will screen views from Curraghmore House which is 23.7km to the east of the nearest turbine.
- 9.4.4 Haul Road assessment examined for a length of approximately 30km to ascertain if any bridges of archaeological significance would be impacted on during construction or operational phases of the proposed windfarm. Access road will cross a total of 23 bridges. None are listed in the NIAH or protected structures.
- 9.4.5 Mitigation measures include provision for floating road rather than conventional construction in relation to the Site 11 Fair Green, which is marked on first edition OS maps but is not a protected archaeological site. Archaeological monitoring of groundworks is also proposed. The

assessment notes that the windfarm has been designed to minimise impact on cultural heritage. Based on the details submitted I consider that the impact on cultural heritage is appropriately mitigated.

9.5 Impacts on soils and geology

- 9.5.1 Predictions for impact on soils and geology are addressed in Chapter 15 of the EIS. The maximum elevation at the site is 419m OD. Access to the site will be from local road to the west via a 3.4km length of forestry road that crosses the local road at two locations. Three sections of this road with a combined length of 1.7km will be newly constructed. The remainder of the road is existing but will require widening and upgrading to facilitate delivery of large loads.
- 9.5.2 Preliminary site investigations were carried out to determine subsoil types and depth to bedrock at each turbine. No peat deposits were encountered on the site. Grounds slopes are low to moderate depending on location and there are high infiltration rates and ephemeral natural drainage to the watercourses in the surrounding area. The rock overburden which will be excavated as part of the works consists mainly of sandstone and sand, gravel or clay scree which is stable at these slopes. On the basis of detailed investigations it is asserted that the ground is inherently stable and the risk of ground instability during and after construction is very low.
- 9.5.3 Two sites within the site are identified for borrow pits for the extraction of aggregate for road construction. Best practice measures to avoid slope instability are set out. Based in site investigations and in light of the mitigation measures outlined it is considered that there will be no significant residual impacts to soils and geology following development.

9.6 Hydrology and Hydrogeology

- 9.6.1 Surface water is addressed in Chapter 16 of the EIS. The existing drainage regime is defined by the relatively free draining nature of the soils on site with all of the watercourse within the site being ephemeral. The hydrological characteristics of the site are considered positive in terms of the potential for impact from the proposed development because the potential for surface water impacts is significantly less compared to a site with blanket peat cover. Potential sources of surface water impacts are identified and included suspended solids, cementitious materials, hydrocarbons, tree felling, waste / wastewater, increases in impermeable areas, interruptions to or alternations of the watercourses on the site. It is noted that the windfarm layout is designed so that the infrastructure is

sited in the least ecologically sensitive areas. Pollution control, integral system attenuation and other preventative measures are incorporated into the project design to minimise adverse impacts on water quality and prevent increased flow rates into downstream watercourses. Proper site management based on an Environmental Operating Plan will prevent further adverse effects on the hydrology of the area. This will include measures to prevent a reduction of water quality from concrete, silt waste, waste water and tree felling activities.

- 9.6.2 In relation to surface water supply notably The Glenary River is used as a source of water for the Clonmel Town Water supply. Surface water is abstracted from the river at two intake locations (Main intake and supplementary intake). The supplementary intake is only used during very low flow periods when insufficient flows occur at the upper main intake location. Three turbines T6 T7 and T8 are located within the surface water catchment of the intakes. Approximately 1.3km of the cable route exists within the catchment to the supplementary intake. In terms of potential impacts, construction and operational phase run off may contain increased sediment loads and various contaminants which could have physical and chemical effects on the Clonmel Town surface water supply. Physical effects could result from the increase in suspended solids from the site runoff and chemical effects may arise from pollutants such as hydrocarbons, chemicals and cement. A detailed surface water management and sediment control plan is proposed for the development and there will be no storage of hydrocarbons or chemicals within the catchment to the intakes. Refuelling of mobile plant will be carried out outside the intakes while immobile plant within the catchment will be done by trained personnel. Washing out of cement trick chutes will not be permitted within the intakes catchment.
- 9.6.3 Groundwater is addressed in Chapter 19. It is asserted that due to the short groundwater flowpaths within the subsurface and the preference for surface water flows during very wet periods, potential impacts on groundwater are generally not significant and surface water is generally more sensitive to impact. The primary risk to groundwater would be from fuel / chemical spillage, leaching of cement material, leaching from borrow pits and domestic wastewater disposal. The use of cement fuels chemicals will be carefully managed and controlled on the site. Fuels and chemicals will be stored at a designated area which will be bunded to protect from any spills or leaks.
- 9.6.4 In relation to potential impact on water supplies including public supplies and private wells it is noted that only one dwelling is potentially located downstream in terms of groundwater flow of a proposed development area within the wind farm. This dwelling is over 1km away and therefore due to the short groundwater flow distances 300-400, impacts on any existing or

potential well are not expected. Knockalisheen Public Water Supply is located approximately 1.1km down gradient of the proposed development and no impacts on this spring fed groundwater source are anticipated. In response to the request for additional information on Russelstown New Group Water Scheme was assessed and it was outlined that no development will occur within the maximum zone of contribution. On the question of potential impact on the supply well at the Pinewood Healthcare plant at Ballymacarbry it was outlined that the well which is located to the rear of the plant a distance of 3.3km from the closest windfarm infrastructure. There is no development within the groundwater contribution zone of this well which is expected to extend at maximum 500m from the well source.

9.6.5 It is asserted that the implementation of the sediment and erosion / storm water control plan as designed will ensure that all contaminated water will be collected and treated before being discharged to the downstream watercourse. The attenuation system will reduce the peak discharge rate from the development area and ensure that there will be no increase in flow rates downstream and consequently there will be no increase in floor rise downstream of the site as a result of Glenahiry Windfarm Development. On the basis of the details submitted, I consider that the proposed development is appropriately mitigated to ensure that it will not impact on water quality.

