



An  
Bord  
Pleanála

## Inspector's Report ABP-306497-20

<b>Development</b>	Windfarm Grid Connection. An Environmental Impact Assessment Report have been prepared in respect of this application.
<b>Location</b>	Keereen Upper/Woodhouse or, Tinakilly/Knocknamona Townlands, Dungarvan, Co. Waterford.
<b>Planning Authority</b>	Waterford City and County Council
<b>Planning Authority Reg. Ref.</b>	19369
<b>Applicant(s)</b>	Knocknamona Windfarm Limited
<b>Type of Application</b>	Permission
<b>Planning Authority Decision</b>	Grant Permission
<b>Type of Appeal</b>	First and Third Party
<b>Appellants</b>	Knocknamona Windfarm Limited Olivia and Brian Coughlan James and Brid Power Tom and Moya Power Valerie and Liam O'Donnell

John Reynolds  
Woodhouse Wind Aware Families  
Michael and Giancarla Alen Buckley  
Niamh and Mark Kuhne  
Maurice Reynolds and Marie O'Reilly  
Anna Maria Cloona

**Observer**

Eirgrid plc.

**Date of Site Inspection**

24<sup>th</sup> July, 2020

**Inspector**

Stephen Kay

**DECISION QUASHED**

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**DECISION QUASHED**

## 1.0 Site Location and Description

- 1.1. The appeal site is located c. 10km to the west of Dungarvan, a short distance to the east of the R671. The N72 national road is located c.5km to the north.
- 1.2. The site is located in an area of forested uplands to the west of the Kilnafarna Hills and on lands that are known as the Drum Hills. AGLISH Village and Villiarstown Village are located c.4km and 6km respectively to the west of the site and Cappoquin Town is located c.10 km to the north west.
- 1.3. The environs of the site are characterised by two existing infrastructure developments, the Woodhouse Windfarm (referred to in this report as the WWF) which is located to the west of the appeal site and which comprises 8 no. turbines, hardstanding areas, access roads and associated works and the Woodhouse Substation which is located at the northern end of the appeal site. In addition to these constructed and operational developments, the context of the site is characterised by an extant permission for the development of an 8 no. turbine windfarm, the Knocknamona Windfarm (referred to in this report as KWF), incorporating turbines of up to 126 metres that extends over a significant area to the south and west of the current appeal site.
- 1.4. The appeal site is linear in nature and, with the exception of a short section where the site crosses recently felled forestry / scrub ground, the bulk of the site comprises existing windfarm access roads and Coilte forestry tracks.
- 1.5. The wider area in the vicinity of the site is characterised by a rural area with a dispersed population. There are no houses in close proximity to the site, with the main cluster of residential properties located to the west in the vicinity of Woodhouse crossroads and north west in the townland of Keereen Lower and along local roads to the north in the Ballymulalla area.
- 1.6. The stated area of the site is 15.23 ha. and the stated area of construction is 3.6 ha. (section 2.4.3.4 of Volume E of submitted EIAR). The main components of this construction area comprises Knocknamona substation 0.47 ha, forestry roads 1.09 ha. and existing Woodhouse WF internal roads 0.60 ha.

## 2.0 Proposed Development

2.1. The stated purpose of the proposed development is to facilitate the export of electricity from the permitted but not yet constructed Knocknamona Windfarm to the national grid via the operational Woodhouse substation.

2.2. The proposed development consists of grid connection works to connect the permitted Knocknamona Wind Farm (KWF) (ABP Ref. 93.244006) to the grid and associated infrastructure. The development comprises the following main elements:

(a) the laying of 1,940m of underground medium voltage electrical cabling (up to 33kV), in Keereen Upper & Knocknamona townlands, linking Knocknamona Windfarm (permitted but yet to be constructed) and the existing operational Woodhouse 110kV Substation. The following are the approximate lengths of the various sections of the underground cable.

- Felled forestry – c.30 metres (within the footprint of the permitted Knocknamona WF substation at the southern end of the site),
- Forestry road – c.1180 metres,
- Scrub – c.190 metres
- Woodhouse WF internal roads – c.465 metres,
- Public road – c.15 metres underground crossing by directional drilling,
- Grassland – c.60 metres.

(b) Works within the existing Woodhouse 110kV Substation compound in Keereen Upper, comprising a new control building measuring 5.3m x 3.6m & 4.6m high; main 110kV transformer of c.6m in height, with associated plinth and bund; a 110kV transformer bay; 2 no. lightning masts 17.5m in height & ancillary electrical equipment. Works to the substation will also include a new access track 17m long & 4.5m in width; additional palisade gateway 4.9m wide & 2.6m in height with palisade fencing within the compound and with 2 no. gateways in the existing perimeter fence. The fencing & gateways are proposed to be same height & width as the existing fence & gates;

(c) A Link Road, 190m in length & 4.5m in width connecting the existing forestry road network at the Knocknamona Windfarm site to the existing Woodhouse Windfarm internal forestry roads. It is proposed to use this link road and the existing Woodhouse Windfarm roads to facilitate the delivery of the main components / oversized loads to the Knocknamona Windfarm site. (Note that following revised proposals submitted as part of the response to further information, this access route is now proposed to also be used for construction access to the Knocknamona Grid Connection Project).

(d) The widening of 960m of existing forestry road by 1m, in Knocknamona town and to facilitate the delivery of the main components to Knocknamona Windfarm and;

(e) Ancillary site works.

An Environmental Impact Assessment Report & Appropriate Assessment Report (Stage 1 Screening) have been prepared and have been submitted with the application.

2.3. The proposed works are stated to be undertaken over the following time periods:

- Underground cabling, link road and widening of the existing forestry track to take c.2 months,
- Installation of additional plant and apparatus and associated works within the existing Woodhouse Substation to take approximately 4 months,
- Delivery of abnormal loads for the construction of the Knocknamona WF to be undertaken over a period of c.3 months.
- The proposed hours of construction are stated to be daylight hours between 07.00 and 19.00 Monday to Friday and between 08.00 and 16.30 hrs on Saturdays.

2.4. The rationale for the proposed development and for the change to the windfarm grid connection presented in the Knocknamona Windfarm Revised EIS (2015) is summarised at Exec Sum 4.1 of Volume C2 of the submitted EIAR. This notes that the previously proposed connection method and route involved a connection point at Dungarvan substation, c.9km to the north east of the Knocknamona wind farm and which would require a grid connection route of at least 11.5km, primarily along the public road network. In the interim since the preparation of the 2015 Knocknamona

Windfarm EIS, a potential new grid connection point in the form of the Woodhouse substation was commissioned by ESB Networks / Eirgrid. The grid connection point at Woodhouse substation is located c.2km to the west of Knocknamona Windfarm and presents an opportunity for a grid connection route that is significantly shorter than that to the Dungarvan substation. The alternative grid connection route options described above are illustrated at Figure 4.1 of Volume C3 of the submitted EIAR.

- 2.5. Exec Sum 4.3 presents the rationale for the alternative component haul route from that previously presented in the Knocknamona Windfarm Revised EIS (2015). Arising from the proposed grid connection for Knocknamona Windfarm to the Woodhouse substation, the grid connection route would run primarily along existing forest roadway on the Knocknamona site and cross to run on Woodhouse Windfarm roadway in the vicinity of the Woodhouse substation. The section between these two existing roadways comprises a short section of c.190 metres in length and across lands that are in the ownership of Coilte. It is stated that Coilte require that any grid connection route would run along a roadway to assist the identification of the cable alignment and to protect it from damage during forestry management activity. This requirement presents an opportunity to use this new section of road linking the existing road network in the Woodhouse Windfarm development with the forestry road network in the Knocknamona site as a haul route, utilising the Woodhouse Windfarm entrance, Woodhouse internal roads and new section of road to access the Knocknamona site for the delivery of abnormal loads for turbine components. This route is proposed to replace that indicated in the 2015 Knocknamona Windfarm EIS which proposed a turbine component haul route utilising the Knocknamona Windfarm main entrance gate and public roads to the east and south east of the site. The alternative turbine component haul route options described above are illustrated at Figure 4.2 of Volume C3 of the submitted EIAR.



### 3.0 Planning Authority Decision

#### 3.1. Further Information

Prior to the issuing of a decision the Planning Authority issued a Request for Further Information that included the following items / issues:

1. Roads, submission of a Traffic Impact Assessment is required that assesses the impact of proposed and permitted works. Information regarding the sequencing of works, a road safety audit and a pre-condition road survey, including bridge crossings, of the proposed route affected by the development works.
2. The submission of an Archaeological Heritage Impact Assessment of all historic features along the routes to and from the site including the R-671, L-2019, L-6074 and L-60741. Features to be examined to include all bridges, culverts, gateways, entrance screens, random rubble stone walls and other features of vernacular interest.
3. Further clarification regarding the sequencing of works and the potential cumulative traffic impacts arising.
4. Excavation of only two trial holes over the length of the route noted and considered inadequate to undertake a full assessment particularly given the presence of rock in these two holes. The feasibility of use of all of the excavated material / rock as fill is questioned and the noise implications of the necessity of use of a rock breaker noted. Revisions to the relevant section of the EIAR required.
5. Further justification for the assertion that the substation will not impact on any adjoining residence which is based on a separation distance of 330 metres. Decibel levels to be provided for the existing and post development phases.
6. That having regard to the submission from the Development Applications Unit, that the site is large in extent and that there is potential for the cultural heritage including under water cultural heritage. An Archaeological Impact Assessment is required which shall include an Underwater Archaeological Impact Assessment (UAIA).

The response to the request for further information is contained in a separate bound document that is with the appeal file. In summary, the response received to the request for further information contained the following information:

- Regarding issue No.1 Roads, it is stated that a meeting was held with the Council Roads Department prior to the submission of the response to FI.
- A Traffic and Transportation Assessment (TTAR) report prepared by NRB Consulting was submitted. This report addresses the worst case vehicular traffic impacts arising from the proposed KWF Grid Connection development with the scenario that the grid connection works are undertaken at the same time as the construction of KWF. Results for the three main junctions impacted (L2019 / N72, N72 / R671 and R671 / L6074) junctions are presented.
- Stated that following consultations with the Council a Road Safety Audit is not considered necessary and has not been submitted as the proposed development does not propose any modifications to the public road.
- Concerns raised by the council regarding the capacity of the L6071 on the route to the substation (its narrow width and the absence of passing bays) and requirement for a safety assessment of this section of the route. In response, now not proposed that this section of road would be used for delivery access to the substation site and that such traffic would access the site via the Woodhouse VWF internal access roads. The proposed route will involve a crossing of the local road (L6071) at Keereen Upper and traffic management measures are proposed at this location.
- A pavement condition survey report of the local roads was submitted. Stated that following consultation with the Council, this report / survey only covers the local roads along the haul routes.
- An Architectural Heritage Impact Assessment from James Powell Built Heritage Conservation Consultant submitted. Stated that this assessment has been prepared following consultation with the Conservation Officer of Waterford City and County Council. Structures along the route identified and

mitigation measures recommended where appropriate including load escorts and coning off of vulnerable areas.

- The results of 6 no. additional trial pits were presented and a report on these prepared by David Broderick Hydrologist of Hydro Environmental Services. Concluded that the sub soil material found in the excavated trial pits is suitable for reuse as backfill in the cable trenches and that with careful installation no additional import of materials would be required. It is also stated that on the basis of the results obtained a rock breaker will not be required as rock depths are below those of the proposed cables trench. Excavation volumes, trips to and from the site and noise assessment presented in the EIAR do not therefore need amendment.
- A Noise Assessment submitted that includes a survey of existing noise levels at the closest house located c.330 metres from the proposed substation and predicts noise levels post development. The assessment indicates that the noise emissions from the Woodhouse substation will not exceed the background noise level at the nearest noise sensitive location.
- Stated that the applicant contacted the Department of Culture Heritage and the Gaeltacht with regard to the need for an Archaeological Impact Assessment and an underwater archaeological assessment. The department confirmed that an underwater assessment would not be required in the event that there are no watercourses on the site. This is the case with the proposed development and an Underwater AIA has not therefore been prepared, (correspondence on this issue with the Department was submitted).

### 3.2. Decision

The Planning Authority issued a Notification of Decision to Grant Permission subject to 13 no. conditions. The most significant of these conditions are considered to be as follows:

Condition No. 2 requires that all monitoring and mitigation measures set out in the submitted EIAR shall be complied with in the development and also that, prior to the commencement of development, the developer shall submit to and agree in writing with the planning authority the schedule of mitigation as per the EIAR and submitted further information.

Condition No.3 specifies that the period of the permission granted shall not exceed that period granted under PA Ref. 14/600109 and ABP Ref. 244006 (Knocknamona WF). The permission shall therefore expire on 13<sup>th</sup> December 2026.

Condition No.4 specifies that, in the absence of a further grant of permission, the authorised grid connection shall operate for no more than 25 years from the date on which electricity is first transferred.

Condition No.5 specifies that noise emissions from the development shall not exceed the greater of 43dBAL90 or 5 dB above background when measured externally at noise sensitive locations.

Condition No.6 requires the submission of a decommissioning plan.

Condition No.7 requires that prior to the commencement of development, the developer shall submit a construction and environmental management plan for written agreement of the planning authority.

Condition No.10 requires the submission of a pre and post construction survey of the haul route and the identification of a schedule of the works required along the route. Measures to rectify issues, temporary traffic arrangements and timescale for works to be submitted for agreement.

Condition No.11 requires that dust emissions shall not exceed 350 ug/ m<sup>2</sup> /day at the façade of houses. Hours of works to be restricted as specified.

Condition No.12 relating to archaeology requires the employment of an archaeologist to monitor all works and prepare a report for submission to the Planning Authority and to the Department of Arts Heritage and the Gaeltacht.

### 3.3. Planning Authority Reports

#### 3.3.1. Planning Reports

The initial report of the Planning Officer dated 22<sup>nd</sup> July, 2019 notes the internal reports and the content of the third party observations received. The content of the submitted AA Screening Report is noted and it is concluded that the development, *'in combination with the previously approved works'* would not impact negatively on any European site. This initial report also states that, in principle, it is not considered that project splitting has occurred by virtue of the fact that the application is accompanied by an EIAR and the previous application for the Knocknamona WF was the subject of EIA. Regarding the issue of the development being facilitated by unauthorised development, it is stated that the grid connection proposed is to a substation with permission and that the issue regarding compliance of the turbines in the existing Woodhouse WF *'do not facilitate the proposal'*. Rationale for the altered grid connection route and the abnormal load haul route is noted, namely the reuse of the Woodhouse WF haul route and also the fact that the Woodhouse substation is now in place which was not the case when the proposals for grid connection to the KWF and revised EIS were submitted to An Bord Pleanála in 2015. The initial report recommends further information, including on issues relating to trial holes / proposals for backfill and materials for the excavation, TIA and sequencing of works, survey of bridges / cultural features and archaeology and noise assessment including existing noise. A second report subsequent to the submission of further information recommends a grant of permission that is consistent with the Notification of Decision which issued.

#### 3.3.2. Other Technical Reports

Roads – states that Roads do not require the submission of a bond but that a pre and post construction survey is required.

Environment – Initial report states that further information is required regarding the noise implications of the use of a rock breaker for trenching and the works to the Woodhouse substation. Not considered that any significant impacts with regard to EMF, air / dust and climate will arise.

Second Environment Section report, subsequent to the submission of further information, states that the information regarding the noise from the substation on the house (330 metres away) is that the 3dB increase in background noise will not be significant. Therefore, no objection to development.

Conservation Officer – Report notes that there are vernacular features such as bridges, walls and gates along the proposed haul route. There is no proper assessment of these impacts in the Cultural Heritage section of the EIAR (Chapter 13). Recommended that an architectural impact assessment and a pre-construction survey should be requested by further information.

Water Services – The assessment in the EIAR that the impact on ground and surface waters is imperceptible is agreed with.

Heritage Officer – Report notes the conclusion of the submitted AA screening and the content of the biodiversity section of the EIAR. Concludes that the submitted AA screening report adequately assesses the impact of the proposed development individually and in combination with other projects on the European site. Also agrees with the assessment in the EIAR that the habitats in the vicinity of the site are of local importance and that the site is suitably separated from significant habitats or watercourses that no significant ecological issues are likely to arise and that the site itself is significantly modified.

### 3.4. Prescribed Bodies

TII – Initial submission states that TII has no observations to make. Second report subsequent to the further information stating that position remains as per initial submission of 12 June, 2019.

Department of Culture, Heritage and the Gaeltacht – Regarding underwater archaeology, states that there are no watercourses within the footprint of the development then there is no requirement for an Underwater Archaeological Impact Assessment.

HSA – No comment to make as development outside of scope of relevant regulations.

### 3.5. Third Party Observations

The following is a summary of the main issues raised in the third party observations submitted:

- The grid connection, wind farm and haul route form part of a single development and must be assessed as part of a single EIA.
- That the applicant does not have sufficient legal interest to undertake the development.
- That failure to address past issues is not a defence for not complying with EIA. (Ref. Derrybrien WF case).
- That the fact that a decision was not challenged does not alter the fact that it is erroneous (Mone v ABP).
- In the current case, permission for the substation was extended unlawfully and therefore the larger wind farm development is unauthorised.
- That the Woodhouse substation was constructed without an EIA being undertaken. It is therefore considered to be unauthorised. The option of substitute consent is not available.
- That road widening works have been undertaken without permission in advance of the decision. These were not exempt as they formed part of an application which was accompanied by EIAR.
- That the local authority has also carried out road widening works to facilitate the applicant, and these should have been considered in the EIA and AA. These works imply bias towards the applicant and could undermine the right of local observers and landowners.
- That the landowners adjoining the route own the roadway to the centre and their consent to the development was not sought.
- That the applicant has commenced works for which permission is sought and that therefore these works are unauthorised, and the permission is invalid.

- That the ongoing legal case regarding the Woodhouse substation raised issues regarding EIA and AA and the current application is perpetuating these issues.
- The proposed crossing of the L6074 is a traffic hazard.
- Negative impact on the rural character.
- A failure of a bridge on the haul route would have a negative impact on ecology.
- That the information regarding noise is deficient, especially regarding cumulative impacts (MAS consultant report).
- That the use of a common substation for the Knocknamona and Woodhouse WFs means that EIA of the entire development is required. Not to do so is project splitting.
- That there are conflicting objectives in the development plan with regard to wind energy and land use.
- That the proposed development would exacerbate existing negative impacts on residential amenity arising from the Woodhouse Windfarm.
- That the WHO identify noise from wind farms as a health hazard.
- Query whether the existing wind farm is compliant with conditions.

#### 4.0 Planning History

The following planning history is noted:

##### ***Knocknamona Wind Farm Grid Connection***

Waterford City and County Council Ref. 19/347 – Invalid application for development of the same description as that the subject of the subject appeal.



## ***Knocknamona Wind Farm***

Waterford City and County Council Ref. 14/600109; ABP Ref. PL93.244006 – Permission refused by the Planning Authority but granted on appeal by the Board to Eco Power Developments Limited for the construction of a windfarm development comprising 8 no. wind turbines (reduced by Condition No.2 from 12 to 8), overall height of up to 126.6 metres, 1 no. meteorological mast up to 80 metres in height with wind measuring equipment attached, access roads, electrical substation compound, equipment and control building and ancillary site works all on lands in the townlands of Knocknaglogh Lower / Barranastook Upper / Knocknamona / Woodhouse or Tinakilly / Monageela / Killatoor, Dungarvan, Co. Waterford. Prior to the issuing of its decision, the Board requested further information relating to three items as follows:

- Further consideration of the potential environmental impacts arising from the road widening works required to facilitate construction access to the site,
- The method of assessment of shadow flicker,
- The absence of the identification of a specific grid connection corridor / options and method and that, having regard to the judgement of the High Court in O’Grianna and others v An Bord Pleanala, details of a grid connection and the potential cumulative impacts

It is noted that this permission relates to the development within the windfarm site and not specifically a grid connection

In the context of the current appeal, the following conditions attached to this grant of permission are also noted:

Condition No. 7 requires, inter alia, that noise from the development would be restricted to 5 dB(A) above background noise levels or 43 dB(A) L90,10min when measured externally at dwellings or other sensitive receptors and that 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, including any mitigation measures such as the de-rating of particular turbines.

Condition No.8 restricts shadow flicker to 30 hours per year or 30 minutes per day and also requires that prior to the commencement of development 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, with further such reports within 12 months of commissioning of the proposed wind farm, and at reasonable intervals thereafter when requested by the planning authority.

Condition No.10 relates to roads and requires information to be submitted for the agreement of the Planning Authority including, inter alia, a transport management plan and a road condition survey of the proposed haul route.

Condition No.11 requires the submission and agreement of a detailed site restoration plan.

### ***Woodhouse Wind Farm***

Waterford City and County Council Ref. 04/1788 - Permission granted by the Planning Authority to Hibernian Wind Power for the development of an 8 no. turbine wind farm in the townlands of Woodhouse / Tinakilly, Keereen Upper, Ballygambon Upper and Knocknamona. The permitted turbines had a tower / hub height of 70 metres and blades of 42 metres in length, with an overall structure height of 112 metres. This grant of permission was not the subject of appeal and the application was accompanied by an EIS. The development is known as the Woodhouse wind farm.

Waterford City and County Council Ref. 10/45 – Permission granted by the Planning Authority to ESB Wind Development Limited for modifications to the wind farm permitted under Ref. 04/1788 comprising an increase in permitted tower height (70m to 80m) and blade length (42m to 45m) minor re-alignments of internal access tracks: relocation of four turbines.

Neither Refs. 04/1788 nor 10/45 were the subject of appeal to An Bord Pleanála.

Waterford City and County Council Ref. 10/175 – Permission granted by the Planning Authority to ESB Wind Development Limited for extension of duration of permission Ref. 04/1788. Permission extended up to 23<sup>rd</sup> May 2015.

### ***Woodhouse Sub Station***

An Bord Pleanála Ref. 24.VC0112 – Pre application consultation determined by the Board that development comprising underground 110kv cabling and ancillary works to connect the permitted Knocknamona Windfarm substation to the existing Woodhouse Transmission System 110kv station at Knocknamona and Keereen Upper Td, County Waterford did not come within the scope of s.182A of the Act and that the application should therefore be made to the Planning Authority in the first instance. It is the decision on this resulting application made to the Planning Authority that is the subject of the current appeal.

Waterford City and County Council Ref. 09/642 – Permission granted by the Planning Authority to ESB Wind Development Limited for the construction of a 110kv electrical transformer station on a site of 3.6 hectares located adjacent to a previously approved wind farm development ( Reg. Ref. 04/1788). This substation is the Woodhouse substation into which the Woodhouse Wind Farm (constructed) and the Knocknamona Wind Farm (consented) are both proposed to connect.

Waterford City and County Council Ref. 11/355 – Permission granted by the Planning Authority to ESB Wind Development Limited for alterations to the previously permitted Woodhouse substation.

Neither Refs. 09/642 nor 11/355 were the subject of appeal to An Bord Pleanála.

## **5.0 Policy Context**

### **5.1. National Policy**

The EU has set binding targets for Member States to reduce greenhouse gas (GHG) emissions by 20% by 2020. In addition, under the EU Renewable Energy Directive (2009/28/EC) Ireland is committed to produce from renewable sources at least 16% of all energy consumed by 2020. Ireland has committed to meet this national target through 40% renewable electricity, 12% renewable heat and 10% renewable transport.

Ireland's National Policy position is to reduce CO2 emissions in 2050 by 80% on 1990 levels across the Energy Generation, Built Environment and Transport sectors, with a goal of Climate neutrality in the Agriculture and Land-Use sector.

### **National Planning Framework**

**National Policy Objective 55** stated that it is an objective to:

*'Promote renewable energy use and generation at appropriate locations within the built and natural environment to meet national objectives towards achieving a low carbon economy by 2050.'*

### 5.2. **Regional Spatial and Economic Strategy (RSES) for the Southern Region**

The recently adopted RSES for the Southern region contains a number of provisions of relevance to consideration of this appeal:

**RPO 95** related to Sustainable Renewable Energy Generation states that:

*'It is an objective to support implementation of the National Renewable Energy Action Plan (NREAP), and the Offshore Renewable Energy Plan .....'*

**RPO 99** related to Renewable Wind Energy states that:

*'It is an objective to support the sustainable development of renewable wind energy (on shore and offshore) at appropriate locations and related grid infrastructure in the Region in compliance with national Wind Energy Guidelines.'*

**RPO 100** related to Indigenous Renewable Energy Production and Grid Injection states that:

*'It is an objective to support the integration of indigenous renewable energy production and grid injection.'*

**RPO 221** related to Renewable Energy Generation and Transmission Network states that it is an objective that

*'a. Local Authority City and County Development Plans shall support the sustainable development of renewable energy generation and demand centres such as data centres which can be serviced with a renewable energy source (subject to appropriate environmental assessment and the planning process) to spatially suitable locations to ensure efficient use of the existing transmission network;.....'*

### 5.3. Development Plan

The relevant development plan is the Waterford County Development Plan, 2011-2017. Under s.11A of the *Planning and Development Act, 2000* (as amended), the lifetime of this plan has been extended pending the adoption of the Regional Spatial and Economic Strategy by the Southern Regional Assembly (now in place) following which a new plan will be prepared.