9.7 Roads and Traffic.

9.7.1 The main traffic impact arising from the development will arise during the construction phase. The proposed development will be accessed from the local road that runs north from Ballydonagh Cross Roads on the R671 Regional Road. The local road junction on the north side of the Ballydonagh Crossroads is on the inside of a horizontal curve on the R671, with restricted sight visibility splays of approximately 30 metres in both directions from a set-back distance of 3m from the edge of the carriageway. The assessment confirms that the local road network has sufficient capacity for peak construction and operational phase traffic volumes.

9.7.2 Mitigation measures to address construction and operational phase traffic impacts are set out in detail and include the widening of the local road to 4.5m with provision for seven passing bays for two way heavy vehicles, provision for flagman at R671 Ballydonagh Crossroads junction to coordinate traffic on days when stone aggregates or concrete are being delivered. Additionally a planned and executed delivery programme and notification to local residents prior to significant deliveries is envisaged. Repair works to be carried out to local road where necessary.

9.7.3 I consider that given that the construction phase impacts are short term and subject to the implementation of mitigation measures and provision for remedial measures as outlined, the impact on roads and traffic is appropriately mitigated. I note the third parties have questioned the applicant's legal entitlement to carry out road widening works. In this regard, I would refer to Section 34 (13) of the Planning and Development Act as amended which provides that "A person shall not be entitled solely by reason of a permission under this section to carry out development". I consider that traffic and roads issues are not an impediment to the proposed development.

9.8 Ecological Impact

9.8.1 The appeal site consists of commercial forestry plantation some of which has been recently clear felled. An extensive network of roads exists in the area used for ongoing harvesting and maintenance of the plantation. Overall the local landscape has been significantly altered by forestry and agricultural activity.

9.8.2 The EIS at Volume 4 Chapter 19 addresses flora and fauna. The most dominant habitat within the site comprises coniferous plantation with smaller sections of wet heath, recently felled plantation, young conifer plantation and buildings with artificial surfaces. The site forms part of the South Eastern River Basin District. The Glenary River and River Nier both of which are tributaries of the River Suir are located to the north and south of the site respectively and tributaries of both rivers extend uphill towards the site but are not visible within the site. Water quality within the development catchment ranged from good to high status.

9.8.3 A number of designated sites within 10km of the site are identified as follows:

Lower River Suir cSAC (Site Code 002137) 1.3km northwest of the site and 770m west of the access road. Approximately 500m of the grid route along the R680 lies within the boundary of the SAC

- Nier Valley Woodlands cSAC and pNHA (Site Code 000668) 3.3km southeast of the site.
- Comeragh Mountains SAC and pNHA. 7.3km southeast of the site.
- Blackwater River (Cork Waterford) cSAC (Site Code 002170) 9.4km south of the site.
- Marlfield Lake pNHA (SiteCode 001981) 4.8km northwest of the site. 1.55km northwest of the grid route.
- Kilsheelan Lake pNHA (Site Code 001701) 8.2km north east of the site and 5.15km east of the grid route.
- Glenboy Wood pNHA (Site Code 000952) 6.5km southwest of the access road. 9.4km southwest of the main body of the site.

- Toor Wood pNHA (Site Code 001708) 8.7km east of wind farm site. 7,75km south east of grid route.
A Natura Impact Statement was prepared to assess potential impacts on the integrity of Natura 2000 sites arising from the proposed development.

- 9.8.4 No species of rare or protected flora were noted on the site. As regards habitats the habitat that is given the highest conservation evaluation at the site (County Importance) is wet heath. There is no infrastructure within this habitat and it is outlined that this section of wet heath at the margins of the site forms a small section of a larger and better quality habitat within the greater area. The planting of conifer plantation human activity and construction of forestry roads has reduced the quality of this section of habitat. Turbine 6 is the closest turbine located 50m and at the same topographical level approximately and turbine 4 is 95m downslope. It is asserted that the intermittent distance between this section of wet heath, the buffer of existing conifer plantation and low level of excavation required to install turbines based on low levels of peat within the site will reduce the potential for habitat alteration. The grid route travels close to a section of wet heath which has been planted with conifers to the north of the Glenary River. It is asserted that the habitat offers a poor representation of wet heath habitat and has already been heavily disturbed by the encroaching forestry.
- 9.8.5 Habitat alteration to waterways is addressed. The proposed underground cable route will require a single crossing of the Glenary River which will involve directional drilling under the river. The Glenary and Nier rivers support suitable habitat for atlantic salmon. Other aquatic fauna identified as key ecological receptors include brown trout lamprey and European eel, white clawed crayfish, otter and freshwater pearl mussel. There is potential for sediment and pollutants entering ephemeral streams within the site reducing water quality which could negatively impact on these species. Changes to river flow due to increased impermeable areas could impact sensitive species like freshwater pearl mussel. Mitigation measures include the implementation of sediment and erosion / storm water control plan, an oil and fuels management plan, control of cementitious materials and implementation of the environmental operating plan.
- 9.8.6 Mammal species recorded during site surveys included bat species, fallow deer, pine marten, red squirrel, fox and rabbit. Bird species recorded within and outside the site during breeding season included sparrow hawk kestrel, peregrine falcon, golden plover and meadow pipit. In May 2010, there was a single observation of a male hen harrier at the northeast of the site. There were no however further observations during surveys in 2012/2013.

- 9.8.7 As regards bat species common pipistrelles and soprano pipistrelles were recorded within the site however the level of activity was not deemed significant and there is no evidence that the site is a significant resource for foraging or commuting bats and no roost was recorded within the site boundary. Mitigation measures include pre construction and post construction monitoring for bats, birds, red squirrel and pine marten.
- 9.8.8 I consider that the EIS provides ample evidence and detail to demonstrate that subject to implementation of the mitigation measures as outlined including a comprehensive erosion and sediment / storm water control plan to prevent any potential significant pollution event occurring, an environmental operating plan and oil management plan, control of wheel wash, dewatering and concrete, and composition of an ecological restoration and management plan to be implemented by environmental manager and project ecologist. On the basis of the detailed measures I consider that there will be not significant negative impacts on designated conservation site or on local ecology as a result of the proposed development.