The site is located on lands that are outside of any identified settlement and which are **zoned** for 'Agriculture' with the stated objective '*to provide for the development of agriculture and to protect and improve rural amenity*' under the provisions of the *Waterford County Development Plan, 2011-2017* as extended.

**Policy ENV 10** states that it is policy to

*'To facilitate and encourage sustainable development proposals for alternative energy sources and energy efficient technologies.'*

**Paragraph 10.37** of the Plan relates to Wind Energy Development and states that all applications for wind farms and wind energy developments should be compatible with the County Waterford Wind Energy Strategy (Appendix A8 of Plan) and the Wind Energy Guidelines.

The Council have produced a **Renewable Energy Strategy for Waterford City & County Council** and this strategy forms part of the *Waterford County Development Plan 2011-2017*.

**Appendix A8** of the *Waterford County Development Plan, 2011-2017* contains a map that indicates the area of preferred wind energy development locations.

The strategy identifies four distinct areas, as follows:

- Strategic Areas- (Areas coloured in Yellow on the attached map)
- Preferred Areas (Areas coloured in Blue on the attached map)
- Areas Open for Consideration (Areas coloured in green on the attached map)
- No-Go Areas (Areas coloured in Red on the attached map).

The exact location of the appeal site relative to this map is difficult to determine precisely, however it would appear to be located partially within the identified

Strategic Wind Activity Zone, partially within the Open to Consideration Wind Strategy Zone and partially within the No Go Wind Strategy Zone.

The site is located partially on lands that are identified as 'Sensitive' and 'Visually Vulnerable' as per the scenic Landscape Evaluation (1999) which is included in the *Waterford County Development Plan, 2011-2017* at Appendix A9.

The site is located in an area that is identified as a locally important aquifer.

#### 5.4. Natural Heritage Designations

The site is not located within any European site.

The closest European sites to the appeal site are as follows:

- River Blackwater SAC site (site code 002170) is located c.3km to the west of the appeal site at the closest point.
- Dungarvan Harbour SPA site is located c.7km to the east of the appeal site at the closest point.
- The Blackwater Estuary SPA is located c.8km to the south west.
- The Helvic to Ballyquin SPA is located c.11.5km to the south east of the appeal site.
- The Glendine Woods SAC is located c.12.5km north east of the appeal site at the closest point.
- The Helvic Head SAC is located c.13km south east of the appeal site.
- The Armore Head SAC is located c.14km to the south of the appeal site.

#### 5.5. EIA Screening

As a standalone project, the development the subject of this appeal, namely the Knocknamona Windfarm Grid Connection, is not of a class of development that is listed in Annex I or Annex II of Schedule 5 of the Planning and Development Regulations which lists the classes of development and, in the case of Annex II projects, the relevant thresholds where the preparation of an EIAR is required.

With regard to other aspects of the proposed development, it is noted that Class 10(dd) of Part 2 of the Fifth Schedule comprises private roads that exceed 2000 metres in length. The length of the private road proposed in this case is 190 metres.

The application is accompanied by an EIAR. It is stated by the applicant that the EIAR was prepared and submitted at the request of Waterford City and County Council and having regard to the fact that the grid connection application is part of a larger project (Knocknamona WF) which required EIA and in order that the environmental impacts of the proposed development together with other existing and permitted developments can be considered.

## 6.0 The Appeal

### 6.1. Grounds of Appeal

The following is a summary of the main issues raised in the first and third party grounds of appeal:

#### *First Party Appeal*

- First party appeal submitted against conditions Nos. 4 and 6 attached to the Notification of decision to Grant Permission issued.
- Condition No.4 requires that the authorised grid connection and substation shall operate for no more than 25 years from the date of which electricity is first exported from the windfarm permitted under ABP Ref. 244006 unless a separate grant of permission is granted. Condition No.6 requires that prior to the commencement of development, the developer shall submit to and agree in writing with the Planning Authority, a plan for the decommissioning of the authorised development and the reinstatement of the site.
- These conditions are the subject of appeal on the basis that the Knocknamona WF Grid connection application the subject of appeal involves works to be located within the already operational Woodhouse substation. These works / equipment will, on completion, be taken over by ESB Networks and it would not be the norm to include operational time limits or decommissioning conditions on substations that are operated by ESB

Networks and Eirgrid. It is also noted that Woodhouse substation as permitted under Waterford County Council Ref. 11/355, does not have any conditions that restrict operational life or any conditions relating to decommissioning.

- Revisions to Conditions Nos.4 and 6 are proposed with wording that clarifies that the requirements regarding limit of operational life to 25 years and the requirement for a decommissioning plan relate solely to those parts of the development outside of the substation site.

### **Third Party Appeals**

#### ***Michael and Giancarla Alen Buckley***

- That the applicant in this case (Knocknamona Wind Farm) differs from the applicant in the Knocknamona Wind Farm development case (Eco Power Development Limited) to which the grid connection relates. There is no letter of consent from Ecopower Limited. In addition, there are other omissions relating to drawings that mean the regulations are not complied with.
- That neither the haul route nor the grid connection proposed in the current application formed part of the Knocknamona WF application. The proposed change to the haul route materially deviates from the route that was the subject of EIA under Ref. PL93.244006. The haul route via Woodhouse was never the subject of a planning application, planning permission or an EIA screening or EIA and is therefore unauthorised.
- There are a number of mistakes in the Planning Authority report including that the planning history for Knocknamona fails to identify that the haul route was not part of the permitted development. The planning report and decision fails to recognise the unauthorised works undertaken at Woodhouse substation, on the forestry tracks and on the local road network. There is no recognition that the Woodhouse Substation was never the subject of EIA or EIA screening. No recognition that the diameter of the turbine blades installed at Woodhouse WF are 51 metres when the permitted is 45 metres, meaning that this development is unauthorised.



- That unauthorised works to the forestry roads were undertaken in August 2019. Similar unauthorised widening works to the L-2024 were also undertaken along a section of the haul route. This widening of the L-2024 was highlighted in the 2016 Knocknamona Wind Farm EIS as being required for the haul route, although it was not part of that application, (EIS paragraph 7.4.2). This widening of the L-2024 is in direct conflict with the judgement of the High Court which held that these works were not permitted and the Board assessment that they were not exempt. Photographs of sections of the L-2024 and forestry access roads where widening is stated to have occurred are submitted with the appeal submission. (Note: The appeal also includes aerial views of the Woodhouse substation site and environs which indicate construction equipment within the substation compound).
- Requested that the Planning Authority enforce against the unauthorised works undertaken.
- That the Roads Department of the council have undertaken road widening works to facilitate the transport of large items on roads impacted by the proposed development. These works are not routine maintenance as suggested by the Roads Department.
- That these road widening works facilitates development which is the subject of EIA (Woodhouse WF). That these road widening works were undertaken without any EIA or EIA screening. These road widening works took place in an area of the forestry track that comprises the link connection to the Woodhouse WF included in the current application.
- Submitted that the road widening, and link road works have commenced and comprise unauthorised development and that the council have undertaken works to the road network to facilitate the development. This unauthorised status has to be resolved and as the works relate to a development where EIA is required this can only be resolved via the substitute consent process.
- That the Woodhouse substation was developed without any EIA and therefore, in accordance with *Mone v ABP*, means that it is flawed and there can be no reliance on it. Any subsequent decision that relies on it must be similarly flawed.

- That the planning history indicates that the permission for the Woodhouse substation was predicated on serving the windfarm development. The result of the Woodhouse WF being developed with larger than permitted turbines is that the entirety of the development is unauthorised, including the substation.
- That there is strong evidence that the application should be dismissed by the Board.
- That the EIAR is fundamentally flawed and inadequate and the cumulative impacts of the development have not been properly identified, considered or evaluated. Potential cumulative impacts of the original grid connection proposal by Ecopower for 34MW have not been considered by the competent authority. The likely significant effects on the environment should be undertaken from first principles as required under the EIA Directive.
- That the assumption made regarding the legality of the haul route and the grid connection for Knocknamona WF are fatal.
- That the development depends on conferring legal status on what is unauthorised. The development linking the Knocknamona WF to the Woodhouse substation and Wind farm creates a single development for the purposes of the EIA Directive and Planning Legislation. Neither the Woodhouse substation nor the Woodhouse WF have proper legal status.
- That the Knocknamona WF permission is integral with the EIA undertaken at the time by APP and is dependent on alternative grid connection and haul routes identified at this time. Any deviation from these previously assessed haul route and grid connection options necessitates an assessment of the totality of the development from first principles.
- That the original options were clearly not viable but the current connection to Woodhouse was not shown at that time as it shows up the close connection between the Knocknamona and Woodhouse Wind Farms and that there was project splitting. Information in the current EIS indicates that the option of connection to Woodhouse has been under consideration since 2015.
- That deviation from the grid connection and haul route options indicated in the Knocknamona WF EIS cannot occur without voiding the permission granted.

- That the Board order and conditions attached to Ref. PL93.244006 (Condition No.1) clearly indicates that the development is to be completed in accordance with the plans and particulars submitted including the additional information (revised EIS and grid connection / haul route options). It was accepted during the judicial review judgement on the Knocknamona case that the Board may grant permission that for practical reasons may not be implemented and that the development cannot be implemented if the developer cannot secure the necessary permissions.
  - That the pre application consultation undertaken with the Board on the grid connection was immediately after the high court judgement and was an attempt to avoid the assessment of the totality of the project.
  - That in the course of pre application consultations with the planning authority the applicant was advised that the grid connection differed from that indicated in the Knocknamona EIS and that '*...the EIAR must consider the environmental impact of the approved wind turbines*'. The Planning Authority did not however flag the issues regarding the planning status of the Knocknamona WF (grid connection) or the Woodhouse substation (that was permitted as an extension of the Woodhouse WF without any EIA or EIA screening).
  - That there can be no lawful permission for the Knocknamona WF if the mitigation as contained in the EIS accompanying that application is not implemented. The planning permission is not severable from the EIS submitted. The application for permission for the grid connection from Knocknamona WF to Woodhouse substation should have been dismissed by the Planning Authority.
- The unauthorised development that has taken place to complete road widening on the subject site and outside of the site on the public road and other works within the substation site in advance of any grant of development consent precludes a grant of permission as there is no process other than leave for substitute consent to resolve such issues.
- That as there is no valid permission for the Woodhouse WF or the substation, which is an integral part of the overall development, then it is not an option

that an application for substitute consent could be made. This option is only available where there is a failure of compliance with EU law where there is a valid development consent in place.

- That the statement contained at 1.5.4 of the submitted EIAR states that the application is part of a whole project that includes the already consented Knocknamona WF. It goes on to state that *'it does not however attempt to assess that project or the Woodhouse project'*. Submitted that this is the basic flaw in the EIAR as submitted – that it avoids an assessment of the Knocknamona or Woodhouse wind farms and does not assess the whole project as required by the directive.
- The EIAR states at 2.3.3.4.1 that *'it is assumed that Knocknamona WF will be constructed incorporating mitigation measures and planning conditions imposed by the 2016 Board order to grant permission'*. Submitted that this is not possible as the 2016 permission is based on entirely different grid connection and haul routes from what is not proposed.
- Submitted that the proposed different haul route and grid connection negates the planning permission granted. The approach is that the submitted EIAR did not undertake a new evaluation of the Knocknamona WF, rather relying on the effects of the Knocknamona WF as have been already established. Submitted that this approach is flawed and results in their being no EIAR of the totality of the proposed development.
- Regarding alternatives, the comparison of the chosen option taking account of the works undertaken to Woodhouse WF (haul route) is incorrect as this was never the subject of EIA.
- That the road improvements undertaken at the N72 / R671 junction and the R671 / local road at Clogh Crossroads were never assessed during the Woodhouse application.
- That the assessment in the EIAR regarding population and human health is confined to the grid connection and haul route and does not address the totality of the development including Knocknamona / Woodhouse. The

conclusions of the assessment do not tally with the experiences of residents living in the vicinity of the Knocknamona WF.

- That the issue of residential amenity has not been assessed in the EIAR.
- That the surveys show the presence of hen harrier in the vicinity of the substation and link road, buzzard recorded as present in the wind farm site and whooper swans recorded at Clogh bog to the west of the site. Issue of bird collisions and electrocution have not been addressed and should be undertaken in an integrated manner with the wind farms.
- That the Finisk and Goish Rivers drain into the River Blackwater which is a European site and the Brickey River drains into Dungarvan Harbour which is also a SPA. Impacts on these sites were excluded from consideration given the downstream distances, however as per the Derrybrien case this is not a sustainable approach and no cumulative assessment of the impact of the overall project on water has been undertaken.
- That there is a direct pathway from the Woodhouse substation to the R. Blackwater SAC which is host to the fresh water pearl mussel. The application should have been accompanied by an appropriate assessment.
- The fact that a NIS was required for the Knocknamona WF means that additional development in the form of the grid connection application and cumulative assessment of the project must be required. There is no reference to a NIS in the public notices and the application is invalid on this basis.
- That the assessment of noise is completely unsatisfactory. The noise assessment relies on descriptions from the 2014 Knocknamona WF despite Woodhouse WF and substation coming into operation in the interim.
- Cumulative noise is examined in a very limited way and within a very limited study area.
- Operational noise from the Woodhouse wind farm is excluded from the assessment on the basis that the grid connection does not rise to a discernible impact and that therefore there will be no cumulative impact.

- That the further information request was not confined to substation noise only and requested sound contour mapping. The response did not consider the cumulative impact of the overall sound environment and no attempt made to allow for tonal, low frequency or other component to noise.
- That road widening and improvement works to facilitate the Woodhouse WF were undertaken without landowners' consent and were not the subject of EIA or AA. These works form part of the current High Court case regarding the Woodhouse WF development. The council is exceeding its authority and demonstrating objective bias.
- Submitted that the further information request as it relates to roads / traffic was designed to facilitate the applicant and there can be no reliance on road improvements that occur as a result of unauthorised development.
- That construction traffic crossing the L-6074 is a traffic hazard. The local road network is not suitable to accommodate the number or nature / weight of the traffic proposed.
- Contrary to the information submitted with the application (Figure 2.2 of the response to further information) the haul route to Knocknamona WF is not 'as permitted'.
- That the landscape and visual assessment does not consider the cumulative impact of the Woodhouse WF, and substation and Knocknamona WF rather it discounts the visual impact of the proposed development as being insignificant. The general area of the development is elevated and visually vulnerable.
- That there is an inherent contradiction between the zoning of the site for agricultural use and the identification of the area of the site as suitable for wind energy development. The Heather Hill Management Company case (IEHC 450) made clear that the decision maker cannot contravene one of objectives and dismiss that objective as immaterial.
- That from the perspective of the habitats directive, the plans or projects that have to be considered comprise the current application, the Knocknamona WF, Woodhouse WF and the haul route. Submitted that it is inconceivable

that if these projects are assessed in combination and the correct test applied that a stage 2 assessment is not required.

***John Reynolds***

- That no objection was submitted originally to the Woodhouse wind farm as it was not considered that impacts would arise, however the windfarm as constructed is highly intrusive and results in sleep deprivation, tinnitus and general noise disturbance.
- That the effects of low frequency noise are particularly concerning and it is noted that the WHO have stated that such noise can have effects on individuals within 2km of a windfarm.
- That the issues and concerns regarding health are such that high court proceedings have been initiated and a nuisance action.
- That the future construction of a second wind farm at Knocknamona is a huge concern as it will further intensify the disturbance.
- That the grounds of appeal set out in the Woodhouse Wind Aware Families are supported.
- That the currently proposed grid connection was not included in the original application. The submitted EIAR does not address the cumulative effects on surrounding residents and EIA of the full development now needs to be undertaken.
- That the EIS for Knocknamona was undertaken in 2014-2016 and so is outdated.
- That the Knocknamona project developers gave a commitment to the High Court that that they would apply for permission for a grid connection with two route options to Dungarvan indicated. These options bound the development. The same principle applies to the originally proposed haul route.
- It is not permissible for this development to connect to the constructed Woodhouse substation as the Woodhouse development is unauthorised.

- The Woodhouse development cannot be regularised as it would require retention permission for a development that requires EIA.
- That the Habitats Directive requires consideration of all plans and projects not just the grid connection and it cannot be concluded that a Stage 2 AA is not required.
- That the public notices should have referred to the overall development inclusive of both wind farms.
- That there has been project splitting in the development of the two wind farms and grid connections.
- That the site map submitted is inadequate and does not identify all contiguous structures such as the already constructed Woodhouse wind turbines.
- That unauthorised road widening works were undertaken by the local authority (August, 2019). These works were not routine maintenance.

***Valerie and Liam O'Donnell***

- Horrified at the prospect of 16 no. wind turbines in this area.
- That the landscape has already been destroyed.
- That the local authority has not properly assessed the cumulative impacts of this development, including on human beings and has not complied with the EIA Directive.
- That the grounds of appeal set out in the Woodhouse Wind Aware Families are supported.
- That the currently proposed grid connection was not included in the original application. The submitted EIAR does not address the cumulative effects on surrounding residents and EIA of the full development now needs to be undertaken.
- That the EIS for Knocknamona was undertaken in 2014-2016 and so is outdated.
- That the Knocknamona project developers gave a commitment to the High Court that that they would apply for permission for a grid connection with two



route options to Dungarvan indicated. These options bound the development. The same principle applies to the originally proposed haul route.

- It is not permissible for this development to connect to the constructed Woodhouse substation as the Woodhouse development is unauthorised.
- The Woodhouse development cannot be regularised as it would require retention permission for a development that requires EIA.
- That the Habitats Directive requires consideration of all plans and projects not just the grid connection and it cannot be concluded that a Stage 2 AA is not required.
- That the public notices should have referred to the overall development inclusive of both wind farms.
- That there has been project splitting in the development of the two wind farms and grid connections.
- That the site map submitted is inadequate and does not identify all contiguous structures such as the already constructed Woodhouse wind turbines.
- That unauthorised road widening works were undertaken by the local authority (August, 2019). These works were not routine maintenance.

***Anna Maria Cloona***

- That the health risks of another windfarm are unknown and wind turbine syndrome is a concern.
- That the character of the landscape will be changed forever if this development and the Knocknamona WF are developed.
- That the Knocknamona WF will be visible from their house and garden and be a constant irritation.
- That the development will devalue their property and the second windfarm will make the property valueless.
- That the issue of the effects of wind developments on people with autism and on the spectrum is noted and the appellant has relatives who are autistic who will come to stay with them and is concerned about the effects on their health,

- That the cumulative effects of this development and the existing Woodhouse and proposed Knocknamona WF have not been adequately addressed by the local authority as required by the EIA Directive.
- That the grounds of appeal set out in the Woodhouse Wind Aware Families are supported.
- That the currently proposed grid connection was not included in the original application. The submitted EIAR does not address the cumulative effects on surrounding residents and EIA of the full development now needs to be undertaken.
- That the EIS for Knocknamona was undertaken in 2014-2016 and so is outdated.
- That the Knocknamona project developers gave a commitment to the High Court that they would apply for permission for a grid connection with two route options to Dungarvan indicated. These options bound the development. The same principle applies to the originally proposed haul route.
- It is not permissible for this development to connect to the constructed Woodhouse substation as the Woodhouse development is unauthorised.
- The Woodhouse development cannot be regularised as it would require retention permission for a development that requires EIA.
- That the Habitats Directive requires consideration of all plans and projects not just the grid connection and it cannot be concluded that a Stage 2 AA is not required.
- That the public notices should have referred to the overall development inclusive of both wind farms.
- That there has been project splitting in the development of the two wind farms and grid connections.
- That the site map submitted is inadequate and does not identify all contiguous structures such as the already constructed Woodhouse wind turbines.
- That unauthorised road widening works were undertaken by the local authority (August, 2019). These works were not routine maintenance.

### **Tom and Moya Power**

- That they are experiencing significant nuisance from the existing Woodhouse WF. This windfarm was not built in accordance with its permission and is now the subject of High Court proceedings.
- That the increased impact of the proposed development has not been adequately considered contrary to EU legislation,
- That the applications for windfarms in the vicinity of their property has been done piecemeal and in a way that seeks to minimise cumulative effects contrary to the EIA directive.
- That members of the family are suffering from tinnitus after 5 years and the longer term effects are very concerning,
- That the cumulative effect of a second windfarm in the area that will intensify the existing nuisances is a big worry.
- That the level of detail required in articles 22 and 23 of the regulations has not been provided with the application (the full nature and extent of the development in particular),
- That the public notices are invalid as they don't set out the full nature and extent of the development.
- That the grounds of appeal set out in the Woodhouse Wind Aware Families are supported.
- That the currently proposed grid connection was not included in the original application. The submitted EIAR does not address the cumulative effects on surrounding residents and EIA of the full development now needs to be undertaken.
- That the EIS for Knocknamona was undertaken in 2014-2016 and so is outdated.
- That the Knocknamona project developers gave a commitment to the High Court that that they would apply for permission for a grid connection with two route options to Dungarvan indicated. These options bound the development. The same principle applies to the originally proposed haul route.

- It is not permissible for this development to connect to the constructed Woodhouse substation as the Woodhouse development is unauthorised.
- The Woodhouse development cannot be regularised as it would require retention permission for a development that requires EIA.
- That the Habitats Directive requires consideration of all plans and projects not just the grid connection and it cannot be concluded that a Stage 2 AA is not required.
- That the public notices should have referred to the overall development inclusive of both wind farms.
- That there has been project splitting in the development of the two wind farms and grid connections.
- That the site map submitted is inadequate and does not identify all contiguous structures such as the already constructed Woodhouse wind turbines.
- That unauthorised road widening works were undertaken by the local authority (August, 2019). These works were not routine maintenance.

#### ***James and Brid Power***

- That the existing Woodhouse WF has led to very significant negative effects especially related to noise and shadow flicker, these negative effects will be exacerbated by the proposed development.
- That the turbines in the Woodhouse development are larger than permitted in the planning permission,
- That there is concern about the effect of additional wind turbines on health and that the effects have not been properly considered as required under the EIA Directive.
- That the public notices for the development are inadequate as they do not mention that there is a series of windfarms and grid connections.
- That the grounds of appeal set out in the Woodhouse Wind Aware Families are supported.

- That the currently proposed grid connection was not included in the original application. The submitted EIAR does not address the cumulative effects on surrounding residents and EIA of the full development now needs to be undertaken.
- That the EIS for Knocknamona was undertaken in 2014-2016 and so is outdated.
- That the Knocknamona project developers gave a commitment to the High Court that that they would apply for permission for a grid connection with two route options to Dungarvan indicated. These options bound the development. The same principle applies to the originally proposed haul route.
- It is not permissible for this development to connect to the constructed Woodhouse substation as the Woodhouse development is unauthorised.
- The Woodhouse development cannot be regularised as it would require retention permission for a development that requires EIA.
- That the Habitats Directive requires consideration of all plans and projects not just the grid connection and it cannot be concluded that a Stage 2 AA is not required.
- That the public notices should have referred to the overall development inclusive of both wind farms.
- That there has been project splitting in the development of the two wind farms and grid connections
- That the site map submitted is inadequate and does not identify all contiguous structures such as the already constructed Woodhouse wind turbines.
- That unauthorised road widening works were undertaken by the local authority (August, 2019). These works were not routine maintenance.

***Olivia and Brian Coughlan***

- That the proposed development would exacerbate the existing nuisance being experienced from the Woodhouse WF. This has particularly impacted in terms of noise and shadow flicker.