9.10 Landscape and visual impact and impact on tourism

- 9.10.1 Matters of landscape and visual impact are a significant issue in the assessment of the appeals and formed the basis for the Council's three reasons for refusal. The council found that the proposal would constitute a visually dominant features in a vulnerable scenic rural landscape contrary to development plan policy and would thereby compromise the policy to develop the Comeragh area as a national amenity, would be detrimental to the environmental quality and scenic landscape of the Nire Valley and would impact negatively on Ballymacarbry Village and nearby settlements and important iconic landscapes and features in counties Waterford and Tipperary.
- 9.10.2 The EIS provides a detailed description and analysis of the landscape context and predicted impact of the proposed development Volume 3 Chapter 14 Contains the Landscape Report by MosArt Ltd. Landscape and visual impacts are assessed in relation to the proposed Glenahiry Wind farm on the basis of the sensitivity of the receiving landscape and the people that are afforded views over it. This sensitivity is then balanced against the magnitude of the likely landscape impacts and visual impacts to derive overall significance. The significance of the landscape impact is based on a balance between the sensitivity of the landscape receptor and the magnitude of the impact. The visual impact significance is therefore a function of the visual receptor sensitivity and visual impact magnitude.

9.10.3 The assessment notes that the landscape directly surrounding the site has a marginal upland character. This is consistent with its transitional location between a more naturalistic mountain moorland landscape which begins a short distance to the east and the pastoral farmland that emerges on lower slopes to the north and west. It is asserted that the commercial conifer plantations and rough grazing gives the location an anthropogenic character notwithstanding its sense of rural remoteness and low level of built development. As regards magnitude of landscape effects, the physical impacts on the landcover of the site as a result of the development are acknowledged however in the context of the surrounding land use activities these will be barely discernible and take place on already modified land. It is asserted that this scale of development can be comfortably assimilated into this landscape context without undue conflicts of scale although this represents a new form of development within the study area it is not an incongruous one.

9.10.4 The selected photomontage provide for assessment at 23 visual receptor locations throughout the study area. Additional viewshed reference points from The Clonmel Park Hotel 3rd floor and South Tipperary General Hospital main entrance and three additional locations within the mountainous context of the Nire Valley were provided in response to the request for additional information. The assessment notes that the sensitivities of the receptor locations varies between very high and low but with the majority (19 out of 23) being medium or low. The two locations with the highest order of sensitivity at the summit of Slievenamon (AV1) and the Scenic viewpoint at the Vee within the Knockmealdown range (AV5) are both iconic locations that afford vast panoramic vistas across several counties. High levels of visual impact magnitude are recorded at LC1 and LC2 local views representing local residents. As regards view from Ballymacarbry LC3, this view is afforded from an elevated estate within the village and the visual presence and cluttered view are acknowledged. Due to the high degree of terrain and vegetative screening this is one of a few locations within the village that afford a potential view of the development.

9.10.5 Given their elevated siting and the scale, design, height (up to 127m) and nature of the proposed turbines, the proposed windfarm will clearly be highly visible in the landscape. The zone of theoretical visibility (assuming a worst case scenario with respect to viewing exposure) demonstrates the wide area over which 7-8 turbines will potentially be visible. Notably within 5km the theoretical visibility pattern is quite complex as there are few areas in this nearest zone that have a theoretical views all turbines at once. This reflects that the scheme straddles a ridge and some of the lower turbines can only be seen from the northern side or southern side. Due to the undulating topography immediately surrounding the site there

are notable areas with no view of the development a short distance to the east west and north. Beyond 5km theoretical visibility is highly extensive within the river valley landscape to the north, south and west of the appeal site. Furthermore potential views from the northeast Slievenamon and south east Comeragh Mountains are afforded from the upper slopes and ridgelines. Notably due to topography the windfarm will not be visible from Clonmel Town Centre or east of the Comeragh Mountains.

9.10.6 As regards mitigation, it was outlined that design and layout was incorporated into the early stage site selection and design phases. The design of the proposed wind farm is in general compliance with the design criteria as outlined in the Department of the Environment, Heritage and Local Government Wind Energy Development Guidelines (2006). The irregular land form and land cover patterns on the site dictate an informal arrangement of the turbines along the ridge. As regards mitigation for landscape impact apart from the design mitigation in terms of siting and layout, including minimisation of number and extent of new access tracks, and undergrounding of windfarm cabling, measures include use of matt non reflective finishes on all turbine components, avoidance of counter rotation of blades, provision of biodiversity enhancement measures within clear felled areas around turbines and alongside site roads, retention of landscape features a long haul road or grid connection route.

9.10.7 As outlined above in accordance with the Landscape Character Assessment within the Waterford County Development Plan 2011-2016, the scenic landscape evaluation shows the site to contain the front of one sensitive landscape area. The ridge upon which the site is located is also shown to be vulnerable as are all skylines in upland areas in the County. In relation to the potential for impacts on the landscape designations including designated vulnerable ridgeline and sensitive landscape area, as acknowledged by all parties, the development will result in an alteration to the landscape character of the ridgeline and views from designated scenic routes. However I note the assertions of the first party that that this alteration does not conflict with the productive rural character of the site which is dominated by commercial conifer forestry. It is asserted that the commercial conifer plantations and rough grazing gives this location an anthropogenic character notwithstanding its sense of rural remoteness.

9.10.8 The rich variation in the study area in terms of landscape character is explored. The assessment further holds that the policy in relation to scenic views is focussed on areas of natural beauty and while this applies to the Comeragh Mountains it does not apply so readily to the forested foothills containing the proposed site. Reference is also made to the association of wind energy development with this type of transitional landscape in the recent past. The assessment notes that the sensitivity of the landscape to be medium and this is reasonable in my view.

- 9.10.9 On the issue of potential impact on tourism within the area, I note the Chapter 13 of EIS Tourism Audit by Rethink Tourism and detailed response to request for additional information on this issue. The application provides a significant level of detail and analysis in terms of the tourism product audit which provides a baseline of tourism product in the area and impact assessment. The main impacts unmitigated identified relate to construction traffic impacts, access, temporary re-routing of the East Munster Way during construction phase, reduction in attractiveness of River Suir and River Nire for Angling / fishing if a reduction in water quality were to result, visual impacts, and noise impacts. Further to detailed mitigation it is asserted that the effect of the construction of a windfarm on visitor numbers, visitor revenue and tourism development across the study area will be slight.
- 9.10.10 The detailed route screening analysis provides a useful tool in terms of visual and landscape impact assessment. The process of review of the zone of theoretical visibility and route screen analysis exercise is informative in terms of indicating the capacity of the landscape to absorb development. The mapped output from the route screening analysis demonstrates walking routes, cycling routes and scenic driving routes within the Comeragh area that will have a full or partial view of the proposed wind farm. Analysis shows that very few of the walking routes contained within the Comeragh area have any view of the proposed windfarm, as they are mainly associated with the eastern side of the range and the Waterford coastline. The Nire valley loop trails in the heart of the Comeraghs will have a view of the proposed turbines however the turbines will be seen as small scale features at a considerable distance.
- 9.10.11 As regards driving routes, a small proportion of the driving routes that pass through the Comeragh have the potential view of the proposed wind farm. Similarly in relation to cycling routes the affected sections tend to be concentrated around the R671 to the northwest and southwest. The most exposed cycling route is the mountain bike route (Nire Valley Drop which utilises the network of forest tracks in the immediate vicinity of the site.
- 9.10.12 On the issue of visibility from the East Munster way, ZTV pattern indicates that 59% of the 70km long way marked regional walking route is afforded (bare ground) views of the proposed windfarm. Route Screening Analysis shows that only 27% of the route sections within ZTV coverage have any actual view of the proposed development. This equates to only 16% of the overall route distance. As regard the R671 Designated Scenic Route between Clonmel and Ballymacarbry, ZTV map indicates that the majority (79%) of the scenic route affords potential (bare ground) views of the proposed windfarm. the RSA shows that in reality only 34% of the designated road is exposed due to vegetative screening.

9.10.13 In relation to Cumulative impact the Portlaw windfarm (2 operational turbines and 2 permitted turbine) occurs within the Comeragh area to the southeast of the ranges on the opposite side to the proposed Glenahiry Windfarm. This was not addressed within the EIS however as it falls outside the 20km radius study area.

9.10.14 In relation to landscape impact the EIS concludes that, in taking account of the sensitivity of receptors and the magnitude of likely impacts, the proposed Glenahiry windfarm will give rise to impacts in the mid to low order of significance. The response to RFI notes that Fáilte Ireland submission suggests in its conclusion that such impacts will be moderate and stresses that in neither case will significant landscape and visual impacts arise. Having considered the submitted details I consider that the development can be accommodated in the landscape and whilst the proposal will clearly have a significant visual presence the development will not have a significant dominant impact on landscape character. On the basis of the evidence provided I further consider that the effects on construction of a windfarm on the site will not have a significant impact on tourism in the area.

9.11 Grid Connection

9.11.1 On the issue of grid connection as noted in response to the request for additional information Volume 1 Tab 1. that Ecopower Developments Ltd. intends to apply for planning permission to build the grid connection line from the windfarm substation to the ESB substation at SPA road Clonmel. This grid connection will be subject of a future application given its location outside the site boundaries and within two local authority jurisdictions. The grid connection route is 8.2km long and is located predominantly along existing forest tracks /firebreaks and on the public road. 4.3km is along existing forest tracks and firebreaks with 0.2km through forestry. The public road section 3.8km will follow the local road from Kilmacomma Cross to the Old Dungarvan Road on the outskirts of Clonmel. It then follows the Raheen Road to the junction with the R678, travelling south along the R678 for 0.2km before turning onto Spa Road where it travels 0.2km to the ESB substation. Along the route there are 5 watercourse crossings. The Glenary River Crossing and 4 culvert /drains crossings.

9.11.2 I note the first party response to the appeal and issues raised as regard project splitting. The submissions of the first party in the EIS and supplemented by further information and grid connection EIS included in the first party response to the appeal sets out in detail the environmental effects of grid connection thereby allowing for the cumulative assessment. On the basis of the information provided, I would concur with the first party

that the level of detail meets the requirements for cumulative assessment of the two stages of the project (i.e. Windfarm and Grid Connection.)

9.12 Environmental Impact Assessment

9.12.1 On the matter of the Environmental Impact Assessment, I note that that the proposal involves the erection of 8 turbines comprising a windfarm of 25mW installed capacity. The relevant threshold in terms of the prescribed development for the purposes of part 10 provides that EIA is required for “Installations for the harnessing of wind power for energy production (wind farms) with more than 5 turbines or having a total output greater than 5 megawatts”, as set out in Category 3(i) of Part 2 Schedule 5 – Development for the purposes of Part 10 (Environmental Impact Assessment) of The Planning and Development Regulations 2001, as amended. An EIS is therefore mandatory for the proposed development. The Environmental Impact Statement submitted is in five volumes in the grouped format structure.

Volume 1. Chapters 1-5

Chapter 1. Introduction

Chapter 2 Policy and Planning Context

Chapter 3 Alternatives Considered

Chapter 4 Description of the development

Chapter 5 Public Road Network

Volume 2 Chapter's 6-13

Chapter 6 Communications

Chapter 7 cultural Heritage

Chapter 8 Air and Climate

Chapter 9 Socio economic

Chapter 10 Safety and Health Including Review of Current Literature

Chapter 11 noise and Vibration

Chapter 12 Shadow Flicker

Chapter 13. Tourism and Amenity

Volume 3 Chapter 14 – Landscape and Visual (Photomontages)

Volume 4 Chapters 15-22

Chapter 15 Geology and Soils

Chapter 16 Surface Water

Chapter 17 Surface water supply.