- That the Woodhouse WF has been constructed not in compliance with its planning permission. The council cannot allow this unauthorised development to be extended.
- That despite the nuisance, no monitoring controls have been put in place for the Woodhouse WF.
- That the current proposal will increase the intensity of windfarm development in the area and therefore the intensity of the impacts on residents.
- That the EIAR submitted with the application does not address any of the impacts arising in connection with the existing windfarm.
- That the public notices do not properly identify the cumulative series of windfarms and grid connections.
- That they live 720 metres from Woodhouse WF and did not object originally as they thought that there would not be negative effects outside of 500 metres. The windfarm has had a huge negative impact on their lives. No assessment of the impact on their property was undertaken in the original application.
- That the grounds of appeal set out in the Woodhouse Wind Aware Families are supported.
- That the currently proposed grid connection was not included in the original application. The submitted EIAR does not address the cumulative effects on surrounding residents and EIA of the full development now needs to be undertaken.
- That the EIS for Knocknamona was undertaken in 2014-2016 and so is outdated.
- That the Knocknamona project developers gave a commitment to the High Court that that they would apply for permission for a grid connection with two route options to Dungarvan indicated. These options bound the development. The same principle applies to the originally proposed haul route.
- It is not permissible for this development to connect to the constructed Woodhouse substation as the Woodhouse development is unauthorised.

- The Woodhouse development cannot be regularised as it would require retention permission for a development that requires EIA.
- That the Habitats Directive requires consideration of all plans and projects not just the grid connection and it cannot be concluded that a Stage 2 AA is not required.
- That the public notices should have referred to the overall development inclusive of both wind farms.
- That there has been project splitting in the development of the two wind farms and grid connections.
- That the site map submitted is inadequate and does not identify all contiguous structures such as the already constructed Woodhouse wind turbines.
- That unauthorised road widening works were undertaken by the local authority (August, 2019). These works were not routine maintenance.

***Niamh and Mark Kuhne***

- That they live next to the site of the Knocknamona WF and are concerned about the cumulative impacts with the existing windfarm, particularly with regard to the effect on the landscape and Drum Hills and tourism.
- That the development proposes to connect to a development that is unauthorised (Knocknamona WF). The increase in the permitted turbine height in this case is similar to that in the Barnafaddock WF case where the Board issued a s.5 determination that the increased height was not in accordance with the permission granted and that the development was therefore unauthorised.
- That the grid connection now proposed follows a different route to that originally proposed and amounts to project splitting.
- That the grounds of appeal set out in the Woodhouse Wind Aware Families are supported.
- That the currently proposed grid connection was not included in the original application. The submitted EIAR does not address the cumulative effects on

surrounding residents and EIA of the full development now needs to be undertaken.

- That the EIS for Knocknamona was undertaken in 2014-2016 and so is outdated.
- That the Knocknamona project developers gave a commitment to the High Court that they would apply for permission for a grid connection with two route options to Dungarvan indicated. These options bound the development. The same principle applies to the originally proposed haul route.
- It is not permissible for this development to connect to the constructed Woodhouse substation as the Woodhouse development is unauthorised.
- The Woodhouse development cannot be regularised as it would require retention permission for a development that requires EIA.
- That the Habitats Directive requires consideration of all plans and projects not just the grid connection and it cannot be concluded that a Stage 2 AA is not required.
- That the public notices should have referred to the overall development inclusive of both wind farms.
- That there has been project splitting in the development of the two wind farms and grid connections.
- That the site map submitted is inadequate and does not identify all contiguous structures such as the already constructed Woodhouse wind turbines.
- That unauthorised road widening works were undertaken by the local authority (August, 2019). These works were not routine maintenance.

#### ***Woodhouse Wind Aware Families***

- That the currently proposed grid connection was not included in the original application. The submitted EIAR does not address the cumulative effects on surrounding residents and EIA of the full development now needs to be undertaken. To pursue the approach which is submitted in the current application is contrary to the EIA Directive.



- That the local authority only undertook an assessment of the cumulative impacts of the development by reference to the decision of An Bord Pleanála dated 14<sup>th</sup> December, 2016 (Ref. PL93.244006) rather than a new assessment of the cumulative impacts. The EIA Directive requires an assessment of development from first principles. The Board cannot determine the application on the basis of the information before it.
- That the EIS for Knocknamona was undertaken in 2014-2016 and so is outdated. The assessment undertaken of the likely significant effects on the environment was therefore undertaken on the basis of outdated information.
- That the Knocknamona project developers gave a commitment to the High Court that that they would apply for permission for a grid connection with two route options to Dungarvan indicated. These options bound the development. The same principle applies to the originally proposed haul route.
- That following the approach in Gormley V ESB, if a haul route through a whole series of areas, the public in those areas have to be notified. In the proceedings related to the Knocknamona WF it was accepted that permission had not been granted for the grid connection or haul route and the developer is therefore not correct that there is a permitted haul route.
- It is not permissible for this development to connect to the constructed Woodhouse substation as the Woodhouse development is unauthorised. Specifically, the turbine blade lengths are longer than permitted. The principle that this makes the Woodhouse WF development unauthorised has been established by the Barnafaddock WF s.5 case.
- The Woodhouse development cannot be regularised as it would require retention permission for a development that requires EIA.
- That the Habitats Directive requires consideration of all plans and projects not just the grid connection and it cannot be concluded that a Stage 2 AA is not required. The local authority failed to consider the development in the context of other plans and projects for the purposes of AA.

- That the public notices should have referred to the overall development inclusive of both wind farms. There is therefore a question over the validity of the application.
- The developments at Woodhouse and Knocknamona has not been considered as one application and there has been project splitting in the development of the two wind farms and grid connections. If the spirit and letter of the EIA Directive is applied, then an EIA is required to assess and identify the effects of this entire development
- That the site map submitted is inadequate and does not identify all contiguous structures such as the already constructed Woodhouse wind turbines. An EIA should be undertaken for all of the lands outlined in blue.
- That unauthorised road widening works were undertaken by the local authority (August, 2019). These works were not routine maintenance.

***Maurice Reynolds and Marie O'Reilly***

- That the Woodhouse WF is unauthorised as the turbine blades are longer than permitted.
- That the Woodhouse WF development has had significant negative impacts that were not anticipated at the time that the application was submitted and granted.
- Concerned that the proposed development will further exacerbate the existing nuisance issues arising from the Woodhouse WF development.
- That the grid connection will be connecting into a development that is unauthorised (Woodhouse substation) and must therefore be refused.
- That the public notices for the development are inadequate as they fail to set out the full extent of the development.
- That the environmental impacts of the whole development have not been properly considered under the EIA Directive. There needs to be an EIA of the two windfarms together with the grid connection rather than each bit of the overall development being assessed separately.

- That the grounds of appeal set out in the Woodhouse Wind Aware Families are supported.
- That the currently proposed grid connection was not included in the original application. The submitted EIAR does not address the cumulative effects on surrounding residents and EIA of the full development now needs to be undertaken.
- That the EIS for Knocknamona was undertaken in 2014-2016 and so is outdated.
- That the Knocknamona project developers gave a commitment to the High Court that they would apply for permission for a grid connection with two route options to Dungarvan indicated. These options bound the development. The same principle applies to the originally proposed haul route.
- It is not permissible for this development to connect to the constructed Woodhouse substation as the Woodhouse development is unauthorised.
- The Woodhouse development cannot be regularised as it would require retention permission for a development that requires EIA.
- That the Habitats Directive requires consideration of all plans and projects not just the grid connection and it cannot be concluded that a Stage 2 AA is not required.
- That the public notices should have referred to the overall development inclusive of both wind farms.
- That there has been project splitting in the development of the two wind farms and grid connections.
- That the site map submitted is inadequate and does not identify all contiguous structures such as the already constructed Woodhouse wind turbines.
- That unauthorised road widening works were undertaken by the local authority (August, 2019). These works were not routine maintenance.

## 6.2. First Party Response to Appeals

The following is a summary of the main issues raised in the response of the first party to the third party appeals submitted:

- That the Woodhouse substation received planning permission from Waterford County Council in January 2010 (Ref. 09/642). This decision was not the subject of appeal and Woodhouse substation was subsequently built according to its planning permission.
- Regarding compliance with the requirement of Article 22, that letters of consent from the landowners of the site were submitted with the application to the Planning Authority. Ecopower developments is not one of the landowners.
- Contrary to the contention of the appellants, that the development is described in a specific chapter of the EIAR, Chapter 5.
- Regarding the proposed haul route, the KWF grid connection EIAR identifies and assesses the impact of an alternative large component haul route to that which was assessed in the Knocknamona WF Revised EIS (2015). This assessment includes a cumulative assessment of the impact of this project with the Knocknamona WF, Woodhouse WF and Woodhouse substation.
- That contrary to the statement of the appellants, the construction of KWF grid connection does not rely on the haul route assessed in the Knocknamona WF Revised EIS.
- That the appellant has no comment to make on the statement in the third party appeal regarding omissions in the report of the Planning Authority.
- That no construction works have been undertaken by Knocknamona WF Limited or on behalf of Knocknamona WF Limited, either on public roads or on forestry roads or at Woodhouse substation either in August, 2019 or at any other time. Similarly, stated that no such works have been undertaken by Waterford County Council on behalf of Knocknamona WF Limited and that no public money has therefore been spent on such works.

- Stated that the alleged works shown on the forestry track in the photograph submitted was not undertaken by or on behalf of Knocknamona WF limited. While the location of this photograph does appear to be within the Knocknamona WF site, it is not at the location where the proposed widening works are located. Similarly, the maintenance works indicated in the photographs taken of the L-2024 were not undertaken by or on behalf of Knocknamona WF limited. Stated that the diggers at the Woodhouse substation site were not working on behalf of Knocknamona WF Limited.
- Regarding the use of grid capacity by the development, the original 12 no. turbines proposed was reduced to 8 no. and *'using an appropriately capacity related wind turbine that finally received permission can still use up 90 percent of the 34MW of grid capacity the KWF has secured from ESB Networks.'*
- That the proposed use of existing roads at Woodhouse Windfarm, or the installation of equipment at the Woodhouse substation site does not create a single development as stated by the third party appellants. KWF will be a separate legal entity and, as far as the two projects interact, this interaction is assessed cumulatively in the KWF Grid Connection Project EIAR.
- Similarly, the statement by the third parties that the proposed construction of a new road / road connection between the two windfarm sites is evidence of seeking to create a single entity by combining Woodhouse WF and Knocknamona WF is incorrect. KWF will be a separate legal entity that will connect to the same point (grid node) and will operate completely separately from each other and be metered separately. The link road is proposed to facilitate the use of the existing Woodhouse access roads for oversized components and the provision of cabling. The cabling will connect only KWF to the substation and there will be no connection with the cabling within the Woodhouse WF. As far as the two projects interact, this interaction is assessed cumulatively in the KWF Grid Connection Project EIAR and facilitates the Planning Authority in assessing the cumulative impact of the whole project (KWF and KWF Grid Connection).

- It should be noted that a grid connection to Woodhouse WF was not feasible at the time of the original KWF application or at the time of the revised EIS in 2015. The Woodhouse substation was not constructed, and the grid connection method issued by ESB Networks was to Dungarvan substation. Two routes / connection alternatives to the Dungarvan substation were presented in the 2015 Revised EIS. There was no expectation at that time that the prescribed grid connection point could be changed and the process to do so was lengthy and uncertain. There was therefore no intention on the part of KWF Limited to be deceptive as alleged by the third party appellants. The confirmation from Eirgrid that a connection to Woodhouse had been assessed at a high level as being consistent with the rules laid out in the connection offer policy and process (COPP) was received after the High Court judgement upholding the Board Pleanala permission for Knocknamona WF (issued on 26<sup>th</sup> September, 2017).
- Contrary to the statement of the appellants (Pg.17 of Alen Buckley appeal) neither Ecopower nor any other connected company had any part in the commissioning of Woodhouse substation which was commissioned by Eirgrid.
- That the substance of the KWF Grid Connection planning application is in accordance with the undertaking made by the first party as part of the court proceedings in the KWF case to apply for planning permission for the grid connection element of Knocknamona Windfarm. Because this grid connection is part of a windfarm project, case law would indicate that such an application must be accompanied by an EIAR.
- That a fundamental part of the EIA process is consideration of alternatives. At the time of preparation of the grid connection application for KWF, alternative grid connection options that were not previously available became possible. The EIAR addresses the alternative grid connection options and the optimal grid connection method on technical and environmental grounds was chosen.
- The issue of Noise is addressed in Chapter 10 of the EIAR and in the supplementary report submitted as part of the response to Further Information submitted to the Planning Authority and these address the direct and cumulative impacts of noise from KWF Grid Connection. The operational

noise from KWF Grid Connection will only arise from the additional electrical equipment in the substation. This equipment will have no potential to increase ambient noise levels beyond 400 metres and the study area used is 400 metres for direct effects and double that (800 metres) for cumulative impact assessment. The substation site and parts of both the Woodhouse and Knocknamona windfarms are located within this study area. The results of the noise assessment clearly indicate that, both before and after the installation of the additional equipment proposed in the subject application, the Woodhouse substation noise emissions do not exceed the representative background noise levels during the day or night time periods and cannot therefore have a significant direct or cumulative effect within the study area.

- Regarding the reliability of information used which was based on 2014 and 2016 survey data, it should be noted that the KWF Grid Connection EIA (2019) included supplementary information on Knocknamona Windfarm where required. Changes in the environment since the production of KWF EIS in 2014/2015 were considered by the competent experts when preparing the cumulative assessment of impacts between KWF Grid Connection and KWF. The change in context is specifically highlighted in a heading '*Passage of time since the 2014/2015 Knocknamona WF Planning Documents were prepared*' for each aspect of the environment in the KWF Grid Connection EIA (2019).
- That the pre application consultations undertaken with An Bord Pleanála were normal procedure and indeed are required under the SID Legislation.
- That, contrary to the contention of the appellants, the first party did not apply for planning permission during the course of the judicial review hearing.
- That the issues raised regarding the validity of the Woodhouse WF and Woodhouse substation do not relate directly to the current application the subject of this appeal.
- With regard to Screening and Scoping the quotation contained at Page 23 (Paragraph 18) of the Alen Buckley appeal includes an additional sentence that does not appear in s.1.5.4 of the EIA and which forms the basis for the

argument put forward in Paragraph 18. On account of this inaccuracy these points should be discounted by the Board.

- That, contrary to the third party appeal, the baseline condition for the assessment should be the current condition of the environment (and specifically roads) and not the condition prior to the works undertaken as part of the Woodhouse WF development. This is not consistent with the EIA Directive and specifically with Annex IV of the Directive which refers to the current state of the environment (baseline scenario).
- That the cumulative effects of the proposed development on population and human health are considered at 6.2.2 and 6.3.2 of the EIAR.
- That the nature of the proposed development is such that it does not have the potential to have a significant effect on residential amenity by way of noise, shadow flicker or other impacts.
- Similarly, the nature of the proposed development is such that it does not have the potential to have significant direct, indirect or cumulative effects on birds.
- That there is no waterbody within the KWF Grid Connection site. The only pathway for water is overland to the Mountodell Stream which is located c.280 metres from the KWF Grid Connection works at the closest point. There are no water crossings on the site and the impact on surface water is identified as imperceptible in the EIAR. Also noted that the KWF Grid Connection works are largely located in a different sub basin from the KWF.
- Reference to ground stability and the Derrybrien case is not considered relevant as the nature of the grid connection project is very different and ground stability was examined by Hydro Environmental Services during the course of the preparation of the application. No deep peat or evidence of stress points or slope failure were identified. Minimal excavation works and depths are required in the development.
- That the screening for AA report submitted examined the potential for any effects based on the source-pathway – receptor model. An extended buffer zone of 15km was also considered. This screening concluded that there is no



likelihood of significant effects to the European sites considered as a result of the proposed project, either alone or in combination with other plans or projects.

- The comments of the third party appellant's relating to the need for a Stage 2 assessment and the specific issue relating to the potential for the collapse of the single arch bridge over the Glenkeereen Stream are noted. Reference is made to the request for further information which examined the structural stability of bridges along the haul route, including this structure (Assessment Structure AS13) in the report titled '*Architectural Heritage Impact Assessment along construction traffic haul routes*' and Buried Structure (BS6) in report '*Structural Inspection of Bridges*' which considered that this bridge is suitable for construction traffic associated with KWF Grid Connection and the Knocknamona WF. Noted that no engineering basis for the case presented by the third party.
- That the issue of a road safety audit was raised as part of the request for further information, and as no works are proposed to the public road, it was determined by the Council that the submission of a Road Safety Audit was not required.
- That the landscape elements of the KWF Grid Connection project are assessed as having an imperceptible effect on landscape and visual amenity due to the location of the infrastructure within an existing compound and the scale of development. The cumulative impact of the KWF Grid Connection with the Woodhouse substation and the Woodhouse WF is also imperceptible because of the negligible magnitude of effects associated with the KWF Grid Connection.
- With regard to comments made by the appellants relating to conflicting objectives in the development plan and specifically conflicts between the zoning objective of the site for agricultural use and the heritage, environmental and landscape policies of the Plan, and the identification of the site as a strategic area for wind energy development, the case law cited is noted. It should be noted that this issue was determined by Justice Houghton in the High Court judgement on the KWF development (2017 IEHC 145 – Alen

Buckley v. An Bord Pleanála) where at paragraphs 59-60 it is clearly stated that the reconciliation of potentially conflicting policy on wind energy and visual impact was a matter for the Board to consider 'in the context of the facts arising from the proposed development and what would be proper planning and sustainable development of the area'.

- Regarding the issues made in the appeal submitted on behalf of **Tom and Moya Power** which primarily relate to concerns regarding noise from the Woodhouse WF and the potential for additional cumulative noise impacts of construction of the Knocknamona WF, the Power property is located c.937 metres from the nearest point on the KWF Grid Connection and c.1570 from the nearest KWF turbine. As discussed previously under Noise, the results of the noise assessment clearly indicate that, both before and after the installation of the additional equipment proposed in the subject application, the Woodhouse substation noise emissions do not exceed the representative background noise levels during the day or night time periods and cannot therefore have a significant direct or cumulative effect within the study area.
- Regarding the issues made in the appeal submitted on behalf of **Olivia and Brian Coughlan** which primarily relate to concerns regarding noise, shadow flicker and vibration from the Woodhouse WF and potential cumulative impacts with the Knocknamona WF, the Coughlan property is stated to be c.1,422 metres from the nearest point of the Knocknamona Grid Connection project and c.2,000 metres from the nearest turbine in the Knocknamona WF. As discussed previously, the impact of noise will not have a significant direct or cumulative effect on properties within the study area and the nature of the project is such that issues of shadow flicker and vibration will not arise.
- Regarding the issues made in the appeal submitted on behalf of **John Reynolds** which primarily relate to concerns regarding noise and vibration from the Woodhouse WF and potential cumulative impacts with the Knocknamona WF, the Reynolds property is stated to be c.1,715 metres from the nearest point of the Knocknamona Grid Connection project and c.2,320 metres from the nearest turbine in the Knocknamona WF. As discussed previously, the impact of noise will not have a significant direct or cumulative

effect on properties within the study area and the nature of the project is such that issues of vibration will not arise.

- Regarding the issues made in the appeal submitted on behalf of **James and Brid Power** which primarily relate to concerns regarding noise and shadow flicker from the Woodhouse WF and potential cumulative impacts with the Knocknamona WF, the Power property is stated to be c.840 metres from the nearest point of the Knocknamona Grid Connection project and c.1,420 metres from the nearest turbine in the Knocknamona WF. As discussed previously, the impact of noise will not have a significant direct or cumulative effect on properties within the study area and the nature of the project is such that issues of shadow flicker will not arise.
- Regarding the issues made in the appeal submitted on behalf of **Anna Maria Cloona** which primarily relate to concerns regarding noise, shadow flicker, visual impact, health impact and devaluation of property from the Woodhouse WF and potential cumulative impacts with the Knocknamona WF, the Cloona property is stated to be c.3,251 metres from the nearest point of the Knocknamona Grid Connection project and c.2,300 metres from the nearest turbine in the Knocknamona WF. As discussed previously, the impact of noise will not have a significant direct or cumulative effect on properties within the study area and the nature of the project is such that issues of shadow flicker will not arise. Visual impacts will be imperceptible, and no significant population of human health impacts are predicted.
- Regarding the issues made in the appeal submitted on behalf of **Valerie and Liam O'Donnell** which primarily relate to concerns regarding visual impact from the Woodhouse WF and potential cumulative impacts with the Knocknamona WF, the O'Donnell property is stated to be c.2,914 metres from the nearest point of the Knocknamona Grid Connection project and c.1,960 metres from the nearest turbine in the Knocknamona WF. As discussed previously, the nature of the KWF Grid Connection project is such that Visual impacts will be imperceptible.

- Regarding the issues made in the appeal submitted on behalf of **Maurice Reynolds and Marie O'Reilly** which primarily relate to concerns regarding shadow flicker from the Woodhouse WF and potential cumulative impacts with the Knocknamona WF, the Reynolds and O'Reilly property is stated to be c.3,350 metres from the nearest point of the Knocknamona Grid Connection project and c.2,460 metres from the nearest turbine in the Knocknamona WF. As discussed previously, the nature of the KWF Grid Connection project is such that no shadow flicker impacts will arise.
- Regarding the issues made in the appeal submitted on behalf of **Miamh and Mark Kuhne** which primarily relate to concerns regarding visual impact from the Woodhouse WF and potential cumulative impacts with the Knocknamona WF, the O'Donnell property is stated to be c.3,350 metres from the nearest point of the Knocknamona Grid Connection project and c.2,460 metres from the nearest turbine in the Knocknamona WF. As discussed previously, the nature of the KWF Grid Connection project is such that visual impacts will be imperceptible.

### 6.3. Third Party Response to First and Third Party Appeal

The following is a summary of the third party response to the issues raised in the first and other third party appeals.

#### **First Party Appeal Against Conditions**

- That the application is further evidence of project splitting and a lack of commitment to proper planning as evidenced by the grid connection not being as per the options included in the submitted Knocknamona EIS.
- Noted that the Board decision in the Knocknamona WF case made specific reference to the submitted EIS, NIS and further information, including information submitted in relation to the grid connection and the haul route.
- Noted that without the information regarding the grid connection and the haul route, Knocknamona WF would have been refused permission. The current application now changes these aspects of the development. This approach

undermines the entirety of the Knocknamona WF which is not severable from the supporting EIS.

- That there is a lack of clarity around the different applicant and their interest in the lands.
- That the appeal against conditions would have the effect of granting permission for a grid connection that is separate from the Knocknamona WF and raises issues of further future wind energy development. Submitted that the appeal against conditions aims to avoid decommissioning and that the development is part of an overall plan for further wind farm development in this area which should have been highlighted in the application and public notices.
- That the appeal as submitted (omission of the need for decommissioning) is outside the scope of the public notices for the development which clearly refers to the export of electricity from the Knocknamona WF to the grid at Woodhouse substation.
- The comment of the first party that the substation is to be taken over by ESB Networks and then operated as part of the transmission system, however for this to be permitted separate from the windfarm then the permission sought should have been different.
- That the issue of decommissioning has been inadequately considered in the EIAR and in the application. Condition 6 is contrary to the Aarhus Convention and also does not identify the environmental issues in advance of the granting of permission.
- That the application lodged, and the decision issued contain completely inadequate data and assessment relating to noise. The wording of the noise condition should have made specific reference to the issue of tonal and low frequency noise. The wording of the condition regarding noise is imprecise and should clarify that the maximum permitted noise is 3dBA above background.

- That the nature of the development links Knocknamona and Woodhouse wind farms, a single development for the purposes of EIA is created and no assessment of this undertaken contrary to the EIA Directive.
- That the Woodhouse WF is the subject of current HC proceedings regarding unauthorised development. The Board is precluded from granting permission for development which seeks to extend an unauthorised development. Substitute consent is not available in this case as there is no valid development consent.
- That the Draft Wind Energy Guidelines are clear that an application for development needs to include the totality of the project. The Draft Guidelines preclude an alternative not considered during the planning application assessment for the windfarm.
- That the submitted EIAR contains fundamental deficiencies and the cumulative impacts of the development have not been properly identified.
- There are competing and conflicting development plan objectives relating to the proposed development that can only be resolved through material contravention of the development plan.
- That there is a failure of compliance with the Habitats Directive as an Appropriate Assessment of the totality of the development is required. A NIS is required for the extension of an EIA project where the substantial development required such a NIS.

#### ***Other Third Party Appeals***

The issues raised in the other third party appeals are supported.

#### **6.4. Planning Authority Response**

There is no record of a response received from the Planning Authority to the first and third party grounds of appeal.

## 6.5. Observations

An observation has been received from Eirgrid and the following is a summary of the main issues raised in this submission:

- Stated that the Woodhouse substation will eventually transfer ownership to the ESB and become an operational asset on the transmission network operated by Eirgrid and is expected to continue to operate as an asset on the transmission network beyond the lifetime of the windfarm.
- It is therefore requested that in the event of a grant of permission, Conditions Nos.4 and 6 would not be attached to any decision.