Chapter 18 Groundwater

Chapter 19 Flora and Fauna

Chapter 20 Summary of Impacts for each environmental topic

Chapter 21 Interaction's of the Foregoing

Chapter 22 Non Technical Summary.

Volume 5

Tab 1 Sediment and Erosion / Storm Water Control Plan

Tab 2 Natura Impact Statement

Tab 3 Habitat Enhancement Plan

Tab 4 Preliminary Environmental Operating Plan

Tab 5 Preliminary Schedule of Environmental Commitments (Mitigation measures)

The Environmental Impact Statement was supplemented by additional information in 5 volumes. I consider that the submitted documentation provides a significant level of detail and scientific evidence.

9.12.2 Compliance with Requirements of Articles 94 & 111 of the Planning and Development Regulations 2001 (as amended)

I consider that the proposed development, in overall terms, is in compliance with Articles 94 and 111 of the Planning and Development Regulations, 2001, as amended. To this extent I would observe that-

The EIS contains the information specified in paragraph 1 of Schedule 6 of the Regulations. The EIS-

- Describes the proposal, including the site and the development's design and size;
- Describes the measures envisaged to avoid, reduce and, if possible, remedy significant adverse effects;
- Provides the data necessary to identify and assess the main effects the project is likely to have on the environment;
- Outlines the main alternatives studied and the main reasons for the choice of site and development, taking into account the effects on the environment.
- The EIS contains the relevant information specified in paragraph 2 of Schedule 6 of the Regulations. This includes-
- A description of the physical characteristics of the project and its land use requirements;
- The main characteristics of the wind energy process to be pursued;
- The emissions arising;
- A description of the aspects of the environment likely to be significantly affected by the proposal;
- A description of the likely significant effects on the environment resulting from the development's existence, the development's use of natural resources, the emission of pollutants and creation of nuisances, and
- a description of the forecasting methods used; and
- There is an adequate summary of the EIS in non-technical language.

I note that the EIS does not provide a clear summary indication of any difficulties (technical deficiencies or lack of know-how) encountered by the developer in compiling the required information.

9.12.3 The main likely effects can be identified under the range of headings as follows:

Human Beings

- Employment and economic impact at the construction stage and operational phase
- Health and Safety impacts during construction.
- Shadow flicker.
- Visual impact
- Tourism and amenity
- Traffic

Noise and Vibration

- Noise & other disturbance to residents.

Ecology - Flora & Fauna

- Effects on SAC, SPA, pNHA
- Impacts on on-site habitats.
- Species impact.
- Avifauna disturbance.

Aquatic Ecology

- Undermining water quality in streams during construction phase.
- Affecting important habitats downstream of the site.
- Fisheries.

Soils, Geology and Hydrogeology

- Removal of soil
- Peat stability.
- Impact on natural drainage patterns
- **Hydrology and Water Quality.**

- Sediment release
- Surface water runoff
- Water quality

Landscape and Visual Impact

- Scale, height and extent of visibility.
- Impact on landscape character.
- Impact on important views.
- Cumulative impact with other permitted wind farms.

Cultural Heritage

- Effects on archaeology.
- Impact on landscape
- Impact on structures of heritage significance.

Air Quality and Climate,

- Dust
- Climate Change.

Material Assets

- Tourism and amenity.
- Impact on local road network.
- Electromagnetic radiation
- Shadow cast shadow flicker

- Interference with telecommunications.
- Impact on land use

9.12.4 Interactions Chapter 20.

- Humans and noise, flora and fauna, landscape and visual, cultural heritages, soils geology and hydrology, water quality and fisheries.
 - Flora and Fauna, noise, soils geology hydrology, water quality and fisheries
- Cultural Heritage, Landscape and visual material assets.
- Geology and Hydrology.

Direct indirect and cumulative impacts were considered during the siting of turbines for the proposed wind farm to satisfy landscape and visual impact, geotechnical considerations, habitats, hydrology and noise generation as well as other factors and constraints.

The effects of the interactions between humans and air quality, the visual landscape, flora & fauna and water and soils; and landscape and the natural environment are implicit in the range of preceding issues listed.

9.12.5 As regards **alternatives**, consideration is given to this matter in chapter 3 of the EIS. The alternatives considered include the do nothing scenario. As regards alternative sites, the study area was confined to within 10km of the electrical transmission grid at Spa Road Clonmel. Two possible alternative sites were identified however were in areas open for consideration which is less favourable than favoured designation on the proposed site. Based on visual impacts arising and proximity to the River Suir SAC, the alternative sites considered were less favourable. It is noted that the Glenahiry windfarm is proposed for an alternative location confined to the east of the Boolabrien site location refused by the Board in 2012. (PL239522) The EIS notes that the revisiting of the Boolabrien windfarm site was informed by Board's direction in that case where the Board indicated that it did not agree with the Inspector's summary analysis that "the proposed development is unacceptable in principle, on the basis of the landscape setting and its impact thereon". As regards alternative layout the potential for 30 no 850kW wind turbines was investigated to ascertain if visual impact would be mitigated by using smaller turbines. However this was assessed as being too spatially extensive and would require location on vulnerable east west ridge at Curraheenavoher. The final location at Russelstown New / Boolabrien Upper was identified given the potential to mitigate visual impact on the landscape with a compact form to the east and away from the vulnerable ridge line at Curraheenavoher. Alternative layouts and component layouts and alternative haul routes and alternative grid connection, construction processes are detailed. It is asserted that the most suitable location, windfarm layout and construction processes which were capable of mitigation through avoidance and reduction were chosen.

9.12.6 Assessment of the Likely Significant Effects Identified having Regard to the Mitigation Measures Proposed

The assessment preceding this section of the report under the relevant headings fully considers the range of relevant likely significant effects with due regard given to the mitigation measures proposed to be applied if the to address the range of potential significant impacts arising from the proposed development.

9.12.7 Conclusions Regarding the Acceptability or Otherwise of the Likely Residual Effects Identified

The conclusions regarding the acceptability of the likely main residual effects of this proposal are clearly addressed under the various headings of the main assessment. The principal areas of concern focus on visual and landscape impact, impact on established amenity, impact on tourism and impact on ecology.

9.12.8 I consider that the EIS is adequate and of an acceptable standard that the document is generally in compliance with the provisions of Article 94 and Schedule 6 of the Planning and Development Regulations 2001.

9.13 Appropriate Assessment

9.13.1 The obligation to undertake appropriate assessment derives from Article 6(3) and 6(4) of the Habitats Directive. Essentially it involves a case by case examination for Natura 2000 site and its conservation objectives. Appropriate Assessment involves consideration of whether the plan or project alone or in combination with other projects or plans will adversely affect the integrity of a European site in view of the site's conservation objectives and includes consideration of any mitigation measures to avoid reduce or offset negative effects. This determination must be carried out before a decision is made or consent given for the proposed plan or project. Consent can only be given after having determined that the proposed development would not adversely affect the integrity of a European Site in view of its conservation objectives.

9.13.2 The Natura Impact Statement compiled by Malachy Walsh and Partners Engineering and Environmental Consultants. The designated conservation sites within a 15km radius of the site are

	Designated site	Site Code	Proximity
1	Lower River Suir SAC	Site Code 002137	1.3km northwest of the windfarm site 770m west of the access road

			Approximately 500m of the grid route that travels along the R680 within the boundary of the SAC
2	Nier Valley Woodlands SAC	Site Code 000668	3.3km south southeast of the windfarm site
3	Comeragh Mountains SAC	Site Code 001952	7.3km south east of the windfarm site
4	Blackwater River (Cork Waterford) SAC	Site Code 002170	9.4km south of the windfarm site

The designated Sites and Qualifying Features are:

Designated Sites	Key Features
Lower River Suir SAC	<p>Atlantic salt meadows (<i>Glaucopuccinellietalia maritima</i>) [1330]</p> <p>Mediterranean salt meadows (<i>Juncetalia maritimi</i>) [1410]</p> <p>Water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitriche-Batrachion</i> vegetation [3260]</p> <p>Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels [6430]</p> <p>Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles [91A0]</p> <p>Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i>, <i>Alnion incanae</i>, <i>Salicion albae</i>) [91E0]</p> <p><i>Taxus baccata</i> woods of the British Isles [91J0]</p> <p><i>Margaritifera margaritifera</i> (Freshwater Pearl Mussel) [1029]</p> <p><i>Austropotamobius pallipes</i> (White-clawed Crayfish) [1092]</p> <p><i>Petromyzon marinus</i> (Sea Lamprey) [1095]</p> <p><i>Lampetra planeri</i> (Brook Lamprey) [1096]</p> <p><i>Lampetra fluviatilis</i> (River Lamprey) [1099]</p> <p><i>Alosa fallax fallax</i> (Twite Shad) [1103]</p> <p><i>Salmo salar</i> (Salmon) [1106]</p> <p><i>Lutra lutra</i> (Otter) [1355]</p>
Nier Valley Woodlands SAC	91A0 Old sessile oak woods with <i>Ilex</i> and

	<i>Blechnum</i> in the British Isles European dry heaths
Comeragh Mountains SAC	[3130] Oligotrophic to Mesotrophic Standing Waters [3260] Floating River Vegetation [4010] Wet Heath [4030] Dry Heath [4060] Alpine and Subalpine Heaths [8210] Calcareous Rocky Slopes [8220] Siliceous Rocky Slopes [1393] Slender Green Feather-moss (<i>Drepanocladus vernicosus</i>)
Blackwater River (Cork Waterford) SAC	Estuaries [1130] Mudflats and sandflats not covered by seawater at low tide [1140] Perennial vegetation of stony banks [1220] Salicornia and other annuals colonising mud and sand [1310] Atlantic salt meadows (<i>Glaucopuccinellietalia maritimae</i>) [1330] Mediterranean salt meadows (<i>Juncetalia maritimi</i>) [1410] Water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitriche-Batrachion</i> vegetation [3260] Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles [91A0] Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i> , <i>Alnion incanae</i> , <i>Salicion albae</i>) [91E0] <i>Taxus baccata</i> woods of the British Isles [91J0] <i>Margaritifera margaritifera</i> (Freshwater Pearl Mussel) [1029] <i>Austropotamobius pallipes</i> (White-clawed Crayfish) [1092] <i>Petromyzon marinus</i> (Sea Lamprey) [1095] <i>Lampetra planeri</i> (Brook Lamprey) [1096] <i>Lampetra fluviatilis</i> (River Lamprey) [1099]

	<p>Alosa fallax fallax (Twaité Shad) [1103]</p> <p>Salmo salar (Salmon) [1106]</p> <p>Lutra lutra (Otter) [1355]</p> <p>Trichomanes speciosum (Killarney Fern) [1421]</p>
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9.13.3 The screening process identified that there is no potential for impact on two Natura 2000 sites namely the Blackwater River cSAC and Nier Valley Woodlands SAC. In relation to the Nier Valley Woodlands cSAC this is 3.3km to the south of the proposed windfarm. The proposed windfarm is downstream of the cSAC and there are no water abstraction requirements for the windfarm. The Blackwater River (Cork/Waterford) cSAC 002170 is 9.4km to the south of the site where a tributary of the river Blackwater, the Finsk river flows. The River Blackwater and its tributaries are in a different river catchment therefore there is no potential for direct or indirect impact.