## 7.0 Planning Assessment

7.1. The following are considered to be the main issues in the assessment of the subject appeals:

- Introduction / Context
- Legal and Procedural Issues,
- Access and Traffic,
- General Ecology,
- Visual Impact,
- Residential Amenity,
- Other Issues / First Party Grounds of Appeal,

This assessment should be read in conjunction with the sections below relating to EIA (Section 8.0) and Appropriate Assessment – Screening (Section 9.0).

## 7.2. Introduction / Context

- 7.2.1. For the benefit of the Board the following is a brief summary of the circumstances and context of this case. Figure 1.2 of Volume C3 of the submitted EIAR is useful in getting a visual context for the context of the subject grid connection application and issues raised in the appeal:
- 7.2.2. The site is located in immediate proximity to two wind farm developments and an existing substation, these being the constructed and operational 8 no. turbine Woodhouse Windfarm, located to the west and indicated in red on Figure 1.2 of the EIAR, the permitted but not yet constructed 8 no. turbine Knocknamona WF located to the south which is indicated in yellow on Figure 1.2 and the constructed Woodhouse substation which is located at the northern end of the site.
- 7.2.3. The constructed Woodhouse substation was granted permission to Hibernian Wind Power Limited but is now stated to be owned and operated by ESB. This windfarm is connected to the grid via the Woodhouse substation which was permitted to ESB Wind Developments.
- 7.2.4. The initial application for the Knocknamona WF was for 12 no. turbines and was submitted to the Planning Authority in 2014, (Waterford County Council Ref. 14/600109). Permission was refused by the Planning Authority, but a grant of permission was subsequently issued by the Board on appeal (Ref. PL93.244006), with a reduction in the number of permitted turbines from 12 no. to 8 no. This application included an initial EIS which did not specifically indicate a grid connection for the Knocknamona WF. On foot of the legal issues arising from the O'Granna cases, and a High Court judicial review of the Knocknamona WF decision, the Board requested further information and a revised EIS was submitted to the Board for consideration in 2015. This revised EIS (rEIS) provided an assessment of the environmental impacts of the Knocknamona WF development including two potential grid connections to the Dungarvan substation c.11km to the east of the site and also a haul route via the N25 and Pulla cross roads (c.8km to the south east of the current appeal site) onto local roads (L-2024 and L-6077) to the main Knocknamona WF site access.



- 7.2.5. The current application is for a grid connection to connect the Knocknamona WF to the grid. The first party rationale for the change to the windfarm grid connection options presented in the Knocknamona Windfarm Revised EIS (2015) is summarised at Exec Sum 4.1 of Volume C2 of the submitted EIAR. This notes that at the time of the Knocknamona WF application, the grid connection offer for the Knocknamona WF prescribed a connection point at the Dungarvan substation. However, in the interim since the preparation of the 2015 Knocknamona Windfarm Revised EIS, a potential new grid connection point in the form of the Woodhouse substation was commissioned by ESB Networks / Eirgrid. The grid connection point at Woodhouse substation is located c.2km to the west of Knocknamona Windfarm and presents an opportunity for a grid connection route that is significantly shorter than that to the Dungarvan substation. The alternative grid connection route options described above are illustrated at Figure 4.1 of Volume C3 of the submitted EIAR.
- 7.2.6. Similarly, Exec Sum 4.3 of Volume C2 of the submitted EIAR presents the rationale for the alternative component haul route from that previously presented in the Knocknamona Windfarm Revised EIS (2015). Arising from the proposed grid connection for Knocknamona Windfarm to the Woodhouse substation, the grid connection route would run primarily along existing forest roadway on the Knocknamona site and cross to run on Woodhouse Windfarm roadway in the vicinity of the Woodhouse substation. The section between these two existing roadways comprises a short section of c.190 metres in length and across lands that are in the ownership of Coilte. The proposed construction of a new section of road of c.190 metres in length presents an opportunity to link the existing road network in the Woodhouse Windfarm development with the forestry road network in the Knocknamona site and to use the existing Woodhouse site access and internal road network as a haul route for the delivery of abnormal loads for turbine components. This route is proposed to replace that indicated in the 2015 Knocknamona Windfarm EIS which indicated a turbine component haul route utilising the Knocknamona Windfarm main entrance gate and public roads to the east and south east of the site. The alternative turbine component haul route options described above are illustrated at Figure 4.2 of Volume C3 of the submitted EIAR.

### 7.3. Legal and Procedural Issues

7.3.1. A significant part of the third party appeals received relates to issues regarding the validity of the approach pursued in the application in terms of its scope and relationship to existing and permitted developments in the vicinity and the validity of the application. Among the most significant issues raised in the third party submissions are the following:

- The validity of the application submitted to the Planning Authority, including issues related to public notices, red line boundary and clarity around landowners and issues of consent.
- That the application as submitted constitutes project splitting, as the current application for KWF Grid Connection and the KWF are part of a single project.
- That the proposed use of internal haul routes within the Woodhouse WF site and development within the site of the Woodhouse substation means that these projects are also now part of the overall project which is the subject of EIA.
- That the identification of a specific grid connection as part of the assessment of the application for Knocknamona WF and consideration of the environmental impacts of this connection as part of the revised EIS submitted to the Board means that it is not now open to the applicant to submit a grid connection application for an entirely different connection.
- That the application for a grid connection is constrained by the grid and haul route options identified and assessed in the Revised EIS for the Knocknamona WF submitted to the Board in 2015 and which was prepared on foot of High Court judgement. Contended that the revisions to the grid and haul routes identified in 2015 EIS (rEIS) are such that they go beyond the scope of the original permission granted by the Board and that a new application for permission for the entire development (KWF Grid Connection and Knocknamona WF) is required.
- That there are issues regarding potential unauthorised developments relating to the Woodhouse WF and Woodhouse substation and that, in view of the connections between the subject application and these developments, it is

inappropriate for the Board to grant permission pending resolution of these issues.

- 7.3.2. A number of these issues overlap with EIA and AA and will also be referenced under these headings later in this assessment. The following sections address these legal and procedural issues raised in more detail.

### ***Validity of the Original Application to the Planning Authority***

- 7.3.3. The third party appellants raise a number of concerns and issues with regard to the validity of the original application as submitted to the Planning Authority, notably regarding the public notices, the drawings (specifically site map) and regarding ownership / consent. At the outset it is noted that these are all issues that were for the Planning Authority in the first instance, that the Planning Authority accepted the application as valid which has resulted in the current appeal to the Board and that the issues raised are between the Planning Authority and the First Party. Having stated this, I note the following:
- 7.3.4. Regarding notices, I consider that the notices are comprehensive with regard to the description of development. The issue raised regarding red line boundary largely relates to the contention of the first party that the project which should be the subject of the application in this case should include the entirety of the Knocknamona WF. As is set out below under the heading of Project Splitting and Cumulative Assessment of Impacts, I do not agree that this interpretation is correct. Regarding ownership, I note that while the applicant in this case (Knocknamona Wind Farm) differs from the applicant in the Knocknamona Wind Farm development case (Eco Power Development Limited), the information provided by the first party indicates that Knocknamona Windfarm Limited is part of the Ecopower Group and is therefore a subsidiary of Eco Power Developments Limited. Regarding consent, there is no consent from Ecopower Developments Limited as they are not the owners of the land on which the development is proposed. The consent of the landowners relating to the proposed development, notably Coilte, is submitted with the application.

- 7.3.5. To restate, the application was accepted as valid by the Planning Authority and a decision issued and issues regarding the validity of the application are for the Planning Authority in the first instance.

***Project Splitting and Cumulative Assessment of Impacts***

- 7.3.6. A central objection raised in the third party submissions on file and specifically in the detailed submission received from Reid Associates Planning and Development Consultants on behalf of Michael and Giancarla Alen Buckley relates to what constitutes the overall project in this case. Specifically, the third party note that the extant permission for the windfarm (Knocknamona WF) permitted by the Board under Ref. PL93.244109 was the subject of legal challenge and that as part of these proceedings a particular haul route and grid connection option were outlined. The fact that the current application seeks to alter these grid connection and haul route options is noted, and is considered by the appellants to result in the current proposal being beyond the scope of the original permission and such that the appropriate course to ensure that an integrated EIA of the overall project can be completed is that a new application for the windfarm and new grid connection should be submitted. Given that the revised haul route (for turbine components) is proposed to be via the existing Woodhouse Windfarm, it is also contended that the application should encompass this project. With regard to these issues I note the following:
- 7.3.7. Firstly, it is important to note that there is no clear splitting of projects with the intention of avoiding EIA. The application for the Knocknamona WF was accompanied by an EIS as was that for the Woodhouse WF and the current application for the grid connection, haul route and other works is accompanied by an EIAR. In the case of the Knocknamona WF and Woodhouse WF, EIA of the projects was undertaken which included an assessment of the likely significant cumulative impacts with other plans and projects. The approach taken will not, in my opinion, result in any aspect of the overall Knocknamona WF project (windfarm and grid connection) not being the subject of EIA.

- 7.3.8. While I do not consider that it is of central relevance to the issue of project splitting or the cumulative assessment of impacts, I note the information submitted by the first party regarding the history of the project, the basis on which the original grid connection was proposed to be to the Dungarvan substation and why the revised grid connection is now proposed. Sections 4.1 - 4.3 of Exec Sum in Volume C3 of the EIAR and the response to the grounds of appeal are particularly noted in this regard. From the information presented, it is in my opinion apparent that at the time of revised EIS in 2015 the grid connection offer in place for Knocknamona WF was a connection to Dungarvan substation and that this informed the connection options indicated in the Revised EIS submitted. On basis of the information presented, I do not consider that Woodhouse was a valid option on which to base the 2015 Revised EIS. Maybe a connection to Woodhouse substation could have also been indicated as a possible future option / corridor in the options presented in the 2015 rEIS, however I can understand why this was not presented given that it was not part of the grid connection offer in place at the time and there was no certainty that this would be the case in the future or the timing that the necessary agreements would be in place.
- 7.3.9. Overall, on the basis of the information presented and available on file, I don't agree with the third party appellants that the first party acted in bad faith on this issue. In any event, the issue at hand now is an assessment of the currently proposed grid connection and cumulative effects arising with the Knocknamona WF, Woodhouse substation, Woodhouse WF together with any other relevant plans and projects.
- 7.3.10. With regard to the third party argument that the use of the existing Woodhouse access and internal road network means that this project has to be part of the current application and included in the EIAR submitted, I do not accept this position. While access is proposed via this route, no works are proposed to either the Woodhouse WF entrance or to the internal roads. The proposed development is not required to facilitate the operation of the Woodhouse WF and, other than use of the internal Woodhouse WF roads for access, there is no functional or legal connection between the proposed development the subject of this appeal and Woodhouse WF.

7.3.11. With regard to the contention that the current proposal is beyond the scope of the original permission such that the appropriate course to ensure that an integrated EIA of the overall project can be completed is that a new application for the windfarm and new grid connection should be submitted, I consider that the following points are relevant:

- In its decision under Ref. PL93.244006, the Board permitted construction of the Knocknamona WF. In this decision the Board had before it a revised EIS (rEIS) which set out the significant environmental impacts of the proposed windfarm development and an assessment of the cumulative impacts with other plans and projects, including grid connection options to connect the windfarm to Dungarvan substation. It is noted that the application related solely to the windfarm development, and that the grid connection was indicated to enable to undertake a complete EIA of the project including an assessment of the cumulative environmental impacts and whether it was possible for the windfarm to be connected to the grid without excessive environmental impacts arising.
- The Knocknamona WF was permitted by the Board having regard to the content of the revised rEIS which it considered showed that the wind farm could be connected to the grid without excessive environmental impacts. The Knocknamona WF was considered to be a viable project that could be completed (connected to the grid) without excessive environmental impacts arising.
- The current proposal for the grid connection and changes to the haul route clearly deviates from the layout as assessed in the revised EIS submitted as part of the Knocknamona WF. I note the contention of the third party appellants that this invalidates the original permission granted and requires the submission of a complete new application for the windfarm and grid connection, and the assessment of the first party (as per Chapter 4 of the EIAR, Section 4.2 and Table 4.2) that the connection to Woodhouse substation rather than Dungarvan substation would result in reduced potential environmental effects. The issue in my opinion is one of whether the purpose of the EIA directive is met in this case and that, before development consent

is given, projects likely to have significant effects on the environment by virtue, inter alia, of their nature, size or location are made subject to a requirement for development consent and an assessment with regard to their effects on the environment, (Art. 2(a)(1) of Directive 2014/52/EU). In my opinion the third party is incorrect in contending that the changes proposed to the grid connection and haul route invalidate the original permission. The EIA for the permitted Knocknamona WF was completed by the Board and it was demonstrated that the Knocknamona WF could be constructed and connected to the grid without excessive environmental impacts arising. This permission stands alone and cannot be reversed by the current application. What appears to be suggested by the appellants is that permission for a development requiring EIA cannot be revised without revisiting the whole development / principle of the development. In my opinion this is an incorrect interpretation of the directive and the planning and development legislation and, in this regard, I note that Class 13 of Part 2 of the Fifth Schedule of the Planning and Development Regulations, 2001 (as amended) expressly anticipates and provides for such applications, (and also provides that such applications need not necessarily require EIA).

- Given the changes proposed in the current application from what was originally indicated, what in my opinion does however have to occur in the current application is that it needs to be the subject of EIA and that this assessment would include a cumulative assessment of the impact of the grid connection application with the previously permitted Knocknamona WF. This is the approach that is followed in the EIAR submitted, and the structure and content of the EIAR is the subject of more detailed comment under the heading of EIA below.

For the above reasons, I do not agree with the contention of the third party appellants that deviation from the grid connection and haul route options indicated in the Knocknamona WF revised EIS cannot occur without voiding the permission granted.

7.3.12. I note reference by the third party appellants to the most recent Draft Revised Wind Energy Development Guidelines (December, 2019) and the contention that, under these guidelines, wind energy projects and grid connects should not be split /

separated. Firstly, and most significantly it has to be noted that this document is still in draft form and that it has not been produced in a final format and therefore, as at the date of the writing of this report, is not a statutory s.28 Guidance document. In stating this, the following points are noted.

- 7.3.13. The conclusion from O’Grianna and other case law is that ideally developments which are the subject of EIA and requiring grid connections would be submitted as a single application, although section 4.7.4 of the Guidelines state that *‘case law on this issue acknowledges that the requirements of the EIA Directive may be satisfied by multiple consents necessitated by the different stages in delivering a project.’* The situation in the case of the appeal site and Knocknamona WF is different to a new windfarm application in that the application for the Knocknamona WF was submitted to the Board prior to the O’Grianna judgement, and the approach taken by the Board was to request the first party to submit a revised EIS which included details of a grid connection and the potential cumulative impacts arising. In my opinion it is therefore clear that it is open to the first party to now submit an application for permission for a grid connection to enable the permitted Knocknamona WF to be connected to the grid. I note the following from Paragraph 4.7.1 of the Draft Guidelines where it states that *‘If required, an EIAR and planning application for the grid connection must address the direct effects and any short, medium and long-term, permanent and temporary, positive and negative, indirect, secondary, cumulative and transboundary effects of the whole project, i.e. the wind energy development and the grid connection.’* In my opinion this is the approach that has been followed in the EIAR submitted with the subject grid connection application and that this is such as to *‘ensure that the totality of the project i.e. wind energy development and the grid connection are assessed thoroughly and in an integrated manner as regards EIA in line with the requirements of the EIA Directive.’* (Paragraph 4.7.1).
- 7.3.14. The third party appellants also make the case that the Board order and conditions (specifically Condition No.1) (for the Knocknamona WF ABP Ref. PL09.244006) clearly indicates that the development is to be completed in accordance with the plans and particulars submitted including the additional information, (revised EIS and grid connection / haul route options). The permission granted under Ref. PL09.244006 relates solely to the proposed windfarm development and, as highlighted in the third party appeal, does not grant permission for the haul route and



grid connection submitted as further information and included in the revised EIS submitted. In my opinion therefore Condition No.1 only relates to the development granted permission which comprises the Knocknamona WF development. The subject application incorporating a grid connection is a separate project for which no permission has previously been granted. With regard to the haul route to the Knocknamona WF, the current application for the grid connection project which is the subject of the current appeal specifically includes reference to the proposed alteration of the haul route for oversized / turbine components connected with the Knocknamona WF and the impacts of this change from the originally proposed route as set out in the revised EIS submitted for the Knocknamona WF are clearly set out and assessed in information that accompanies the current application.

***Issues Related to the Legality of the Woodhouse Wind Farm and Woodhouse Sub Station***

- 7.3.15. The third party appellants make the case that the Woodhouse Windfarm has not been constructed in accordance with the permission granted, and that the Woodhouse substation was permitted without EIA and is also therefore unauthorised. It is contended that the Board is precluded from granting a permission that would be facilitated by unauthorised development and that the Board should use its powers under s.138 of the Planning and Development Act to dismiss the application on the basis that existing development on the site was unauthorised and that to grant permission would result in the extension of an unauthorised development.
- 7.3.16. There are in my opinion a number of points to make on this issue. Firstly, it should be noted that both the Woodhouse substation and the Woodhouse WF received planning permission from Waterford County Council and that neither decision was the subject of appeal to An Bord Pleanala. In addition, issues regarding enforcement of existing permissions is a matter for the relevant planning authority, in this case Waterford City and County Council, and An Bord Pleanala has no role in the enforcement process. Notwithstanding these facts, in the case of both developments, there is not in my opinion a clear indication that the developments were not constructed in accordance with the permissions granted. In this regard,

the report of the Planning Officer dated 17<sup>th</sup> December, 2019 on file states that *'the grid connection is to a substation which has planning permission and there is no record of non-compliance regarding the substation.'* Issues regarding the compliance of the Woodhouse substation and windfarm with the relevant permission or the process around the granting of permission including the contended requirement for EIA or Screening for EIA, are therefore considered to be between the first party and the Planning Authority, and I do not consider that there is a clear basis on which the Board could make a determination that either the Woodhouse substation or windfarm are unauthorised such that it could either refuse permission on this basis or refuse to consider the application under section 138 of the Act.

7.3.17. I note that the appellants refer to ongoing legal actions relating to the Woodhouse wind farm and substation, however on the basis of the most recent information on file, these legal proceedings are ongoing, and no final decision has issued. There is no direction from any court to instruct the Board not to continue to determine the subject appeal and, as referred to previously, the Board does not have any enforcement powers. As of the date of this report therefore the legal position is that the Woodhouse Wind farm and substation are permitted developments and it would not in my opinion be either legally correct or appropriate for the Board to pre-empt the outcome of any legal proceedings and make a determination on the legal status of the Woodhouse wind farm or substation that would influence the current assessment.

7.3.18. I note the reference by the third party appellants to the case *Cleary Compost and Shredding v ABP* where An Bord Pleanála invoked s.138(1)(b)(i) of the Act and refused to deal with an appeal on the basis that the existing development on the site was unauthorised, and that to grant permission would result in the extension of an unauthorised development. The points raised by the appellants on this issue are noted, however there are in my opinion a number of notable differences between the current situation and that in the *Cleary Compost and Shredding v ABP* case. Most significantly, in the *Cleary* case, the Board had made a number of determinations on referrals relating to the operations at the site (ABP Refs. 09RL.3029/3045 and 3216) in which the Board determined that development had occurred and that such development was not exempted development. Therefore, in determining / dismissing the appeal in the *Cleary* case, the Board had significant background

information available regarding the activities at the site and the planning status of these activities on which to base its decision. This was noted at paragraph 46 of the High Court judgement in this case where it is stated that, 'the decision of ABP flowed logically from the previous s.5 determinations.' The situation in the current case is, in my opinion, materially different in that the Board does not have the benefit of the full information regarding the planning status of the Woodhouse WF and Woodhouse substation and is not party to the legal proceedings regarding these developments referred to by the third party appellants. For the above reasons therefore, I do not consider that there is a clear basis for the Board not to determine the appeal or to refuse permission on the basis that to do so would consolidate an unauthorised development.

#### ***Issues Raised Regarding Local Roads and Roads Within the site***

- 7.3.19. It is noted that the third party appellants make a number of contentions regarding the nature of works undertaken on local and forest roads in the vicinity of the site and contend that unauthorised works that facilitate the proposed development have been undertaken. It is specifically contended that upgrading / widening works have been undertaken to a section of the L2024 which were specifically referenced in the EIS for the Knocknamona Wind Farm. Photographs of the relevant section of local road are enclosed with the appeal submitted on behalf of Michael and Giancarla Alen Buckley. It is therefore contended that works that comprise part of the Knocknamona Wind Farm have been commenced in advance of permission for the haul route or grid connection being granted and that this has significant implications given the fact that the wind farm is the subject of EIA.
- 7.3.20. I have reviewed the photographs submitted by the third party appellants of the relevant sections of public and private / forestry roads where works to facilitate the Knocknamona WF are contended to have been undertaken and looked at the relevant areas during the course of my inspection of the site. If works have been undertaken in these areas, they are in my opinion minor and there is no clear indication that they have been undertaken by or on behalf of the applicant. In this regard, I note that the first party response to the grounds of appeal clearly states that no construction works have been undertaken by Knocknamona WF Limited or on

behalf of Knocknamona WF Limited, either on public roads or on forestry roads or at Woodhouse substation either in August, 2019 or at any other time. The first party also state that no such works have been undertaken by Waterford County Council on behalf of Knocknamona WF Limited and there is no indication on file that Waterford County Council undertook such works on behalf of the first party. No mention of any such works is made in the reports on file from the Roads Section of the local authority. On the basis of the information available therefore I do not consider that the contentions made by the third party appellants regarding unauthorised works to roads with the intention of facilitating the Knocknamona WF development can be substantiated and, as with the case above regarding the legality of the Woodhouse WF and Woodhouse substation, I do not consider that there is a basis on which the Board could reasonably dismiss the appeal or refuse permission on this issue.

### ***Other Issues***

7.3.21. The case has been made by the third party appellants that the increased intensity of power connection to the substation would facilitate additional wind farm development in the area that would have further impacts. The basis of this issue is not in my opinion entirely clear, however it would appear that the concern is that the works to the Woodhouse Substation would lead to a precedent for other wind energy developments in the vicinity. No such developments are however current proposed, and no additional windfarm development / wind turbines or other renewable energy generating infrastructure form part of the current application. In the event that any such future developments were proposed they would have to apply for planning permission, would likely be the subject of EIA and would have to set out the likely significant environmental impacts including noise, of the proposed development as well as the cumulative impacts with other plans and projects.

### **7.4. Principle of Proposed Development**

7.4.1. The proposed development comprises a grid connection project to connect a permitted wind energy development to the grid. While it is not therefore in itself a wind energy project, it is an essential piece of infrastructure to facilitate the

connection of wind energy to the grid and such that there are a range of renewable energy policies that are in my opinion of relevance.

### ***National Planning Framework***

7.4.2. ***National Policy Objective 55*** in the National Planning Framework states that it is an objective to '*Promote renewable energy use and generation at appropriate locations within the built and natural environment to meet national objectives towards achieving a low carbon economy by 2050.*' The move to a low carbon economy by 2050 is going to require significant additional onshore as well as offshore wind energy, and the proposed development would in my opinion be consistent with the achievement of this objective. In this regard, Table 2.1 of the Screening for Appropriate Assessment Report submitted as Volume E of the application documentation sets out the anticipated contribution of Knocknamona WF to climate action and indicates that the development could power c.16786 houses per annum or c.39 percent of the total households in Waterford City and County.

### ***Regional Spatial and Economic Strategy for the Southern Region***

7.4.3. Regional Spatial and Economic Strategy (RSES) for the Southern Region includes a number of objectives that are consistent with the proposed development. These include ***RPO 99*** related to Renewable Wind Energy states that '*It is an objective to support the sustainable development of renewable wind energy (on shore and offshore) at appropriate locations and related grid infrastructure in the Region in compliance with national Wind Energy Guidelines.*' Also related to the development of grid infrastructure ***RPO 100*** states that '*It is an objective to support the integration of indigenous renewable energy production and grid injection.*' The form of development proposed is in my opinion consistent with these objectives comprising infrastructure required to connect a permitted wind energy development, which is located in an identified strategic area for wind energy development, to the national grid.

## **Local Policy – Waterford County Development Plan**

- 7.4.4. The relevant development plan is the *Waterford County Development Plan, 2011-2017*. Under s.11A of the Planning and Development Act, 2000 (as amended), the lifetime of this plan has been extended pending the adoption of the Regional Spatial and Economic Strategy by the Southern Regional Assembly (now in place) following which a new plan will be prepared.
- 7.4.5. The site is located on lands that are outside of any identified settlement, and Paragraph 10.57 of the plan states that all lands outside of the designated settlements and land zoning maps is regarded to be zoned as Agriculture A. Lands that are zoned Objective A 'Agriculture' have the stated objective 'to provide for the development of agriculture and to protect and improve rural amenity' under the provisions of the *Waterford County Development Plan, 2011-2017* as extended.
- 7.4.6. Table 10.11 sets out the land use matrix, however none of the development types listed in the matrix are consistent with the form of development which is the subject of the current appeal. Specifically, there is no reference to wind energy, grid infrastructure or electricity infrastructure under the list of development types in Table 10.11. Development proposals must therefore be assessed on their merits by assessing whether the proposal has an adverse impact on the stated land use objective, in this case future agricultural development and rural amenity.
- 7.4.7. The proposed development comprises infrastructural works designed to facilitate the connection of renewable energy generation to the grid. Permission has already been granted for the renewable energy project in the form of the permitted 8 no. turbine Knocknamona WF (ABP Ref. PL93.244006) and this permission included a cumulative assessment of the environmental impacts of the development with other plans and projects including a grid connection option. It is therefore considered that the principle of a grid connection has been established. The specific impact of the proposed development on the agricultural zoning objective will be considered in more detail in subsequent sections.
- 7.4.8. With regard to the principle of renewable energy and renewable energy projects, there are a number of policies and objectives in the plan that are in my opinion consistent with the grid connection development which is the subject of this appeal. These include **Policy ENV 10** states that it is policy 'To facilitate and encourage

*sustainable development proposals for alternative energy sources and energy efficient technologies.'*

7.4.9. Paragraph 10.37 of the Plan relates to Wind Energy Development and states that all applications for wind farms and wind energy developments should be compatible with the County Waterford Wind Energy Strategy (Appendix A8 of Plan) and the Wind Energy Guidelines. Appendix A8 of the *Waterford County Development Plan, 2011-2017* contains a map that indicates the area of preferred wind energy development locations. The strategy identifies four distinct areas, as follows:

- Strategic Areas- (Areas coloured in Yellow on the attached map)
- Preferred Areas (Areas coloured in Blue on the attached map)
- Areas Open for Consideration (Areas coloured in green on the attached map)
- No-Go Areas (Areas coloured in Red on the attached map).

7.4.10. The exact location of the appeal site relative to this map is difficult to determine precisely, however it would appear to be located partially within the identified Strategic Wind Activity Zone, partially within the Open to Consideration Wind Strategy Zone and partially within the No Go Wind Strategy Zone. It is noted that the Knocknamona WF site which the grid connection is proposed to serve is located within an area identified as Strategic, and that permission has already been granted for this windfarm. In view of this fact, and the nature of the proposed development that does not have any significant above ground and hence landscape and visual impacts, it is my opinion that the proposed development is consistent with the wind energy strategy for the county.

7.4.11. With regard to comments made by the appellants (Michael and Giancarla Alen Buckley of Reid Associates) regarding conflicting objectives in the development plan and specifically conflicts between the zoning objective of the site for agricultural use and the heritage, environmental and landscape policies of the Plan, and the identification of the site as a strategic area for wind energy development, the case law cited is noted. With regard to zoning, while the site is located on lands outside of any zoned area, and therefore de facto zoned Agricultural use under the provisions of the plan, the proposed use is not listed in the zoning matrix. Such development proposals must therefore be assessed on their merits by assessing whether the

proposal has an adverse impact on the stated land use objective, in this case future agricultural development and rural amenity. Given the nature of the proposed development that comprises an underground cable, road widening works within private lands, the location of the development site within existing forestry area and the separation of the site from the closest residential properties, I do not consider that the development would be contrary to the land use zoning objective. Similarly, as will be discussed in more detail in subsequent sections of this report, I do not consider that the proposed development would be contrary to other policies and objectives contained in the Plan relating to heritage, environment and landscape and visual issues. For these reasons therefore, I do not agree with the contention of the third party appellants that there are clear conflicting objectives in the development plan that require refusal of permission in this case. Notwithstanding this conclusion, it is also noted that this issue was determined by Justice Houghton in the High Court judgement on the KWF development (2017 IEHC 145 – *Alan Buckley v. An Bord Pleanála*) where at paragraphs 59-60 it is clearly stated that the reconciliation of potentially conflicting policy on wind energy and visual impact was a matter for the Board to consider *'in the context of the facts arising from the proposed development and what would be proper planning and sustainable development of the area'*.

## 7.5. Access and Traffic

- 7.5.1. Consideration of the traffic and access implications of the proposed development should be read together with the assessment contained at section 8.5 of this report under the heading of EIA – Material Assets. Information related to traffic is contained at Chapter 12 of the EIAR under the heading of Material Assets, and also presented in the form of a Traffic and Transportation Assessment submitted as part of the response to further information and included at Tab B of the RFI submission (see separate RFI Volume in the application documentation on file).
- 7.5.2. As per the 2015 rEIS, the proposed delivery route for the permitted Knocknamona WF comprises a route that runs along the N25 and turning west at Pulla Crossroads to travel on the L2024, L8077 and L6077 to the main Knocknamona WF entrance. This route is shown on Figure 2.2 of the Traffic and Transportation Report. Construction materials from Cappagh Quarry would come north via the L2018 and



2019 to the N72 and via the R672 onto the N25 and access the site via the Knocknamona WF main site entrance.

- 7.5.3. What is proposed in the current application relates firstly to the construction access for the grid connection project and secondly a change for some of the materials connected with the construction of the Knocknamona WF, specifically oversized turbine components. The construction route for both construction of the grid connection project and the windfarm oversized components is proposed to be from the N25 (oversized components would arrive at Bellview Port) onto the N72 and R671. Traffic would then turn off at Clogh crossroads and follow the L6074 and 60741 for a distance of approximately 1.2km before accessing the grid connection and windfarm sites via the existing Woodhouse WF main entrance and access road. The originally proposed (2015 rEIS) and currently proposed Knocknamona WF turbine component haul routes are illustrated on Figure 4.2 of Volume C3 of the EIAR.
- 7.5.4. It is noted that as part of the response to further information, the original construction access to the Knocknamona WF Grid Connection site involved the use of the local road (L6074) to the north of the site in the townland of Keereen Upper. As part of the response to further information, this original route was revised with all traffic associated with the grid connection project now proposed to access the site via the existing Woodhouse WF main entrance and internal access road. No construction traffic is therefore proposed to use the narrow local road (L-6074) in the vicinity of Keereen Upper, however the result of this revised layout is that all traffic associated with the works at the substation compound have to cross the L-6074 at a point to the south east of the substation site.
- 7.5.5. From the above, it can be seen that the only section of road in the general vicinity of the current appeal site and the Knocknamona WF site where there is a potential overlap of construction related traffic between the grid connection project (and associated change in the oversized turbine components for the Knocknamona WF) and the Knocknamona WF itself is the section of local road (L-2018 and L-2019) that connects the Roadstone Cappagh Quarry with the N72.

- 7.5.6. The submitted Traffic / Transportation Assessment (included as part of the response to further information) includes traffic counts undertaken at 7 no. locations on the road network surrounding the Knocknamona WF and grid connection projects. The location of these traffic surveys is presented in Figures 2.6 and 2.7 of the Traffic / Transportation Report, and the results are presented in section 2.0 and Appendix B of the report. As noted at 2.8 of the report, all of the surveyed locations exhibit low to moderate levels of traffic for the category of road. For example, the N72 has a two way 24 hour AADT of just under 5,000 PCUs in the vicinity of the R671 junction, when the capacity of such a road is estimated at c.2,400 PCU's per hour. Similarly, the R671 has a 24 hour 2 way AADT of c.1780 PCUs with a maximum of 134 and 170 PCUs respectively in the AM and PM peak. Twenty four hour AADTs on the L6074 and L60741 local road ranges between 40 and 88. On the basis of the survey information presented I would agree with the traffic / transportation assessment that the existing traffic volumes on the surrounding road network are low and that the roads surveyed are significantly below capacity.
- 7.5.7. The junctions required to access the Knocknamona WF (oversized components) and the grid connection works comprise those at the N72 / R671, the R671 / L-6074, the junction at the entrance to the Woodhouse WF off the L60741 and the crossing of the L-6074 in the townland of Keereen, Upper. In addition, there is the junction of the local road and N72 that accesses Cappagh Quarry.
- 7.5.8. The existing N72 / R671 junction has been the subject of relatively recent works and was used for access at the time of the construction of the Woodhouse WF. A view of this junction is provided at Figure 2.8 of the Traffic / Transportation report and photographs attached with this report. The geometry of the junction is therefore suitable for the delivery of oversized components as proposed in the current application including turbine components for the Knocknamona WF. Similarly, the junction of the R671 and the L-6074 (Clogh Crossroads) has also been the subject of upgrading works which were undertaken at the time of the construction of Woodhouse WF. This junction is shown at Figure 2.9 of the Traffic / Transportation report and in the photographs attached with this report. On the basis of the information presented, this junction is also in my opinion capable of accommodating the oversized components proposed.

- 7.5.9. The existing access into the Woodhouse WF and the internal Woodhouse WF haul route was used for the construction access for the Woodhouse WF development. On the basis of the information presented with the application, this part of the access is suitable as a construction access for the Grid Connection Project and for the oversized components connected with the Knocknamona WF and grid connection project.
- 7.5.10. Third party submissions on file (notably that received from Michael and Giancarla Alen Buckley c/o Reid Associates) raise concerns regarding the safety of the construction traffic crossing the L-6074, and contend that this crossing point will lead to a traffic hazard. The issue of the crossing of the L-6071 by construction traffic is specifically addressed at section 6.5 of the submitted Traffic / Transportation Assessment. This section details the proposed use of signage and, given the very low existing traffic levels recorded at this point in the traffic surveys undertaken (survey location No.3 referenced at 2.16 of the Traffic / Transportation Assessment) with a 24hr. AADT of 13 PCUs recorded, and the fact that construction traffic crossing the public road at this point would only be that connected with the works to the Woodhouse Substation, I do not consider that there is a significant traffic safety issue likely to arise at this location.
- 7.5.11. The capacity of the above junctions was assessed in the Traffic / Transportation report by the assessment of trip generation from the proposed development and assignment to the existing network (section 4.0 of the Report) and modelling of the impact on the capacity of the junctions using PICADY analysis (see section 5.0 of the Traffic / Transportation Report). The trip assignment and generation calculations are illustrated at section 4.0 of the Traffic and Transportation Assessment and this section sets out a cumulative assessment of the construction of the grid connection project (including the proposed new haul route for the Knocknamona WF turbine components) at the same time as the construction of the Knocknamona WF. The methodology used in this assessment is in my opinion reflective of a realistic worst case scenario with construction of the grid connection and substation works overlapping with the construction of the Knocknamona WF. The assessment also notes the fact that the haul route from Cappagh Quarry to the N72 is the only area of potential overlap between the haul route for the grid connection project (including oversized turbine components) and the Knocknamona WF project. The results of

this assessment indicate that all of the main junctions on the grid connection project haul route would operate well below capacity at peak periods (see Tables 5.1 – 5.4 inclusive of the Traffic / Transportation Assessment submitted as part of the RFI) and such that no queuing would arise. I do not therefore consider that the works proposed as part of the grid connection project would have a negative impact on the road or junction capacity along the proposed haul route.

- 7.5.12. I note that the third party appellants (notably Michael and Giancarla Alen Buckley c/o Reid Associates) have raised a number of issues regarding the nature of road widening works that have occurred along the route and that these works, including the junction improvements at the R.671 / L-6074 junction were undertaken without the necessary consents. As set out at 7.4 above, these junction works were undertaken in connection with the Woodhouse WF permission which was granted by Waterford County Council and any issue regarding the legality of these works are an issue for the Planning Authority. Similarly, as also detailed in section 7.4 of this report above, I do not consider that there is any clear evidence that road widening works along public roads have been undertaken with the intention of facilitating the current proposed development or the Knocknoman WF developments. The first party refute this suggestion and, on the basis of the information available, I do not consider that there is any clear basis that the Board could determine that the appeal is invalid or refuse permission on this basis. Again, any incidence of such works would be an issue for the council as the roads authority for the area.
- 7.5.13. The issue of the pavement condition along haul route is addressed at Item C of the response to further information. This presents a condition survey of the haul route using a Pavement Condition Index (PCI) and comprises the sections of local road that are proposed to be utilised, namely the L-2018 and L-2019 in the vicinity of Cappagh Quarry, the L6074 and L-60741 between Clogh Cross Roads on the R671 and the Woodhouse WF main entrance and finally the short section of the L-6074 in the vicinity of the proposed crossing point at Keereen Upper. I note the fact that it was agreed by the local authority that the pavement condition survey would be restricted to the potential impact on local roads and this is considered appropriate. The results of the assessment submitted on behalf of the first party indicates that the pavement condition is very good in the vicinity of Clogh Crossroads and that the section of local road between this junction and the Woodhouse WF has already been

widened to a width of 5 metres. Pavement condition on the section of local road between the N72 and Cappagh Quarry (L-2018 and L-2019) is classified as good and the short section in the vicinity of the crossing of the L-6074 at Keereen Upper is classified as poor. My observations on site support these conclusions.

7.5.14. On the basis of the above assessment and from my observations of the road network at the time of inspection, I consider that the haul route along local roads is capable of accommodating the proposed construction traffic. In particular, I note the short distance of local road L-6074 and L-60741 between Clogh Crossroads and the Woodhouse WF site entrance where the access for construction traffic will be made and the fact that the originally proposed use of the L-6074 north of Woodhouse Crossroads and in the townland of Keereen Upper is no longer proposed to be used for construction access. Therefore, on the basis of the information available, I do not agree with the third party appellants that the local road network is not suitable to accommodate the traffic proposed. In the event of a grant of permission a condition requiring a pre and post development survey of the local road network should be required by way of condition.

## 7.6. General Ecology

7.6.1. The issue of biodiversity and ecology is addressed at Chapter 7 of Vol. C2 of the EIAR and figures associated with this topic are presented at section 7 of Volume C3 (EIAR Figures). Appendix 7.1 of the EIAR (Volume C4) contains an evaluation of the potential impacts on biodiversity and details of the bird survey data presented is presented at Appendix 7.2 of the EIAR. The following assessment should be read in conjunction with section 9.0 of this report relating to Appropriate Assessment which assesses the likely significant effects of the proposed development on European sites.

7.6.2. The general environs of the site are characterised by modified habitat as indicated on Figure 7.2 presented in Volume C3 of the EIAR. The route runs along existing forestry tracks with the exception of the c.190 metre long section of new forestry road proposed and the area within the existing Woodhouse Substation compound. Habitats along the line of the proposed cable connection comprise recently felled woodland and conifer planting along the main part of the cable route, scrub land on

the section of new forestry access track and modified grasslands in the northern end of the route. From an inspection of the site and the information presented with the application, I would agree with the assessment contained at Chapter 14 of the EIAR that the habitats in the vicinity of the site are of local importance. Similarly, on the basis of my inspection of the site and the information submitted, there are no fauna of particular ecological significance or importance recorded as using or likely to use the site and that could potentially be significantly impacted by the proposed development. Surveys for the Knocknamona WF project indicated the confirmed or likely presence of a number of species including otter, pine martin, hare, red squirrel, badger, hedgehog, stoat, fallow deer and pigmy shrew. The form of development proposed is such that the habitat for these species will not be significantly impacted post construction with the main construction areas being within the existing forestry roads and full reinstatement being undertaken.

7.6.3. During the construction phase itself, the construction activity is generally confined to the existing forestry tracks and modified areas. Some disturbance impacts during construction on the above species are possible, however no direct impacts are likely to arise and there is significant similar habitat in the vicinity of the site that would offset any short term construction related disturbance impacts arising. In the particular case of otter, while these species can forage over significant distances away from watercourses, the separation of the site from the closest watercourses (c.280 metres) and the fact that there are no watercourses or drainage channels that cross the works areas, means that impacts on this species are unlikely to be significant.

7.6.4. Appendix 7.2 of the EIAR sets out the bird surveys undertaken both for the grid connection project and the Knocknamona WF. A number of bird species of note were recorded in the general vicinity of the site including golden plover and hen harrier which were recorded in the vicinity of the substation site and the proposed new link road. Whooper Swan was recorded to the west of the site. The numbers of birds observed is low with 2 sightings of each of the plover and hen harrier over the 9 day winter surveys undertaken in 2018. The nature of the proposed development is such that the only area of direct impact on foraging habitat arising would be along the c.190 metre new forestry road connection. In general, the modified ground characteristic of the proposed works areas and close environs are of limited

significance for breeding or foraging habitat. The extent of habitat loss in these areas would be limited in the context of the overall extent of such habitat in the general area and the impact on these species post development is therefore considered to be very limited. Some disturbance impacts during construction will potentially arise, however the limited time period for construction, the nature and timing of the construction and the work being undertaken in segments of 50 metres maximum combine to limit the potential impact on bird species during construction. Overall, given the type and number of bird species recorded in the surveys, the limited significance of the habitats to local bird species and limited extent of habitat loss arising from the proposed development it is considered that the overall impact of the development on birds will not be significant.

- 7.6.5. I note that the third party appeal submitted on behalf of Michael and Grancarla Alen Buckley states that the issue of potential bird collisions and electrocution have not been addressed and should be undertaken in an integrated manner with the wind farms. The nature of the proposed development is such that no issues of collision risk or significant risk of electrocution arise, and such risks associated with the windfarm developments at Woodhouse and Knocknamona were the subject of assessment at the time of assessment of these projects. Given that there is no collision risk arising from the proposed development then there is no potential for any cumulative impacts to arise when considered in conjunction with the existing and permitted windfarms in the vicinity. The grid connection cable is proposed to run underground to the Woodhouse substation and additional plant within this substation comprise a second transformer and associated infrastructure. The additional electrocution risk to bird species arising from the proposed development is therefore considered to be very low.
- 7.6.6. Bat species were observed during transect surveys undertaken in 2017 and it would appear likely that the forestry access roads are used as foraging routes by bats. No structures that are potential roosts would be impacted by the proposed development and the one structure that is close to the site (the Woodhouse Substation control building) was the subject of survey that showed no sign of use of this structure as a roost. Trees in the vicinity of the site are conifer species which are not generally suitable as roosts and no evidence of such roosts were observed. On the basis of

the available information I do not therefore consider that the proposed development would have a significant impact on bats species.

7.6.7. The closest watercourse to the site is the Mountodell Stream that is located c.280 metres from the works area at the closest point. Consideration of the potential impact of the proposed development on watercourses in the vicinity of the site, with specific focus on the potential for these watercourses to act as a pathway to European sites, is considered in more detail in section 9.0 of this report under the heading of Appropriate Assessment. The degree of separation between the works areas and the closest watercourses, together with the limited extent of material that would be excavated at any one time and the nature of the existing forestry or recently felled forestry that adjoins the works areas is in my opinion such that there are no significant risks of contamination of surface watercourses in the vicinity of the site such as would impact negatively on aquatic species. On the basis of the information available, including an inspection of the appeal site and environs, I would therefore agree with the conclusion of Chapter 9 of the EIAK that the likely impacts on surface water is negligible.

7.6.8. Overall, on the basis of my inspection of the site and the information on file, I consider that any impacts on ecology arising as a result of the proposed grid connection project would be limited to the construction phase of the project. During the construction phase mitigation in the form of limited extent of construction activity at any one time (50 metre linear lengths) and the nature of the equipment proposed to be used which does not include rock breaking or piling, together with the separation from watercourses and the fact that no linear habitat features would be broken would result in the overall negative impacts on ecology being low.

## 7.7. Visual Impact

7.7.1. Issues relating to landscape and the visual impact of the proposed development are addressed at Chapter 14 of the submitted EIAR and Appendix 14. Figures relating to landscape and visual impacts are presented in Appendix 14 which show the location of the site relative to landscape designations and visually sensitive locations. The following sections should be read in conjunction with section 8.5.3 of this report below under the heading of EIA which relates to landscape and visual impacts. This



assessment under the heading of EIA specifically addresses the issue of potential cumulative visual impacts arising. Concerns regarding the impact of the proposed development on the landscape are raised in a number of third party submissions on file, notably those of Valerie and Liam O'Donnell, Anna Maria Cloona and Niamh and Mark Kuhne, albeit that the concerns relate mainly to the indirect visual effects of the proposed development and the fact that it would facilitate additional wind turbines.

7.7.2. The nature of the proposed development is such that the above ground elements of the project are limited to the additional transformer and associated infrastructure proposed to be located within the existing Woodhouse WF compound. Section 14.2.1.1 of the EIAR sets out how the study area examined for landscape impacts is confined to 500 metres for construction phase impacts and 2km for operational phase impacts. The context for the assessment of landscape and visual impacts includes that the part of the cable route would pass through areas that are identified as sensitive in the landscape character assessment referenced in the development plan (see Fig. 14.2.1 of Volume C3 of the EIAR). In these areas, however the context is one of woodland with a high degree of screening afforded by the existing forestry. Construction phase excavations would therefore be largely screened and on completion of the proposed development and reinstatement of the ground along the forestry tracks, no operational phase visual or landscape impacts are considered likely to arise.

7.7.3. At the northern end of the proposed development site, the construction of a new forestry track of length c.190 metres across an existing sloping area of scrub would have some potential visibility and therefore visual and landscape impacts when viewed from the north west in the Keereen Upper area. Works in this area and along the track running north to the Woodhouse substation including crossing of the L-6074 would have some potential negative impact during the construction phase of the grid connection project. These impacts would however be short term in duration and would not have a significant negative impact on visual amenity or landscape quality. At operational phase, the proposed new area of track is across already modified forestry lands and the new track would be a consistent feature with the existing forested nature of the environs. The proposed cable connection would be buried in this proposed new and existing tracks and would not be visible. The overall

landscape and visual impacts of this aspect of the proposed development is therefore considered to be negligible.

7.7.4. The main potential landscape and visual impact arising from the proposed development relates to the additional plant and equipment proposed to be added to the Woodhouse substation compound. These construction works in this area will have a potential slight negative impact during construction. At operational phase, the scale of the proposed additional equipment, and its location within an existing compound is such that significant negative landscape and visual impacts are not considered likely to arise. The site is visible from locations to the west and north in particular, however the nature and scale of the proposed additional equipment is in my opinion such that it would blend in with the existing substation compound and equipment in this location and such that significant additional landscape and visual impacts would not arise.

#### 7.8. Impact on Residential Amenity

7.8.1. All of the third party appeals submitted raise concerns regarding the impact of the existing Woodhouse WF on residential amenity and the potential for the Knocknamona WF to add to issues of residential disamenity. While the proposed grid connection project will facilitate the connection of the Knocknamona WF development to the national grid and the windfarm could not be commissioned with the grid connection, it should be noted that the issues regarding turbine noise, shadow flicker and landscape issues arising from turbines in the landscape have no direct connection with the application which is the subject of this appeal. These issues were the subject of assessment at the time that the Woodhouse and Knocknamona WF developments which were permitted by the Planning Authority and An Bord Pleanála respectively. In stating this, where the proposed grid connection project has the potential to give rise to impacts that could have a negative impact on residential amenity (such as noise), the potential for cumulative impacts in these areas is clearly relevant and is assessed in detail in section 8.0 of this report under the heading of EIA.

- 7.8.2. The nature of the proposed grid connection project, and specifically the fact that it does not include any proposed turbines, is such that no issues of shadow flicker arise. Concerns raised in the third party appeals on this issue are noted, however it is considered that this issue has been addressed in the assessments and decisions issued relating to the Knocknamona and Woodhouse windfarms.
- 7.8.3. Similarly, in the case of visual amenity, as no additional turbines are proposed as part of the development, which is the subject of this appeal, the development will not result in any direct addition to the existing or permitted extent of wind turbines in the general area. As with the case of shadow flicker, the visual impact of Knocknamona and Woodhouse windfarms was assessed at the time of the granting of permission for these developments and was considered to be acceptable. The visual impact of the proposed grid connection project, the subject of the current appeal, is addressed at section 7.7 of this report above and is in my opinion acceptable. Section 8.5.3 of this report below considers landscape impacts under the heading of EIA. As set out in that part of the assessment, I do not consider that the proposed grid connection project would have any significant negative impacts on landscape or visual amenity of the area and that the cumulative landscape and visual impacts of the grid connection project taken together with other permitted and existing plans and projects (including the Woodhouse WF, Knocknamona WF and Woodhouse substation) are not such as to have a significant negative impact on landscape or visual amenities of the area. For this reason, I do not consider that the proposed development can be considered to have a negative impact on the residential amenity of properties in the vicinity of the site by virtue of negative impact on visual amenity, landscape character or visual intrusion.
- 7.8.4. With regard to noise, the proposed grid connection project will have some potential impacts in terms of noise generation, and therefore has a potential to generate cumulative noise impacts with permitted (Knocknamona WF) and operational (Woodhouse WF and Woodhouse substation) developments in the vicinity. These cumulative noise impacts are the subject of detailed assessment at section 8.4.3 of this report under the heading of EIA - Air and Climate.