9.13.4 The Lower River Suir cSAC is 1.3km to the northwest of the proposed windfarm and 700m west of the most westerly point of the site access road networks at the site access. The proposed site lies within the catchment of two tributary streams of the Glenary river, the Glenkeal Stream drainage to the north west and an unnamed stream to the east of the site draining to the north. The lower River Suir cSAC extends along the Glenary river corridor downstream from the bridge immediately west of Glenabbey. Some parts of the southern portion of the site drain into the river Nier which lies approximately 3.3km to the south of the site and this river is also part of the Lower River Suir cSAC. It is possible that either of these rivers could become polluted via tributaries that drain the site due to construction activities on site.

9.13.5 The Comeragh Mountains cSAC 001952 is approximately 7.3km to the southeast and upstream of the proposed windfarm. No potential impact is envisaged to Annex I habitats and Annex II species. However potential impact on two Annex I bird species hen harrier (*Circus cyaneus*) and peregrine falcon (*Falco peregrinus*) which occur within the Comeragh Mountains cSAC must be considered as potential receptors for impact by way of disturbance, displacement and a risk of collision.

9.13.6 The main potential negative impacts relate to risk of pollution of waterways downstream of the drains / streams within the proposed site and in turn a negative impact on aquatic habitats and species. Other potential impacts related to birds including collision risk, displacement and / or disturbance from the development area. Subject to mitigation measures including the

sediment and erosion / storm water control plan and the implementation of a fuel and oil management plan, control of wheel wash, dewatering and concrete, habitat enhancement plan and environmental operating plan it is anticipated that there will be no significant residual adverse impact as a result of construction and operational phase of the Glenahiry Windfarm on Natura 2000 sites.

9.13.7 Having considered the submitted reports including the detailed further information and response to the appeals, I am satisfied that the methodology used in the NIS report is clearly explained and information sources set out. I consider that the level of information provided allows the Board as the competent authority to assess the impact of the proposed development on the integrity of the adjacent Natura 2000 sites. Having regard to the mitigation measures proposed I consider that the conclusion that the proposed development will not adversely impact on the Lower River Suir cSAC and Comeragh Mountains cSAC 001952 is reasonably supported.

9.10.18 On the basis of the details provided I accept the assertion of the first party that it has been demonstrated that the cumulative impact of the development will not have adverse effect on the adjacent Natura 2000 sites in the light of their conservation objectives and that subject to the mitigation measures and habitat and species management plan, construction and environmental management plan and surface water management plan the proposed project will not adversely affect the integrity and conservation status of any Natura 2000 sites.

10.0 CONCLUSION & RECOMMENDATION

10.1 The site is within an area which in the context of the development plan is preferred area for wind development subject to normal planning criteria. Having considered the contents of the application, the decision of the planning authority, the provisions of the development plan, national policy as set out in the Windfarm Development Guidelines issued by the Department of Environment Heritage and Local Government, the grounds of appeal and third party submissions, my site visit and assessment of the planning issues, I conclude that subject to the stated mitigation the proposed development would not have an adverse impact on the integrity of the adjacent European Sites, would not seriously injure the amenities of the area or of property in the vicinity and would be acceptable in terms of traffic impact, would be acceptable in terms of visual impact. Accordingly I recommend permission subject to the following schedule of conditions:

REASONS

REASONS AND CONSIDERATIONS

Having regard:

- (a) national policy with regard to the development of sustainable energy sources,
- (b) the Wind Energy Development Guidelines for Planning Authorities issued by the Department of the Environment, Heritage and Local Government in June, 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 Waterford County Development Plan, including those regarding renewable energy development,
- (f) the distance to dwellings or other sensitive receptors from the proposed development, and
- (g) the submissions from the appellants and observers on file
- (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), the further information submitted by the applicant in the course of the planning application and the appeal,
- (i) the Natura Impact Statement and the further information submitted in relation to ecology by the applicant in the course of the planning application and the

It is considered that, subject to compliance with the conditions set out below, the proposed development would not adversely affect the landscape, would not seriously injure the visual or residential amenities of the area and would not give rise to any significant impacts on the natural heritage of the area or affect the integrity of any European Site or any protected species. The proposed development would, therefore, be in accordance with the proper planning and sustainable development of the area.

CONDITIONS

- 1 The development shall be carried out in accordance with the plans and particulars lodged with the application, as amended by the further plans and particulars submitted to the planning authority on, 21st May 2015, and information submitted to the Board on 15th September 2015, including the

mitigation measures set out in the EIS and NIS, except where otherwise may be required in order to comply with the following conditions.

Reason: In the interest of clarity.

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

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

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

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

4. This permission shall not be construed as any form of consent or agreement to a connection to the national grid or to the routing or nature of any such connection.

Reason: In the interest of clarity.

5. All environmental mitigation measures set out in the Environmental Impact Statement, Natura Impact Statement, and associated documentation submitted by the applicant to the planning authority and An Bord Pleanála, shall be implemented in full, except as may otherwise be required in order to comply with the following conditions.

Reason: In the interest of protection of the environment.

6. The developer shall facilitate the preservation, recording and protection of archaeological materials or features that may exist within the site. In this regard, the developer shall –
 - (a) notify the planning authority in writing at least four weeks prior to the commencement of any site operation (including hydrological and geotechnical investigations) regarding the proposed development,
 - (b) employ a suitably qualified archaeologist who shall monitor all site investigations and other excavation works, and

(c) Provide arrangements, acceptable to the planning authority, for the recording and for the removal of any archaeological material which the authority considers appropriate to remove.

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

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

7. Prior to the commencement of works on site, a surface water management plan shall be submitted to the Planning Authority for written agreement and shall set out the detailed measures to be undertaken to protect water quality during tree harvesting, construction and operation phase, as well as a schedule for water quality monitoring. Works with a potential to result in pollution or siltation of watercourses shall be supervised by an on site clerk of works who will report on compliance with the relevant mitigation measures. The clerk of works shall be empowered to halt works where he/she considers that continuation of the works would be likely to result in a significant pollution or siltation incident. In the event of a water pollution incident, or of damage to a river, these reports will be made available to the relevant statutory authorities and on site works will cease until authorised to continue by the Planning Authority.