- 7.8.5. In summary, the potential for operational noise impacts arises from the noise that would be emitted from the additional plant to be installed at the Woodhouse substation site. The information presented at Section HI of the response to further information includes a noise survey undertaken over 7/8th August 2019 at the nearest noise sensitive location, which is the house located c.330 metres to the west of the construction area at the substation compound. The results of this survey indicate that the LAeq level for daytime hours is an average of 45dB(A) with an LA90 average of 41dB(A). For the night-time hours, the equivalent figures are 42dB(A) and 33dB(A). These figures are noted, as is the methodology used in the assessment which is considered appropriate.
- 7.8.6. The Noise Assessment undertakes a modelling exercise of the additional equipment proposed to be installed in the substation compound, and the output of the noise assessment modelling indicate an existing night time background level of 25dB(A) pre development and this increasing to 28dB(A) post development. This increase of 3dB(A) does represent a doubling of the sound level, however this increase is such as to be just about perceptible to the human ear. In addition, the predicted noise level at N1 (nearest residential property c.330 metres to the west of the substation compound) at 28dB(A) is very low and is well below what would be considered to be a level that would be considered to have a potential to cause a nuisance or loss of amenity. Finally, the predicted noise level (28dB(A) at N1) has to be seen in the context of the recorded background noise levels, with an average night time noise level is 42dB(A), and therefore well above the predicted 28dB(A). Taken at an average night time basis therefore the ambient background noise would be well below the predicted noise and would, as indicated in section 3.2 of the noise report submitted, indicate a low impact. Overall, therefore, on the basis of the information presented, I consider that the likely operational phase noise impact at the nearest noise sensitive receptor would be negligible.
- 7.8.7. It is also noted that the bulk of properties occupied by the third party appellants are located at a significantly further separation from the substation compound (and therefore the operational phase noise source generated by the proposed development) than location N1 as assessed above and therefore such that no notable increase in noise would arise. As presented in detail at section 8.4.3 of this assessment under the heading of EIA, given the separation of the appellants

properties from the substation compound and the fact that no notable increase in noise arising from the proposed development is predicted to arise at these locations, then there is not in my opinion potential for any significant cumulative noise impacts together with the existing (Woodhouse) and permitted (Knocknamona) windfarms to arise at appellant's properties.

#### **7.9. Other Issues and First Party Appeal Against Conditions Nos. 4 and 6**

- 7.9.1. The first party (Knocknamona Windfarm Limited) has submitted an appeal against conditions Nos. 4 and 6 attached to the Notification of Decision to Grant Permission issued. The grounds of appeal relate to the requirements of Conditions Nos.4 and 6 attached to the Notification of Decision to Grant Permission. Condition No.4 requires that the authorised grid connection and substation shall operate for no more than 25 years from the date of which electricity is first exported from the windfarm permitted under ABP Ref. 244006 unless a separate grant of permission is granted. Condition No.6 requires that prior to the commencement of development, the developer shall submit to and agree in writing with the Planning Authority, a plan for the decommissioning of the authorised development and the reinstatement of the site.
- 7.9.2. The basis of the first party appeal is that the Knocknamona WF Grid connection application the subject of appeal involves works and the installation of additional equipment within the already operational Woodhouse substation. These works / equipment will, on completion be taken over by ESB Networks and it is contended that it would not be the norm to include operational time limits or decommissioning conditions on substations that are operated by ESB Networks and Eirgrid. It is also noted that Woodhouse substation as permitted under Waterford County Council Ref. 11/355, does not have any conditions that restrict operational life or any conditions relating to decommissioning. The basis of the appeal is supported by an observation on file submitted by Eirgrid which states that the Woodhouse substation will eventually transfer ownership to the ESB and become an operational asset on the transmission network operated by Eirgrid, and is expected to continue to operate as an asset on the transmission network beyond the lifetime of the windfarm.

- 7.9.3. The third party response to the first party appeal submitted by Reid Associates on behalf of all of the third party appellants raises a number of issues including some that were raised in the original third party appeal submissions. These issues include project splitting, that the development is tied to and is not severable from the original grant of permission which was made on the basis of the grid connection as indicated in the rEIS submitted with Ref. PL93.244006 and that without the information regarding the grid connection and the haul route submitted as per the rEIS, Knocknamona WF would have been refused permission. These issues of project splitting and the degree to which the haul route and grid connections indicated in the rEIS limit the scope of the current application have been addressed in section 7.3 of this report above.
- 7.9.4. The third party response to the first party grounds of appeal contends that the appeal as submitted (omission of the need for decommissioning) is outside the scope of the public notices for the development which clearly refers to the export of electricity from the Knocknamona WF to the grid at Woodhouse substation. Similarly, this response to the first party appeal also contends that fact that the substation is to be taken over by ESB Networks and then operated as part of the transmission system separate from the windfarm requires that the permission sought should have been different. I do not understand exactly what point is being raised by the third party in this regard, and do not see how specific reference to the future ownership or the absence of decommissioning of the development would require to be specifically referenced in the public notices for the proposed development. Similarly, from my reading of Condition No 6 regarding the reinstatement of the site, I do not see how Condition No 6 is contrary to the Aarhus Convention as contended by the third party appellants.
- 7.9.5. The third party appellant is clearly concerned that the proposed substation would be used as a node on the transmission network that would be used to connect other wind energy or other renewable energy developments to the grid. This concern has already been addressed at section 7.3 of this report above, and it is my opinion that any such future use of the substation is firstly, not proposed as part of the current application, and that secondly, the additional infrastructure proposed within the substation compound is such as to provide for the connection of the permitted Knocknamona WF development to the grid and that there is no indication that

additional infrastructural capacity within the substation is being provided. Finally, and most significantly, any future renewable energy development and associated grid connection would require permission and would likely require EIA and an assessment of cumulative impacts of such development with existing and permitted plans and projects. The fact that permission for the works within the substation would not be time limited or subject to a condition regarding reinstatement would not therefore in my opinion act to facilitate any future additional renewable energy development in the vicinity of the site.

- 7.9.6. Having regard to these issues and to the fact that there is no time limit on the operation of the existing Woodhouse substation and that this piece of infrastructure is proposed to transfer in ownership to the ESB and be operated by Eirgrid in the future, I do not consider that it is appropriate that a part of the transmission network would be limited to 25 years in terms of its operational life. The fact that control of the infrastructure within the compound would transfer away from the current applicant means that there would, in my opinion be issues of implementation of the condition and, in any event I do not consider it desirable or necessary that a part of the transmission network would be time limited in the way required by Condition No.4. The period of 25 years is consistent with the time period specified in Condition No. 4 attached to Ref. PL93.244006 (Knocknamona WF development).
- 7.9.7. As part of the first party appeal, the first party has suggested revised wordings for Conditions Nos.4 and 6 which clarify that the requirements regarding limit of operational life to 25 years and the requirement for a decommissioning plan relate solely to those parts of the development outside of the substation site. Revised conditions along these lines are in my opinion appropriate and would ensure that private development connected with the Knocknamona WF would be time limited and the subject of restoration while omitting the part of the development which will comprise a node on the transmission network.
- 7.9.8. I note that Condition No.3 attached to the Notification of Decision issued by the Planning Authority relates to the appropriate period within which the development must be carried out and specifies that this period shall match with that for the Knocknamona Windfarm development permitted by the Board under Ref. PL93.244006. Given the nature of the subject development which comprises a grid connection to serve this permitted windfarm development , it is considered

appropriate that the duration of permission would be drafted to correspond with that of the permitted windfarm. In the event of a grant of permission, it is therefore recommended that a condition specifying that the development permitted may be carried out for a period of 6 years from the date of the order which would bring the permission period just beyond that of the windfarm. In this regard, I note that the wording of Condition No.3 as attached to the Notification of Decision to Grant Permission makes reference to a date of 13<sup>th</sup> December, 2026 as being 10 years from the granting of permission when the wording of Condition No.3 attached by the Board to Ref. PL93.244006 makes reference to 10 years from the date of the Board Order in that case which would bring the permission up to 22<sup>nd</sup> November, 2026.

## 8.0 EIA

### 8.1. Introduction

8.1.1. As a standalone project, the development the subject of this appeal, namely the Knocknamona Windfarm Grid Connection, is not of a class of development that is listed in Annex I or Annex II of Schedule 5 of the Planning and Development Regulations, 2001 (as amended). With regard to other aspects of the proposed development, it is noted that Class 10(d) of Part 2 of the Fifth Schedule comprises private roads that exceed 2,000 metres in length. The length of the private road proposed in this case is approximately 190 metres and is therefore very significantly below the threshold for the purposes of EIA. Notwithstanding these facts, the application as submitted to the Planning Authority, and which is now the subject of appeal, is accompanied by an EIAR. It is stated by the first party that the EIAR was prepared and submitted at the request of Waterford City and County Council and having regard to the fact that the grid connection application is part of a larger project (Knocknamona WF) which required EIA, and in order that the environmental impacts of the proposed development together with other existing and permitted developments can be considered. In circumstances where an EIAR has been submitted it is required that the Board consider its contents and compliance with the relevant requirements of the Planning and Development Act and Regulations. This is undertaken below.



8.1.2. The application is accompanied by an EIAR prepared by Knocknamona Windfarm Limited with the additional input of relevant experts as detailed at Table 2.2 of Volume C2 of the submitted EIAR Main Report. The identity of these relevant experts is noted and considered to comply with the requirements of the directive. The EIAR is contained at Volume C of the application documentation, and contains the following elements:

- Volume C1 EIAR Non Technical Summary
- Volume C2 EIAR Main Report
- Volume C3 EIAR Figures
- Volume C4 EIAR Appendices

8.1.3. The application has been prepared under the provisions of the 2014 EIA Directive and I have undertaken an examination of the information presented by the applicant including the EIAR and the submissions made during the course of the appeal. A summary of the results of the submissions made by the Planning Authority, prescribed bodies, appellants and observers has been set out at sections 3.4 and 6.0 of this report. The main issues raised with regard to EIA can be summarised under two headings, the first relating to general EIA issues, project splitting and the relationship of the proposed development to surrounding project and the second issues that relate specifically to the submitted EIAR and the development the subject of the current appeal. The main issues raised relating to EIA can be summarised as follows:

**General EIA Issues**

- That the approach taken results in project splitting for the purposes of EIA,
- That there is a change in the proposed grid connection and haul route proposed from that previously indicated and subject of EIA which acts to invalidate the previous EIA and permission granted.
- That the proposed development is part of a wider project that now includes the Woodhouse WF, Knocknamona WF and Woodhouse substation and that a new EIA to cover all these projects is required.

These general EIA issues including project splitting and the relationship of the project to surrounding developments have been addressed at section 6.3 of this report above, specifically under the heading of Project Splitting and Cumulative Assessment of Impacts and are not therefore considered further in this section.

### ***Issues Relating to Submitted EIAR***

- That the submitted EIAR contains fundamental deficiencies and the cumulative impact of the development have not been properly identified.
- That the assessment under the heading of Population and Human Health is confined to the grid connection and haul route but should assess the impact of the totality of the project including the Knocknamona WF, Woodhouse WF and Woodhouse Substation.
- That the issue of residential amenity is not addressed in the EIAR,
- That the assessment of noise impact is unsatisfactory including the consideration of cumulative impacts.
- That the application lodged, and the decision issued, contain completely inadequate data and assessment relating to noise. The issue of tonal and low frequency noise is not addressed.
- Operational noise from the Woodhouse wind farm is excluded from the assessment on the basis that the grid connection does not give rise to a discernible impact and that therefore there will be no cumulative impact.
- That the further information request was not confined to substation noise only and requested sound contour mapping. The response did not consider the cumulative impact of the overall sound environment and no attempt made to allow for tonal, low frequency or other component to noise.
- The assessment under the heading of Landscape and Visual Impact is inadequate particularly with regard to cumulative impacts.

These more specific issues relating to EIA and the submitted EIAR are addressed below under the relevant headings, and as appropriate in the reasoned conclusion and recommendation, including conditions.

8.1.4. With regard to ***cumulative impacts*** and the assessment and presentation of same in the submitted EIAR, I note the concerns raised by the third party appellants (notably the submission of Reid Associates on behalf of Michael and Giancarla Alen Buckley) and the statement that the cumulative impacts of the proposed development in conjunction with other permitted plans and projects have not been properly assessed or presented. My reading of third party appeals, and specifically that submitted by Reid and Associates on behalf of Michael and Giancarla Alen Buckley, is that under a number of environmental headings what is sought in relation to cumulative assessment effectively amounts to a revisiting of the assessment of the constructed Woodhouse WF, and Woodhouse substation and the consented Knocknamona WF. The thrust of the argument presented is that the actual environmental impacts arising, specifically under the heading of noise, are not consistent with the information presented and the assessment undertaken at the time that these developments were permitted. The purpose of a cumulative assessment is not however that full environmental assessment of permitted projects would be undertaken again. Rather what is required of the applicant in this case is that the full environmental impacts of the proposed grid connection project are detailed and that this is used to inform an assessment of the likely cumulative environmental impacts of the proposed development together with permitted plans and projects. Where the environmental impacts of the proposed development are found to be imperceptible or very minor, it is not possible that significant cumulative environmental impacts could arise. In my opinion, the presentation of information in the EIAR relating to cumulative impacts is clear. The main Volume of the EIAR (Volume C2) presents cumulative impacts in a consistent manner at the end of each section (for example 8.2.2.2 relating to land and soils and 10.2.2.2 relating to air). These sections clearly and separately set out the predicted cumulative impacts of the Grid Connection Project with firstly the Knocknamona WF and, secondly and separately, with the Woodhouse Windfarm and Woodhouse substation developments. In each case, this cumulative assessment is supported and elaborated on in the relevant section of the EIAR Appendices document (Volume C4) (e.g. Appendix 8.1 relating to Land and Soils Tables 1-6 and Appendix 10.1 relating to Air Tables 1-9). The approach used is in my opinion comprehensive, beneficial to the overall assessment of the proposed development and consistent with the

requirements of the 2014 EIA Directive (2014/52/EU) and Article 94 of the Planning and Development Regulations, 2001 (as amended).

8.1.5. With regard to **Alternatives**, as the EIAR is submitted in accordance with the requirements of Directive 2014/52/EU, what is required is a description of the reasonable alternatives studied by the developer which are relevant to the project and its specific characteristics and 'an indication of the main reasons for the option chosen, taking into account the effects of the project on the environment'. Consideration of alternatives is presented at Section 4 of the submitted EIAR and incorporates the following:

- Alternative connection point to the national grid transmission network
- Alternative grid connection type (i.e. overground vs underground option) and
- Alternative haul route for construction activity at the site.

In my opinion these aspects of the proposed development comprise the alternatives that are relevant to the form of development proposed.

8.1.6. Paragraph 4.2 of the submitted EIAR and the first party response to the grounds of appeal set out the rationale for the grid connection location proposed and why the grid connection via the Dungarvan substation which was indicated in the rEIS submitted to the Board under Ref. PL93.244006 was not now proposed. Specifically, the information presented in the EIAR and first party submissions on file details how the connection to Dungarvan involves a connection route of c.11.5km mainly along existing public roads. The submission also details how the current proposed route to the Woodhouse substation was not available at the time of the previous application as the Woodhouse substation had not been constructed or commissioned, and the grid connection offer that the applicant had was for a connection via the Dungarvan substation. Any alteration to this connection specified in the connection agreement is subject to the agreement of the system operator and compliance with a number of criteria. Alternatively, the proposed route involves a c.2km connection route to the Woodhouse substation that, with the exception of the crossing of the L-6074 in the townland of Keereen Upper, generally avoids public roads. On the basis of the information available, these two connection points are the

only viable alternatives available. Section 4.2 sets out a comparison of the proposed connection to Woodhouse relative to that previously proposed to Dungarvan substation. This indicates that the likely environmental effects of the connection to Dungarvan are more significant, particularly in the areas of water quality and impact on cultural heritage sites. These results of the comparison between the two connection routes are noted and generally accepted such that I do not consider that there is an alternative grid connection route that would clearly have a lesser environmental impact than the option proposed.

- 8.1.7. Alternative grid connection technologies are set out at Paragraph 4.3 of the submitted EIAR and this section sets out a comparison of the potential environmental impacts of possible overground and underground connection options to Woodhouse substation. The overground option would have some additional negative impacts relative to the underground method proposed, particularly with regard to likely effects on the landscape and such that I do not consider that there is an alternative grid connection type that would clearly have a lesser environmental impact than the underground option proposed.
- 8.1.8. Alternative haul routes for oversized turbine components are set out at paragraph 4.4 of the EIAR. The route indicated under Ref. PL93.244006 proposed access via the Knocknamona WF site entrance at Knocknaglogh Lower on the L6077, while the alternative proposed in the current application is for access for oversized turbine components to be via the Woodhouse WF main access on the L60741. This alternative access involves a reduced distance on local roads and does not require any road widening or improvement works to be undertaken. On the basis of the information available, I do not consider that there is an alternative haul route that would clearly have a lesser environmental impact than the option proposed.
- 8.1.9. With regard to the vulnerability of the project to **Major Accident Hazards, Natural Disasters and Climate Change**, the appeal site is not located close to and the proposed development is not connected with any Seveso establishment or activity. The nature of the construction and final development in terms of emissions and storage of materials is such that the development is not vulnerable to a major accident hazard. No element of the proposed development is located within an identified flood extent area and no flood events are recorded for the immediate vicinity of the site and ground investigations do not indicate any ground or slope

failures or the presence of peat in the vicinity of the site. Having regard to these factors, it is considered that the risk of major accident hazards or potential implications arising from natural disasters and climate change are negligible.

8.1.10. In conclusion, I am satisfied that this EIAR has been prepared by competent experts to ensure its completeness and quality and that the information contained in the EIAR and supplementary information provided by the first party, adequately identifies and describes the direct, indirect, and cumulative effects of the proposed development on the environment and complies with the requirements of Article 94 of the Planning and Development Regulations, 2001 (as amended).

## 8.2. Population and Human Health

8.2.1. The proposed development will have impacts on economic activity during both the construction and operational phases. At construction, the proposed development will lead to economic impacts in the form of positive impacts on employment and suppliers during the construction phase and increased revenue for the local authority and landowners during operation when the Knocknamona WF is operational. It is not considered that the proposed development and the associated Knocknamona WF would have any likely significant impact on local employment.

8.2.2. The development is not considered to be such that it will result in a change in the pattern of land use or types of activity in the local area and no issues of loss of rights of way or severance will arise. The main land uses in the vicinity of the site will remain commercial, forestry and agricultural activities, and the proposed development will not have any significant adverse direct or indirect impacts on these established uses. Given this, the cumulative impacts of the proposed development on land use, taken together with the existing Woodhouse windfarm, Woodhouse substation and proposed Knocknamona windfarm is not considered to be significant.

8.2.3. With regard to tourism, the proposed development would not have any likely significant impact on the attractiveness of the area for tourism or leisure use. The Sean Kelly cycle route runs to the north west of the site at a separation of c.1.2km from the appeal site at the closest point. This route runs along a c.2km section of the R.671 which is proposed to be part of the oversized turbine component haul route and therefore there is some potential for vehicular conflicts and negative

impact on the use and amenity of this route to occur during the construction phase of the proposed development and the associated Knocknamona WF. Similarly, the Saint Declan's Way pilgrim route runs to the west of the site in the Woodhouse / Keereen Upper areas and some slight negative impacts on the amenity of this route during construction would arise. In both cases, the post construction impacts would be imperceptible and the overall impact of the proposed development on tourism is also considered to be imperceptible. Given this, the cumulative impacts of the proposed development on tourism taken together with the existing Woodhouse windfarm, Woodhouse substation and proposed Knocknamona windfarm is not considered to be significant.

- 8.2.4. With regard to **human health**, the proposed development will have a potential impact on surrounding populations in terms of noise and emissions during the construction phase of the project. The construction phase will be limited to approximately 2 months for the cable and forestry access road works, 4 months for the works at the substation and 3 months for the delivery of abnormal loads (EIAR, paragraph 5.3). The exact timing of the proposed works, and the degree to which they will overlap is not yet clear, however the timelines are such that construction related impacts will be relatively short term in duration.
- 8.2.5. Construction phase traffic impacts will potentially arise along the haul route comprising the N72, R671, and short distances along the L6074 and L60741. A total of 72 no. abnormal loads undertaken during daytime hours are envisaged for the construction of the Knocknamona WF. Potential impacts are considered to be temporary and minor adverse in the case of the limited number of residential properties located along the local road between the R671 and the entrance to the Woodhouse WF.
- 8.2.6. As is discussed in more detail in Section 8.4 of this assessment below under the heading of Air, the noise impact of the proposed development at construction phase is not considered to be such as would have any significant negative impact on population in the vicinity of the site. In particular, construction will not require the use of any rock breaking equipment and the separation between works areas and the nearest noise sensitive receptors are such that significant negative impacts in terms of noise or other emissions to air will not arise. During the operational phase, the impact of the development on human health is not considered likely to be significant.

- 8.2.7. Similarly, no negative impact on population or human health arising from water pollution are considered likely to occur and consideration of the impact of the proposed development on water is also considered in more detail at section 8.4 below.
- 8.2.8. As detailed at 8.1 above, the proposed development is not considered to be such as to have the potential to lead to major accident hazards or to be susceptible to natural disasters or climate impacts and it is therefore not considered that the any such impacts could act negatively on population or human health.
- 8.2.9. I note that the third party appellants contend that the assessment under the heading of Population and Human Health is confined to the grid connection and haul route but should assess the impact of the totality of the project including the Knocknamona WF, Woodhouse WF and Woodhouse Substation. This point is noted, however these issues relating to population, and impacts on air (specifically noise) were considered at the time of assessment of the Knocknamona WF under Ref. PL93.244006 and it was determined by the Board that the impacts on population and air / noise (human health was not a specific factor as the assessment was undertaken under the 2011 Directive) were acceptable and not such as to merit refusal of permission. In the case of the current application, as will be set out in more detail in section 8.4 under the heading of Air, the impact of the proposed development on noise and air quality is such that there will be a negligible impact on sensitive receptors in the vicinity and therefore a negligible adverse impact on human health. Given this, and the fact that the noise and other environmental impacts related to the Knocknamona WF that could be considered to combine to impact on human health were considered to be acceptable under Ref. PL93.244006, it is not considered that the cumulative impact on human health, including the specific projects cited by the third parties, would be significantly negative. Given this cumulative assessment, the appellants are not in my opinion correct to state that the assessment under the heading of Population and Human Health is confined only to the grid connection and haul route.
- 8.2.10. I also note that the third party appellants contend that the issue of residential amenity is not addressed in the EIAR. In my opinion considerations of residential amenity and impacts on residential amenity cross a number of the factors of the environment as set out in the Directive 2014/52/EC for inclusion in the EIAR and consideration by



the competent authority. There is no specific category for residential amenity. Issues relevant to residential amenity occur under a range of factors of the environment including population and human health, air, material assets and the landscape. As set out in the sections above, I do not consider that the proposed development would have a significant adverse impact under the heading of Population and Human Health, and therefore do not consider that issues for consideration under this heading would lead to a negative impact on residential amenity. Potential impacts on residential amenity will be addressed as they arise under the relevant sections of this assessment below and are also specifically addressed at Section 7.7 of this assessment above under the heading of General Assessment – Residential Amenity.

8.2.11. In conclusion, on the basis of the information submitted with the application including that in the EIAR, the submissions on file and observations at the time of inspection of the site, I do not consider that the proposed development would have any significant adverse direct or indirect effects on population and human health. Given the limited impacts predicted under this factor of the environment I do not consider that significant cumulative impacts are likely to arise when the proposed development is considered together with other permitted plans and projects in the vicinity, including in particular, the Knocknamona WF, Woodhouse WF and Woodhouse substation.

### 8.3. Biodiversity

8.3.1. The impact of the proposed development on biodiversity is addressed at Section 7 of the EIAR and this section relating to biodiversity should be read in conjunction with section 7.6 of this assessment above under the heading of Planning Assessment – General Ecology and section 9.0 below under the heading of Appropriate Assessment – Screening.

8.3.2. The nature of the existing habitat within the study area identified in the EIAR is set out at Table 7-8 and indicates that, within the proposed works area, the majority of the area (57 percent) comprises buildings and artificial surfaces. This is reflective of the nature of the proposed substation works which are within an existing compound where the ground has been disturbed, and the existing forestry tracks which comprise crushed and compacted limestone. Scrub (14 percent) and dry humid acid

grassland comprise the next most significant habitats are characteristic of the margins of the existing tracks. The existing habitat has therefore been extensively modified and is such that it is not unique and is of local significance.

- 8.3.3. The proposed development is not located within or close to any European site. As per the screening for appropriate assessment set out at section 9.0 of this report, the proposed development is not considered likely to have significant effects on any European sites in light of their conservation objectives.
- 8.3.4. **Terrestrial habitats** were the subject of survey at the time of the 2014/2015 Knocknamona WF application and these survey results were reviewed in 2019. The proposed development will largely be undertaken within the existing forestry roads and immediate verge areas in the case of the proposed widening of the existing track. These areas are already disturbed in the case of the forestry track and are of limited importance as habitats. Habitats within the wider area include commercial forestry and managed grassland resulting in habitats of low biodiversity value. I note and agree with the assessment at 7.2.1.3 of the EIA that the overall level of biodiversity value of terrestrial habitats within the study area is low.
- 8.3.5. Potential impacts on these habitats during construction relate to direct habitat loss, severance and fragmentation, loss of trees and the potential for the introduction and / or spread of invasive species. Operational phase impacts would be limited to a loss of habit. Works will primarily be within existing forest tracks and substation compound and would not result in any permanent change in habitat type. No habitat severance or fragmentation would arise. The spread of invasive species is proposed to be controlled by the cleaning of all equipment before it enters the works area. Given these facts and the low habitat significance, while some short term construction impacts may arise, I agree with the conclusion set out at Table 7-10 of the EIA that the impact on terrestrial habitats arising from the proposed development would be no greater than imperceptible.
- 8.3.6. With regard to **birds**, the EIA is based on bird surveys undertaken in connection with the Knocknamona WF in 2010, 2013 and 2014 and additional summer and winter bird surveys were undertaken in 2018. Bird species observed at the site include a number of red listed species, namely meadow pipit, curlew and woodcock.

- 8.3.7. Potential impacts on birds arise from the potential for habitat loss and disturbance arising from construction due to noise and visual disturbance. The primary potential impacts arising from the proposed development relate to the construction period and no significant impacts are considered to be likely during the operational phase as there will not be significant permanent loss of bird habitat and any such habitat lost would be minor in scale and not unique in the local area. Based on the recorded and observed habitats in the works areas and environs of these areas, the low significance of these habitats in terms of uniqueness and importance as bird habitat and the temporary and minor nature of the change to these habitats I would agree with the conclusion of the assessment contained at 7.3.2 of the EIAR that the maximum potential impact on birds arising from the proposed development would be imperceptible to slight. On completion of the project and reinstatement of the works areas, no significant operational phase impacts on birds are considered likely to arise.
- 8.3.8. With regard to **mammals**, surveys of the site identified the presence of bats, in particular common pipistrelles, soprano pipistrelle and leisler's bat. There is potential for these species to be impacted during the construction phase by the potential disturbance of roosts and disturbances of foraging paths. Other species identified during the course of the desktop and site survey include otter, pine martin, hare, badger and deer. Baseline information for the EIAR is from 2013 mammal surveys undertaken as part of the Knocknamona WF EIAR augmented by 2019 field survey data.
- 8.3.9. Potential impacts on mammals arise from potential loss of habitat and indirect impacts due to noise and disturbance, both of particular relevance during the construction phase. Potential impacts during the operational phase are limited due to the reinstatement proposals for works areas, the limited permanent change in habitat composition and the relative abundance of habitats potentially lost in the general area.
- 8.3.10. Impacts on **bats** are not considered likely to be significant. No structures or features (bridges / trees etc) of significant roost potential were identified in the vicinity of the works areas and specific surveys in the vicinity of the only structure (the substation building) did not indicate likely use as a roost. Construction works will only occur

during daylight hours and over a limited time period and the potential for impacts on foraging is therefore limited.

8.3.11. The potential for **otter** to occur is noted in the EIAR, however this species was not observed in either the surveys for both the Knocknamona WF or the current project. Given the c.280 metre separation between the works areas and the nearest watercourse, and the fact that the proposed development will not have any direct impacts or likely significant indirect impacts on any watercourses, significant impacts on otter is not considered likely. Similarly, pine martin is not extensive in the vicinity of the site and is not considered likely to be impacted at operational phase. The nature and timing of the construction activity is such that significant negative impacts on this species are not considered likely. Other species identified as confirmed or potentially being in the study area are of local importance (lower value) and given the nature and timing of the proposed construction works, significant negative impacts are not considered likely to arise.

8.3.12. With regard to **aquatic habitats**, there are no watercourses or drainage channels in immediate or close proximity to the appeal site and proposed works areas. No direct impacts on aquatic habitats are therefore likely to arise. The nearest surface water feature to the proposed works areas is the Mountodell Stream (The Roaring Waters as identified on the OS map) that is located c.280 metres to the east of the works area at the closest point and which drains an area of the permitted Knocknamona WF site to the south east of the appeal site. This watercourse ultimately connects with the River Brickey c.2km away. The Monageela Stream drains the southern part of the grid connection works area and is located such that it is within 350 metres of the works area at the closest point. This stream connects with the Goish River. The Clashnadriv Stream drains the northern part of the grid connection works site and this river and ultimately discharges to the Finisk River. Both the Goish and Finisk Rivers discharge into the River Blackwater. Section 7.5.1.2 of the EIAR identifies species likely to be present within the above watercourses as including small numbers of brown trout. Further downstream the available information indicates that the systems support Atlantic Salmon and sea trout species. These species are identified in the EIAR as being of local importance (higher value).

8.3.13. Given the separation of the separation between the main works areas and the watercourses set out above there are no potential direct impacts arising. Potential overland connections to these watercourses are significant in length and the intervening terrain is generally characterised by forestry or felled forestry and relatively moderate slopes. No significant areas of peat or ground stability are characteristics of these areas. The proposed oversized component haul route does cross a number of watercourses, including on the R671 in the vicinity of Keereen Crossroads to the north west of the site where the road crosses the Clashnadarriv Stream and further north where the Finisk River crosses the R671. As part of the request for further information issued by the Planning Authority, the applicant submitted an Architectural Heritage Impact Assessment prepared by James Powell built heritage conservation consultant. The results of this assessment and the information presented with the application indicate that the stream crossing at Keereen Crossroads on the R671 is satisfactory to take the proposed delivery traffic without compromising the existing structure or resulting in discharges to the stream at this location and no other structures along the route were identified as being vulnerable to failure. No direct impacts on water quality such as would impact on aquatic species arising from the proposed haul route are therefore considered likely to arise.

8.3.14. The proposed development has some potential to result in a deterioration in water quality from sedimentation and other discharges which would have a potential negative impact on the aquatic species identified above. Section 7.5.2.1 of the submitted EIA states that '*a conceptual site model exercise was carried out to identify potential impacts through the examination of the specific pathways between the project (source) and the sensitive aspect (receptor)*'. This conceptual model is not clearly presented in the submitted EIA document and associated appendices, however the impact of earthworks and construction on surface water quality is addressed in some detail at Appendix 7 (A7.1, Table 21) and Appendix 9 (A9.1 Tables 1-3). Section 7.5.2.1 of the EIA goes on to state that '*The potential for impacts was examined in the absence of mitigation measures, and based on the standard construction methodologies, construction activities and operational activities as outlined in Chapter 5*'. Section 5.2.4 of the EIA is titled Mitigation Measures, stated that '*no mitigation measures are proposed for KWF Grid*

*Connection, because there is no potential or likelihood for significant effects, there is no requirement for mitigation measures....'* and sets out what are described as Standard Construction Methodologies. It is noted that one of these methodologies is stated to be *'silt fencing will be installed at construction works area, ahead of groundworks, to prevent and minimise the potential for sediment laden runoff'*. As detailed in Section 9.0 of this report under the heading of Appropriate Assessment - Screening, the use of silt fencing as proposed is clearly a mitigation measure and a measure designed with the intent of reducing the potential for surface water contamination, and was not therefore taken into account in the Appropriate Assessment Screening exercise undertaken. For the purposes of consideration of surface water quality and the assessment of indirect impacts on aquatic ecology, the use of silt fencing is considered to be an appropriate consideration, albeit one that I consider to be a mitigation measure rather than a construction methodology.

8.3.15. Having regard to the nature of the proposed development, the separation of the proposed works areas from the watercourses identified above and attenuation and sediment capture provided by the intervening vegetated areas and the construction methodology and mitigation measures proposed, I do not consider that the proposed development would be likely to have significant negative impacts on surface water quality in the vicinity of the site or on aquatic species. In reaching this conclusion, the following factors are particularly noted:

- The separation distance between the proposed works areas and the nearest watercourses which is a minimum of c.280 metres at the closest point.
- The proposed construction methodology including the limited scale of development, the proposed sequential development of the cable connection such that a maximum extracted area of 50 linear metres at any one time would be opened,
- The proposed use of mitigation measures to protect surface water quality in the form of silt fencing,
- The dilution and retention effect of vegetation and other surfaces across the overland connection between the proposed works area and the nearest watercourses.

8.3.16. In conclusion, on the basis of the information submitted with the application including that in the EIAR, the submissions on file and observations at the time of inspection of the site, I do not consider that the proposed development would have any significant adverse direct or indirect effects on biodiversity. The Knocknamona WF was permitted by An Bord Pleanála under Ref. PL93.244006 and the Woodhouse WF under Waterford County Council Refs. 04/1788 and 10/45. In both cases, EIA of the proposals were undertaken by the competent authority who determined that the predicted environmental impacts were acceptable. Given the limited impacts predicted under this factor of the environment I do not consider that significant cumulative impacts are likely to arise when the proposed development is considered together with other permitted plans and projects in the vicinity, including in particular, the Knocknamona WF, Woodhouse WF and Woodhouse substation. Specifically, in the case of Knocknamona WF, there are no watercourses within the works area and the development is permitted subject to a Sediment and Erosion Control Plan to protect water quality.

#### **8.4. Land, Soil, Water, Air and Climate**

##### **8.4.1. Land and Soils**

8.4.1.1 The existing site context with regard to land and soils primarily comprises a mixed age commercial forestry plantation and forestry access roads. The majority of the 1,940 metres of grid connection cable is proposed to be laid within existing forestry roads with just a short 100 metre section across existing scrubland and an underground crossing of an existing public road not being located on forestry roads. Soils within the identified study area comprise primarily thin peaty podzols. The underlying bedrock in the area is a mixture of sandstone and mudstone. Two trial pits were excavated and formed part of the submitted EIAR. These were supplemented by additional trial pits that were excavated on foot of the request for further information issued by the Planning Authority and detailed at Section F of the Response to Further Information submitted to the Planning Authority on 22<sup>nd</sup> October, 2019. The site is not of value in terms of geology, non-renewable resources or agricultural value.

8.4.1.2 Potential impacts on **land and soils** arising from the proposed development relate to excavation of soils and potential for erosion, compaction from construction activity, soil mobilisation from construction activity, contamination from construction related materials such as oil, fuels, chemicals and cement based materials and the creation of ground instability issues from the construction activity. The potential impacts under this heading therefore relate to the construction phase and not the operational phase of the development. Appendix 8.1 (Table 1) of Volume C4 of the EIAR indicates that the total amount of excavated material is estimated at 1,860 cubic metres of which 1,490 cubic metres is projected to be topsoil, 230 cubic metres to be subsoil and c.140 cubic metres of rock, giving a total volume of excavated material of c.1,860 cubic metres over the 1,940 linear metres of the grid connection or 0.96 cubic metre of material per linear metre.

8.4.1.3 As referenced in 8.3 above under the heading of aquatic ecology and below at section 9.0 under the heading of Appropriate Assessment - Screening, the separation distance of works areas from watercourses, the proposed mitigation measures and the limited construction area and excavated materials are such that no significant impacts related to the mobilisation of soils are likely to arise. Spillages and the impact of the use of concrete in the limited locations required will be the subject of mitigation including measures set out in an Environmental Management Plan to be agreed with the Planning Authority. Volume D of the application documents comprises an Environmental Management Plan and includes at section 2.3 a description of the construction activities and environmental protection measures at section 5.9. Fuels are to be stored in bunded storage containers and silt fencing is proposed to be utilised. Subject to good construction practices I do not consider that significant potential issues of contamination of land or soils would arise.

8.4.1.4 The scale of the excavations proposed are limited and restricted to c. 1.25 metres in depth and 0.6 metres in width and will be reinstated with works areas of maximum of 50 metres in length for the cable trench excavated at any one time. Ground stability issues are not therefore considered to be a potential issue and no peat or evidence of ground instability was recorded in the proposed works areas.



8.4.1.5 In conclusion, on the basis of the information submitted with the application including that in the EIAR, the submissions on file and observations at the time of inspection of the site, I do not consider that the proposed development would have any significant adverse direct or indirect effects on soils or land. Given the negligible impact on soils and land predicted to arise, the limited degree of overlap between the grid connection works and the existing and permitted developments in the vicinity including the Knocknamona WF, Woodhouse WF and Woodhouse substation, no significant cumulative impacts are predicted to arise under the heading of land and soils.

#### 8.4.2. **Water**

8.4.2.1 Water is covered at Chapter 9 of the submitted EIAR main report (Volume C2) and at section 9 of the EIAR Appendices (Volume C4). The potential impact of the proposed development on watercourses in the vicinity of the site has been addressed at section 8.3 of this assessment above under the heading of aquatic ecology and section 9.0 of this report below under the heading of Appropriate Assessment – Screening. The section below should be read in conjunction with these sections.

8.4.2.2 In my opinion, the proposed Knocknamona Grid Connection Project has a number of potential impacts under the heading of Water. These primarily comprise the potential for construction activity to lead to the release of contaminants in the form of excavated material, construction materials stored on site, equipment and fuel storage connected with the construction activity. These sources have the potential to lead to impacts on surface waters and, in the case of fuels and other construction related materials and equipment stored on site, groundwaters. The location of the development relative to surface watercourses where there is a minimum separation of c.200 metres, the nature and scale of the development and the nature of the ground between the works / storage areas and the nearest watercourses is such that no direct impacts are considered likely to arise on surface waters. The nature of the development is also such that no significant operational phase impact under the heading of water are considered likely to arise.

- 8.4.2.3 The site is located in an elevated area and no instances of flooding or flood risk are identified in CFRAM mapping or other flood hazard sources. Given this and the nature of the proposed development, no additional flood risk would arise on foot of the proposed development.
- 8.4.2.4 Potential construction phase impacts on ground water comprise the potential for the leakage of oils, hydrocarbons or other construction related materials such as cement with negative impacts on groundwater. I note that this potential impact is excluded from further consideration at paragraph 9.1.3.2 however I consider it requires further discussion. The proposed development would also have potential impacts on surface water by virtue of potential release of contaminants such as fuels, oils and cement during the construction phase. Earthworks arising from the construction phase including storage of excavated materials also has the potential to impact negatively on surface water.
- 8.4.2.5 The nature of the proposed development works, and specifically the depth of excavations proposed, are such that no impacts on local groundwater or impacts on the water table are possible. The analysis undertaken as part of the EIAR indicates that there are no wells or other water sources located within 50 metres of any works areas (the closest well is identified as an agricultural source located c.135 metres from the site) and given the nature of the proposed works no potential impacts on water supplies are considered likely to arise.
- 8.4.2.6 Spillages and the impact of the use of concrete in the limited locations required will be the subject of mitigation including measures set out in an Environmental Management Plan to be agreed with the Planning Authority. As per Volume D of the application documents fuels are to be stored in bunded storage containers. The underlying rock in the works areas is relatively impermeable and no deep excavations such as would breach the water table are proposed. Subject to good construction practices I do not consider that significant potential issues of contamination of groundwaters during the construction phase are likely to arise.
- 8.4.2.7 In conclusion, on the basis of the information submitted with the application including that in the EIAR, the submissions on file and observations at the time of inspection of the site, I do not consider that the proposed development would have any significant adverse direct or indirect effects on water. Given the negligible impact on water

predicted to arise, the mitigation measures proposed in respect of the permitted Knocknamona WF, and the assessment of the assessment of the competent authorities in the case of the Woodhouse WF and Woodhouse substation that the environmental impacts relating to water were not significant and were acceptable, no significant cumulative impacts are predicted to arise under the heading of water.

#### 8.4.3. Air and Climate

- 8.4.3.1 The proposed development has a number of potential impacts under the heading of air and climate. The completed cable connection and works at the substation have potential to generate an electromagnetic field (EMF) during the operational phase. The construction activity proposed has the potential to result in noise impacts, both during the construction and operational phases. The construction phase also has the potential to generate dust and vibration impacts. With regard to climate, the proposed development comprises infrastructure that would facilitate the connection of a renewable energy generation project to the national grid.
- 8.4.3.2 With regard to **electromagnetic fields**, Appendix 10.4 of the submitted EIAR sets out the modelling work undertaken on this emission. Tables 1 and 2 of this assessment indicates how infrastructures as proposed (110kv substation and underground cabling) produce electric fields and demonstrate how the typical emission from such infrastructure, even at minimal separation distances, is dramatically below the relevant limit values set by the INIRP, and Table 10 indicates how the contribution of the development to electric fields and magnetic fields would be far below the INIRP limits. On the basis of the information presented I agree with the conclusion set out at Table 10-17 of the Volume C2 of the EIAR that impacts related to electromagnetic fields arising from the KWF grid connection project would be imperceptible and that the cumulative impacts with other permitted plans and projects, including the permitted Knocknamona WF would be imperceptible to slight.
- 8.4.3.3 With regard to **dust**, the **construction traffic** is not considered likely to have a significant impact on amenity or the environment. As per paragraph 10.1.6.1.2 of the submitted EIAR, no local air quality assessment was undertaken as the criteria set out in the UK DMRB and TII Guidance on the Treatment of Air Quality during the Planning and Construction of national Road Schemes have not been met.

Background air quality in the environs of the proposed development is good and significantly below the air quality standards. The volume of construction traffic in respect of the grid connection project is low with Table 2 of Appendix A12 indicating a maximum additional 24 hr 2 way AADT of 16 PCUs. Oversized component loads proposed to be delivered via the existing Woodhouse WF main entrance and access road are relatively low and estimated to range between 8-10 loads per day on average over a 10 day period. Cumulative traffic with the Knocknamona WF are predicted to be c.131AADT over a 9-12 month construction period (Appendix 10.1 Table 2). Traffic volumes proposed comprise a total of are therefore very significantly below the 1,000 PCU and 200 HGV threshold set out in the guidelines for an air quality assessment. On the basis of the predicted traffic volumes, traffic based impacts arising from the grid connection project are not therefore considered to be such as to have significant impact on air quality. In the event that the proposed grid connection project construction activity coincides with works on the Knocknamona WF then some additional impacts will arise, however given the very limited air quality impacts arising from traffic connected with the grid connection project, these cumulative impacts are likely to be limited.

8.4.3.4 **Dust impacts arising from the construction phase** of the development are addressed at section 10.1.6.1 of the EIAR and sets out how the dust impact from the proposed grid connection project can be categorised as low under the IAQM Guidance in terms of extent of earthworks required volume of construction material and trackout (number of construction vehicles). An assessment of cumulative impacts with the construction of the Knocknamona WF project indicates a 'Medium' impact under each of these dust assessment criteria. On the basis of the information presented including the nature of the project and the separation of the works area from the nearest sensitive receptors, I would agree with the conclusion that the dust related impact from construction of the grid connection project is negligible. No significant cumulative construction phase dust impacts are considered likely to arise. In the event that permission is granted, a condition restricting dust emissions at the closest sensitive locations to a maximum of 350mg / square metre per day is recommended to be imposed.

- 8.4.3.5 **Vibration impacts** are not considered likely to give rise to significant impacts. The construction methodology proposed does not incorporate any blasting and the nature and scale of the construction operations are such that there would not be any significant construction phase vibration impacts generated and none that would have any impact at the nearest sensitive receptor which is the closest house to the site, c.330 metres from the works area at the closest point. No operational phase vibration impacts arise. Given the absence of any vibration impacts arising from the grid connection project, the fact that there are no residential properties or other sensitive locations are located within 350 metres of either the grid connection project or the Knocknamona WF development and the fact that vibration related impacts of the Knocknamona WF were previously assessed as not significant, no significant cumulative impacts related to vibration are predicted to arise.
- 8.4.3.6 With regard to **noise**, the proposed development has the potential to give rise to noise emissions both at the construction phase due to construction activity and the movement of materials and vehicles to and from the site and the operational phase, primarily from the substation. The issue of Noise is addressed in Chapter 10 of the EIAR, Appendix 10 and in the supplementary report submitted as part of the response to Further Information submitted to the Planning Authority and included in the separate volume on file that contains the response to further information.
- 8.4.3.7 **Construction phase noise impacts** arising from the grid connection project are set out at 10.1.6.2 of the EIAR and the equipment proposed to be used and the relevant sound pressure levels (SPLs) are detailed at Table 10-8. In a worst case scenario, with all of the proposed equipment operating at the same time, the construction phase noise could reach 86dB(A) at 10 metres from the noise source, reducing to 56dB(A) at 320 metres from the noise source which is the distance of the closest residential property, (see Appendix 10.3). Table 10-9 of the EIAR sets out the noise thresholds at the facades of dwellings as per the NRA guidelines and the predicted 56 dB(A) level for the proposed development will be below any of the LAeq levels set out in the NRA document. Specifically, it should also be noted that the actual construction phase noise levels are likely to be significantly less than the projected as it will not be feasible that all construction equipment will be operating simultaneously. Appendix 10.3 cites a realistic noise scenario of 79 DB(A) at 10 metres from the construction noise source, reducing to 49dB(A) at 320 metres and

this is considered to be a realistic assessment of construction phase noise at the nearest receptor. Construction on the grid connection project is proposed to be undertaken during daylight hours and, on the basis of the information presented, I do not consider that the proposed development would have a significant negative impact on residential amenity due to construction phase noise emissions.

8.4.3.8 The potential for **operational phase noise impacts** arises from the noise that would be emitted from the additional plant to be installed at the Woodhouse substation site. In undertaking an assessment of the likely environmental impacts of operational phase noise, I note the content of the request for further information issued by the Planning Authority and the response received by the Planning Authority on 22<sup>nd</sup> October, 2019. This response relates to Item No.5 of the request for further information which required that further information be submitted to support the assertion made in the EIAR that the substation will not impact on any residence on account of the separation distance of 330 metres and that dB levels for pre and post construction are required. .

8.4.3.9 The information presented at Section HI of the response to further information includes a noise survey undertaken over 7/8<sup>th</sup> August 2019 at the nearest noise sensitive location, which is the house located c.330 metres to the west of the construction area at the substation compound. The results of this survey indicate that the LAeq level for daytime hours is an average of 45dB(A) with an LA90 average of 41dB(A). For the night time hours, the equivalent figures are 42dB(A) and 33dB(A). These figures are noted as is the methodology used in the assessment which is considered appropriate. The Noise Assessment undertakes a modelling exercise of the additional equipment proposed to be installed in the substation compound. The programme used is iNoise 2019.1 and the inputted SPLs are derived from those of the existing transformer used on site. Again, these methodologies and assumptions are noted and considered appropriate. The output of the noise assessment modelling indicates an existing night time background level of 25dB(A) pre development and this increasing to 28dB(A) post development.

8.4.3.10 While the predicted increase in night time noise post development is 3dB(A) which would be a doubling of the noise environment, there are in my opinion a number of factors that need to be taken into account in the interpretation of these results and assessment of the operational phase noise impacts of the proposed development.