Reason: To prevent water pollution.

8. Disposal of foul effluent on site is not permitted, unless otherwise authorised by a prior grant of planning permission.

Reason: In the interest of public health.

9. (a) Roads, hardstanding areas and other hard-surfaced areas shall be completed to the written satisfaction of the planning authority within three months of the date of commissioning of the wind farm.
(b) Soil, rock or sand excavated during construction shall not be left stockpiled on site following completion of works. Details of the treatment of stockpiled materials shall be submitted to, and agreed in writing with, the planning authority prior to commencement of development.

Reason: In the interest of visual amenity.

10. (a) A condition survey of the proposed construction haul routes, including provision for bridges, culverts or other structures, shall be carried out by a

suitably qualified engineer both before and after construction of the proposed development. The extent and scope of the survey shall be submitted to, and agreed in writing with the planning authority, prior to commencement of development. In the event of damage occurring to the public road network or associated infrastructure as a result of the construction of the proposed development, such damage shall be made good in accordance with the requirements of and to the satisfaction of the planning authority.

(b) Any such works shall be undertaken in accordance with the “Guidelines for the Treatment of Otters prior to the Construction of National Road Schemes” issued by the National Roads Authority (2006).

Reason: To ensure successful reinstatement of the public road network in the area.

11. A protocol for annual reports on the impact of the windfarm on wildbirds in the vicinity with particular reference to hen harrier and peregrine falcon shall be submitted by the developer to and agreed in writing with the planning authority prior to the commencement of development. These reports shall be submitted on an agreed date annually for as long as the windfarm is operational.

Reason: To allow full monitoring of the ecological impact of the proposed development.

12. 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. Precise specifications of the turbines shall be provided to the planning authority prior to delivery.

Reason: in the interests of visual amenity.

- 13
 - (a) Cables within the site shall be laid underground.
 - (b) The wind turbines shall be geared to ensure that the blades rotate in the same direction.
 - (c) Transformers associated with each individual turbine and mast shall be located either within the turbine mast structure or at ground level beside the mast.

Reason: In the interest of visual amenity.

14. Facilities shall be installed to minimise interference with radio or television reception in the area, Details of the facilities to be installed, which shall be

at the developer's expense, shall be submitted to, and agreed in writing with, the planning authority prior to the commissioning of the turbines and following consultation with the relevant authorities.

Reason: In the interest of residential amenity.

15. 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.

- 16 Wind turbine noise arising from the proposed development shall not exceed the greater of:
- dB(A) above background noise levels or
 - 43 dB(A)

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 farm.

Reason: In the interest of residential amenity.

17. (a) Shadow flicker arising from the proposed development shall not exceed 30 hours per year or 30 minutes per day at existing or permitted dwellings or other sensitive receptors.
- (b) A report shall be prepared by a suitably qualified person in accordance with the requirements of the planning authority, indicating compliance with the above shadow flicker requirements at dwellings. Within 12 months of commissioning of the proposed wind farm, this report shall be submitted to, and agreed in writing with, the planning authority.

Reason: In the interest of residential amenity.

18. Prior to commencement of development, the developer shall submit and agree in writing with the planning authority a detailed Construction Management Plan, including a monitoring regime. The Plan shall make provision for inclusion of all relevant mitigation proposed in the EIS and NIS and shall in any event ensure that its scope extends to the following parameters:
- (a) surface water management during construction to prevent runoff from the site onto the public roads, unnatural flooding and/or the occurrence of any deleterious matter in the rivers and the tributaries and watercourses of their catchments or other waters within and adjoining the site including groundwater in accordance with best practice
 - (b). Detail of treatment of stockpiled material arising from excavation during construction, management of peat storage and disposal
 - (c) dust minimisation including dust potentially generated from vehicles, measures to include appropriately located wheel wash facilities and appropriate good practice in the covering of laden and unladen vehicles;
 - (d) management of public roads in the vicinity/ so that they are kept free of soil, clay, gravel, mud or other debris and general site management to the satisfaction of the planning authorities;
 - (e) provision of detailed plans for all temporary facilities and operations, including the storage of hydro-carbons, and proposals for reinstatement as appropriate on completion of the construction phase;
 - (f) preparation of a formal Project Construction and Demolition Waste Management Plan;
 - (g) control of adverse noise and disturbance by reference to construction working hours, noise limits and traffic management arrangements;
- A record of daily checks that the works are being undertaken in accordance with the Construction Management Plan shall be kept for inspection by the relevant planning authorities. The developer shall satisfy the requirements of the planning authority in relation to measures to be proposed to prevent pollution run-off into water courses. The development shall thereafter be implemented in accordance with the agreed details.

Reason: In the interest of amenities, public health and safety, and to protect the adjoining surface watercourses and areas subject to environmental designations.

19. On full or partial decommissioning of the wind farm or if the wind farm ceases operation for a period of more than one year, the masts and the turbines concerned including foundations shall be removed and all decommissioned structures shall be removed within three months of decommissioning.

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

20. 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.

21. The developer shall pay to the planning authority a financial contribution as a special contribution under section 48(2) (c) of the Planning and Development Act 2000 in respect of works to be carried out for the provision of the road restoration works. The amount of the contribution shall be agreed between the planning authority and the developer or, in default of such agreement, the matter shall be referred to the Board for determination. The contribution shall be paid prior to the commencement of the development or in such phased payments as the planning authority may facilitate and shall be updated at the time of payment in accordance with changes in the Wholesale Price Index – Building and Construction (Capital Goods), published by the Central Statistics Office.

Reason: It is considered reasonable that the developer should contribute towards the specific exceptional costs which are incurred by the planning authority which are not covered in the Development Contribution Scheme and which will benefit the proposed development.

Bríd Maxwell,

Inspectorate.

3rd December 2015