Firstly, while an increase of 3dB(A) does represent a doubling of the sound level, this would be just about perceptible to the human ear. Secondly, the predicted noise level at N1 (nearest residential property c.330 metres to the west of the substation compound) at 28dB(A) is very low and is well below what would be considered to be a level that would be considered to have a potential to cause a nuisance or loss of amenity. Thirdly, the predicted noise level (28dB(A) at N1) has to be seen in the context of the recorded background noise levels. The survey undertaken at N1 indicated that the average night time noise level is 42dB(A) and therefore well above the predicted 28dB(A). Taken at an average night time basis therefore the ambient background noise would be well below the predicted noise and would, as indicated in section 3.2 of the noise report submitted, indicate a low impact. I note that there are periods in the recorded noise survey (notably in the midnight to approximately 1.30 AM period) where the recorded minimum noise levels are in the 23-25 dB range and therefore below the predicted noise level of 28dB(A). This is however over a limited period and represent minimum values that would likely last a short period of time. It is noted that the LA90 value which represents the background night time level is an average of 33dB and therefore significantly (5dB) above the predicted noise level from the substation compound post construction. Overall, therefore, on the basis of the information presented, I consider that the likely operational phase noise impact at the nearest noise sensitive receptor would be negligible.

8.4.3.11 With regard to the operational phase noise impacts and consideration of ***cumulative noise impacts with other plans and projects***, there are a number of factors worth noting. Firstly, while the house to the west that is the subject of the noise assessment submitted (N1) is located c.330 metres from the substation at the closest point, other houses are located at a significantly greater distance and would therefore not in my opinion be subject to any noise impact during the operational phase of the grid connection project. Specifically, the next house to the west is located c.480 metres from the substation site, the closest house to the north east (Ballymulalla West) c.665 metres away and the closest house to the east in the Ballymulalla East area at c.850 metres separation. Properties occupied by third party appellants are located in the townlands of Keereen, Keereen Lower, Toor North, Ballymulalla and Ballyguiry Upper and, as per the assessment provided in the first party response to appeals (Section 6.2 above) at distances that range between

840 metres to c.3.3km from the nearest part of the grid connection project. Using the basic principle that a doubling of separation distance results in a reduction in the noise level by 6dB, I do not therefore consider that there is any potential for the operational phase of the proposed development to have any appreciable impact on the noise environment of any houses or other noise sensitive locations located beyond NSL N1 as assessed in the submitted Noise Impact Assessment. Some very minor impact may be possible at the house located at Keereen Upper c.480 metres away from the substation site as the additional c.150 metres beyond the N1 location could be anticipated to reduce noise from the substation by an additional 2-3dB(A). The resulting noise generated by the operational substation post development would therefore be approximately equal to the lowest LA90 figures recorded at location N1 and such that in my opinion any noise impacts derived from the operational phase of the proposed development would be imperceptible. Certainly, at locations in Ballymulalla East, Ballymulalla West, Ballyguiry Upper, Toor North and Keereen Lower which are further removed from the substation site, the attenuation of noise with distance would be such that no significant noise impacts connected with the operational phase of the proposed development would arise.

8.4.3.12 In terms of **cumulative impacts**, given that there is no evident potential for operational phase impacts to arise on these other properties (other than location N1) there is therefore no potential for cumulative operational phase noise impacts to arise at these locations. From a review of the third party submissions on file and the stated addresses it is apparent that the properties of the third party appellants are located at a distance from the substation site such that no operational phase noise impacts are predicted to arise and therefore such that no cumulative noise impacts with the existing and permitted developments (including the permitted Knocknamona WF and operational Woodhouse WF) are likely. Regarding **location N1**, while there is some potential for very minor night time impacts where short minimum background noise levels would be lower than the predicted operational noise from the substation site, such instances are very limited and, at an aggregate level, night time average equivalent noise and average of minimum noise levels are both above the predicted operational phase noise from the substation with the result that the impact of the proposed development on the noise environment at this location (N1) will be negligible. While this negligible impact at location N1 gives rise to the potential for a



cumulative impact at this location, in reality the predicted noise level of 28dB(A) is very low and is such that it is considered very unlikely to combine with the noise generated by the existing and permitted developments in the surrounding area (including Woodhouse WF and Knocknamona WF) to result in any appreciable increase in the noise environment at this location.

8.4.3.13 Having regard to the above assessment, I do not agree with the **assertion of the third party appellants** that the assessment undertaken by the first party regarding noise is completely inadequate. On the specific issue raised by the third parties regarding the inadequacy in the cumulative assessment of noise impacts and the limited physical extent of the cumulative assessment undertaken, I restate the conclusion of the assessment undertaken above. The analysis undertaken by the first party as part of the response to further information, which in my opinion is based on a sound methodology, indicates that the operational noise impact from the proposed development (which relates to the works proposed at the Woodhouse substation site) are such that a noise level of 28dB(A) is predicted at NSL N1 which is the closest residential property to the substation site, located c.330 metres to the west. Given this noise level relative to the surveyed background noise levels at N1, it is evident that the noise generated by the substation will be below the background level for the vast majority of the time, and below the average night time LAeq and Lmin levels. The potential operational phase noise impact at location N1 is therefore assessed as negligible. The next closest noise sensitive locations to the substation site are located c.480 metres away in the case of the next closest house to the west in Keereen Upper, c.600 metres to the north east in Ballymulalla West and c.850 metres to the east in Ballymulalla East. These additional separation distances are such that no perceptible noise impacts arising from the operational phase of the grid connection project will occur at these locations. Given that no noise impacts attributable to the operational phase of the grid connection project are predicted to occur at these locations, no cumulative impacts with the permitted Knocknamona WF or operational Woodhouse WF can occur and it is not necessary to undertake an assessment of the noise implications of these developments. In any event, both the Knocknamona WF and Woodhouse WF have already been the subject of EIA by the relevant competent authorities who determined that these projects were acceptable with regard to noise.

8.4.3.14 I note the concerns raised by the third party appellants (Reid Associates on behalf of Michael and Giancarla Allen Buckley) with regard to the background information on which the assessment is based and specifically that the noise assessment relies on descriptions from the 2014 Knocknamona WF despite Woodhouse WF and substation coming into operation in the interim. As set out in the first party response to the grounds of appeal, the KWF Grid Connection EIAR (2019) included supplementary information on Knocknamona Windfarm where required. The change in context is specifically highlighted in each section of the EIAR under a heading 'Passage of time since the 2014/2015 Knocknamona WF Planning Documents were prepared' and with specific regard to Air and Noise impacts, the relevant section of the EIAR is 10.2.1.2.2 of Volume C2. In my opinion, the approach taken with regard to updating of baseline information and account for changes in context is consistent throughout the EIAR document and specifically as it relates to Air / Noise.

8.4.3.15 I also note the concerns raised in the third party submission received from Reid Associates on behalf of Michael and Giancarla Allen Buckley regarding the lack of specific assessment of low frequency noise, the lack of a clear specification and sound power level used as input into the noise analysis presented as part of the response to further information and the degree to which the background noise survey undertaken at NSL1 is representative of other locations in the wider area by virtue of the influence of the transformer / substation and the milking parlour at this location. These concerns are noted. With regard to the specification of the new transformer and the input to the model it is apparent from section 2.2 of the Noise Assessment presented in the RFI that the sound power levels of the new equipment / transformer are assumed to be the same as that of the existing. Specific sound power levels are presented for this existing transformer (see Table 2.3) and it is noted that this octave banding incorporates low frequency sound at less than 200 Hz. Ideally, the submitted noise assessment would have incorporated specific sound pressure levels from a specific specification of equipment, however the information presented is in my opinion such as to provide an accurate approximation of the likely noise impacts arising from the proposed additional electrical equipment at the substation site. With regard to the representativeness of the background noise assessment undertaken, NSL1 is likely more impacted by the existing substation and by the presence of the milking parlour, however the milking parlour only operates at

specific periods during the day and the results of the background assessment indicate that background noise levels are higher than the predicted noise from the substation development. In addition, it is noted that while the existing substation has some impact on the background noise environment at NSL, there are other factors that would likely impact on background noise at other locations further from the substation site, including the impact of the existing Woodhouse Windfarm and potentially road traffic noise. Fundamentally, the increased separation distance of other noise sensitive locations, including the properties of the third party appellants, is such that noise impacts, including potential low frequency noise impacts would not have a significant negative impact on such properties. I therefore consider that the results of the assessment remain valid and that on the basis of the information available, the potential impact of the proposed development on noise sensitive locations in the vicinity of the appeal site, including at the appellants' properties would be imperceptible and that the cumulative noise impacts arising would not be significantly negative.

8.4.3.15 With regard to *climate*, during the construction phase, there is potential for a very slight adverse impact due to emissions from construction equipment and the manufacture of materials used in the development. Given the limited scale of the proposed development, this impact is not considered likely to be significant. At operational phase, the proposed development will not have any direct or indirect impacts on climate as in itself it will not have the potential to be part of an overall energy generating project. The operational phase of the proposed development will however facilitate the development of a renewable energy project (Knocknamona WF) and will therefore have a significant positive cumulative operational phase impact on climate. As per paragraph 5.6.3.3 of Volume C2 of the EIAR the overall Knocknamona WF development has the potential to generate c. 70.5 million KW/hrs of renewable energy per annum which is sufficient to power over 16,000 homes and is therefore such as to result in significant indirect positive impacts on climate.

## 8.5. Material Assets, Cultural Heritage and the Landscape

### 8.5.1. Material Assets

- 8.5.1.1 Potential impacts under the heading of material assets relate to the potential impacts of the development on roads, and utilities, tourism and recreation. Material Assets is addressed at Chapter 12 of the submitted EIAR and section 12 of the EIAR Appendices document (Volume C4).
- 8.5.1.2 The proposed development has potential to impact negatively on **local roads** during the construction phase of the proposed development due to construction traffic impacts. In particular, while impacts on the national road (N72) are unlikely, construction access to the site along the R671 and local road network from Clogh Cross Roads has the potential to impact this asset.
- 8.5.1.3 Details of construction traffic volumes are set out at Traffic and Transportation Assessment submitted as part of the response to further information. Specifically, paragraphs 4.11 to 4.16 of this assessment set out the traffic generated by the grid connection project. It is predicted that there would be 3 HGV deliveries and 12 construction personnel travelling to site each day associated with the Grid Connection Project. Oversized component deliveries are proposed to access the site via the N72/R671/L6074/L60741 and the Woodhouse WF main entrance to the east of Woodhouse Cross Roads. Volumes of traffic associated with these deliveries would comprise one complete turbine delivery per day equating to 9 HGV movements. The volume of traffic connected with the proposed development is therefore relatively low, and the haul route has been the subject of a pavement condition report and assessment of architectural heritage along the haul route as part of the response to further information. On the basis of the traffic assessment and these assessments of the haul route, I do not consider that the proposed development would be likely to have any significant effects on the material asset that is the local and regional road network in the vicinity of the site. Cumulative impacts on roads arising from the consented Knocknamona WF are not considered likely to be significant as the overlap between the construction traffic routes is limited to a short section of the L2018 and L2019.

- 8.5.1.4 No impacts on **utilities** will arise. The proposed development will not have any direct or indirect impacts on natural resources and there will not be any additional impacts in terms of land ownership or access or property rights. No commercial or industrial developments would be impacted by the project.
- 8.5.1.5 Under the heading of **tourism & recreational infrastructure**, the development is located such that the Sean Kelly Cycle Route runs to the west and north of the site including along a c.2km section of the R671 to the north west of the site. The proposed development would not have a direct impact on this route, although the proposed oversized component haul route to the site would share the c.2km section of the R671. No significant negative impacts on this asset are considered likely and any impacts that would arise would be temporary during the construction period. Similarly, the Saint Declan's Way pilgrim route also runs to the west of the site and is located c.500 metres to the west of the Woodhouse WF main entrance and c.1.7km from the nearest works area at the closest point. Construction traffic including oversized loads would cross this route, however significant negative impacts on this asset are considered likely and any impacts that would arise would be temporary during the construction period.

## 8.5.2 Cultural Heritage

- 8.5.2.1 Cultural Heritage is addressed at Chapter 13 of the submitted EIAR and at Appendix 13 of the EIAR Appendices (Volume C4).
- 8.5.2.2 In terms of **archaeology**, there are two recorded archaeological monuments listed on the record of monuments and places located within 500 metres of the grid connection project site. Both of these features are ringforts. Within 2km of the site there are a further 11 no. additional sites identified on the RMP comprising 6 no. Fulacht Finn, 1 no. enclosure, 1 no. road / trackway, 1 no. castle and 1 no. burial mound. There is no indication that there are any likely features of archaeological significance located within the footprint of the proposed development, however given the presence of other features in the vicinity of the site it is possible that archaeological features may exist. Given the nature of the appeal site and surrounding lands comprising lands that have been used for intensive forestry and agriculture, the location of the cable route within existing developed forestry tracks

and the nature of the proposed excavations, it is considered that significant impacts on archaeology are unlikely.

8.5.2.3 I note that the issue of underwater archaeology was raised in the submission received from the Development Applications Unit of the Department. As noted in the second report from the department on file, dated 11<sup>th</sup> November 2019, that no underwater archaeological impact assessment is required if there are no watercourses on the appeal site.

8.5.2.4 Potential impacts on **architectural and built heritage** are considered to be insignificant. Clonkerdin House, which is included on the NIAH, is located approximately 1.8km to the north of the site. Given the separation to the appeal site and the nature of the proposed development, no adverse impacts on the character or setting of this structure are considered likely.

### 8.5.3 Landscape

8.5.3.1 Consideration of the potential impact of the Knocknamona Grid Connection Project on the landscape is set out at Chapter 14 of the EIAR and Appendix 14 in Volume C4. The landscape character of the wider environs of the site is characterised by the Drum hills which is upland and rural in character. Parts of this wider study area identified in the EIAR are designated as visually sensitive and a visually vulnerable ridgeline crosses the alignment of the cable connection route. It is also noted that parts of the permitted Knocknamona WF development are located within area identified as visually sensitive in the landscape character designations. The relationship of the proposed development and the Knocknamona and Woodhouse WF developments to the landscape character designations are indicated at Figure 14.2.1 of Volume C3 of the EIAR. The overall landscape sensitivity of the environs of the site is identified as Medium – Low which is consistent with the designation applied in the 2015 Knocknamona rEIS. From my observations of the site and environs I consider that this landscape sensitivity is appropriate.

8.5.3.2 The proposed Grid Connection Project would have potential landscape impacts at construction phase and at operational phase from additional plant and equipment proposed to be installed at the Woodhouse substation site and the potential for changes in landcover along the route. With the exception of the short, c.190 metre

long section of existing scrub where a new forestry track is proposed, the existing works areas are all located within existing modified ground. The construction will not result in any significant changes to groundcover or removal or break in existing vegetation and the nature and location of the cable connection route is such that no significant construction phase landscape or visual impacts relating to this part of the Grid Connection Project are anticipated to arise. Post construction, the operational phase impacts of this part of the project is considered to be imperceptible.

8.5.3.3 With regard to the works at the Woodhouse substation, this area is more visually open due to the general absence of surrounding forestry cover. Temporary slight negative construction phase impacts are likely to arise however operational phase impacts are considered likely to be slight given the relatively small scale of the additional infrastructure proposed, the location of this infrastructure within an existing substation compound and the fact that the compound is located within a landscape that has been altered by the presence of the existing Woodhouse windfarm turbines to the west and which will be further altered by the proposed Knocknamona WF development to the south.

8.5.3.4 With regard to cumulative landscape and visual impacts arising, given that operational phase impacts are at worst slight, I agree with the assessment contained in the EIAR (paragraph 10.2.2.2) that the cumulative impacts of the Grid Connection Project with the Knocknamona WF will not be greater than slight and that the 'whole project' impact of the grid connection and windfarm would not be significant with regard to landscape and visual amenity. The only element of the Grid Connection Project that would be above ground are the relatively minor works proposed in the existing substation compound which results in a slight negative impact. These impacts, when taken in conjunction with the permitted Knocknamona WF which has been assessed by An Bord Pleanála as not having a significant negative landscape and visual impact, would result in an overall project that would not have a significant adverse impact on landscape and visual amenity. Similarly, given the nature of the Grid Connection Project and the predicted landscape and visual impact for this project and the overall Knocknamona development as set out above, the cumulative impact with the constructed and operational Woodhouse substation and Woodhouse Windfarm is not considered to be significant.

8.5.3.5 On this issue of cumulative landscape and visual assessment of the proposed development, for the reasons set out in the above assessment I do not consider that significant cumulative landscape and visual impacts are likely to arise and consider that the assessment of cumulative landscape and visual impacts presented in the EIAR is comprehensive and that the conclusions reached are reasonable. For these reasons I do not agree with the concerns expressed in third party submissions, and specifically the submissions received on behalf of Michael and Giancarla Alen Buckley, Anna Maria Cloona and Niamh and Mark Kuhne, regarding the adequacy of the cumulative assessment undertaken.

8.5.3.6 In conclusion, on the basis of the information submitted with the application including that in the EIAR, the submissions on file and observations at the time of inspection of the site, I do not consider that the proposed development would have any significant adverse direct or indirect effects on material assets, cultural heritage or the landscape. Given the negligible impact on these environmental factors predicted to arise, the fact that the assessment of the competent authorities in the case of the Knocknamona WF, Woodhouse WF and Woodhouse substation that the environmental impacts relating to material assets, cultural heritage and the landscape were not significant and were acceptable, no significant cumulative impacts are predicted to arise under the heading of material assets, cultural heritage and the landscape.

## 8.6. Reasoned Conclusion

8.6.1. Having regard to the examination of environmental information contained above, and in particular the EIAR and supplementary information provided by the developer, including the response to further information submitted to the Planning Authority, and the submissions from the Planning Authority, prescribed bodies, appellants and observers in the course of the application, it is considered that the main significant direct and indirect effects of the proposed development on the environment are, and will be mitigated as follows:



- The construction phase of the proposed development has some slight potential for siltation and pollution of watercourses that are located in the vicinity of the site and consequent impact on aquatic habitats in the vicinity of the site. In addition to the mitigation provided by the separation distance of these watercourses from the proposed works area, and which are considered to be such that no significant impacts on surface water quality would be likely to arise, such impacts would be mitigated by the proposed use of silt fencing and good construction practice around the storage of materials and equipment.
- The operation phase of the proposed development has some potential for direct impacts on air in the form of noise at sensitive locations in the vicinity of the site. Noise impacts at noise sensitive locations in the vicinity of the site are predicted to be mitigated by way of attenuation by distance, with the result that the predicted noise impacts at the closest noise sensitive locations are lower than the surveyed background noise levels at these locations. Given these impacts, no potential for significant cumulative noise impacts are considered likely.
- The proposed development would have an indirect positive impact on climate arising from the proposed development enabling the connection of the Knocknamona WF which has an output of 70.5 million KW/hrs of energy to the grid.
- The proposed development would have a potential direct negative impact on the landscape particularly during the operational phase. These impacts would be mitigated by the underground design of the cable connection, and assimilation into the existing landscape due to the limited scale and extent of the proposed additional substation equipment and location in an existing compound. No significant direct or cumulative landscape or visual impacts are therefore considered likely to arise.

Having regard to the above, I am therefore satisfied that the proposed development would not have any unacceptable direct, indirect or cumulative impacts on the environment.

## 9.0 Appropriate Assessment - Screening

### 9.1. Compliance with Article 6(3) of Habitats Directive

- 9.1.1. The requirements of Article 6(3) as related to screening the need for appropriate assessment of a project under Part XAB, Section 177U of the Planning and development Act, 2000 (as amended) are considered fully in this section.

### 9.2. Background to Application

- 9.2.1. The first party has submitted a screening report for Appropriate Assessment as part of the Planning application. This report is titled 'Screening for Appropriate Assessment Report for Knocknamona Windfarm Grid Connection', prepared by Inis Environmental Consultants Limited and dated May, 2019. It comprises Volume E of the information submitted with the application.
- 9.2.2. The Stage 1 Screening report was prepared in line with current best practice guidelines and provides a description of the proposed development (section 2.4) and identifies European sites located within a possible zone of influence of the development (section 2.5). The application is also accompanied by an EIAR (including Appendices) which includes sections on biodiversity (Chapter 7) and water (Chapter 9). The appendices to the EIAR and Appendix C of the submitted screening report contain the results of bird surveys undertaken in connection with the proposed development.
- 9.2.3. The applicants AA Screening Report concluded (Section 2.9) that '*Following screening it can reasonably be concluded that there is no likelihood of significant effects to any of the above sites (9 sites identified within 15km of the site) as a result of the proposed project, the KWF Grid Connection, either alone or in combination with other plans or projects (including the consented Knocknamona Windfarm and operational Woodhouse Windfarm).*'

### 9.3. Project Scope, Main Characteristics and Potential Emissions

- 9.3.1. The site is located in an elevated area c.10 km to the west of Dungarvan and on lands that are currently primarily in forestry use. The site adjoins an existing constructed 8 no. turbine windfarm development (Woodhouse WF) which is located immediately to the west and northwest of the site and by a permitted windfarm (Knocknamona WF) which is located to the immediate south west and south of the appeal site. There is an existing operational substation located at the immediate northern end of the appeal site.
- 9.3.2. The applicant provides a description of the proposed development at section 2.4 of the screening assessment and at Chapter 5 of the EIAR. The nature of the project the subject of this screening assessment is a grid connection between the permitted but not constructed Knocknamona WF and the grid at Woodhouse substation. The main elements of the project can be summarised as follows:
- (a) The laying of 1,940m of underground medium voltage electrical cabling (up to 33kV), in Keereen Upper & Knocknamona townlands, linking Knocknamona Windfarm (permitted but not constructed) and the existing operational Woodhouse 110kV Substation.
  - (b) Works within the existing Woodhouse 110kV Substation compound in Keereen Upper, comprising a new control building measuring 5.3m x 3.6m & 4.6m high; main 110kV transformer of c.6 m in height, with associated plinth and bund; a 110kV transformer bay, 2 no. lightening masts 17.5m in height & ancillary electrical equipment. Works to the substation will also include a new access track 17m long & 4.5m in width; additional palisade gateway and fencing to the height of the existing is also proposed. ;
  - (c) A Link Road, 190m in length & 4.5m in width connecting the existing forestry road network at the Knocknamona Windfarm site to the existing Woodhouse Windfarm internal forestry roads. It is proposed to use this link road and the existing Woodhouse Windfarm roads to facilitate the delivery of the main components / abnormal loads to the Knocknamona Windfarm site.
  - (d) The widening of 960m of existing forestry road by 1m, in Knocknamona townland to facilitate the delivery of the main components to Knocknamona Windfarm and;

(e) Ancillary site works.

The timeline of the proposed works is indicated in the application documentation as being c.2 months for the cable laying part of the grid connection works and c.4 months for that part of the development within the Woodhouse substation compound.

- 9.3.3. It is noted that section 5.4.4 of Volume C2 of the submitted EIAR states that no specific mitigation measures are proposed in the development. This section of the EIAR also states that the development would be undertaken in line with standard construction methodologies, which it is noted include that *'silt fencing will be installed at construction works areas, ahead of groundworks, to prevent and minimise the potential for sediment laden runoff'*. Section 2.4.2 of the submitted Appropriate Assessment Screening Report states that *'the screening evaluation to inform the AA process.....has been carried out in the absence of any protective measures or mitigation measures required to avoid effects on European sites'*. Section 2.4.3.2 of the assessment sets out what is titled *'Standard Construction Methodology for the KWF Grid Connection Development'* and I note that under this heading is listed *'silt fencing will be installed at construction works areas ahead of groundworks, to prevent and minimise the potential for sediment laden runoff'*.
- 9.3.4. For the avoidance of doubt, this screening assessment has been undertaken on the basis of no measures (including the use of silt fencing) with the purpose of mitigating or avoiding impacts on the conservation objectives of any European sites being taken into account in the assessment of likely significant effects. In addition, and also for the avoidance of doubt, the assessment is undertaken on the basis that the construction activity related to the underground cable connection would be undertaken with a maximum extent of 50 linear metres of cable being laid at any one time and that a maximum linear extent of 50 metres of cable trench would therefore be excavated and open at any one time. The excavation and laying of the cable connection in this manner is considered to constitute a project measure that is related to the capabilities and efficiencies of the construction team and efficient organisation of the construction project and not proposed for the avoidance or mitigation of impacts on any European site.

9.3.5. The relevant potential emissions arising from the proposed development are generally restricted to the construction phase of the project. The following specific aspects of the proposed development are identified as having the potential to give rise to emissions or impacts that may result in effects on European sites:

- The construction activity including the excavation of material and its storage on site and the storage on site of construction related materials and equipment. Specifically, the storage of excavated material (soil, sub soil and rock) along the line of the cable route, storage of construction materials related to the widening of the forestry access road and storage of construction equipment and fuels etc. within the substation compound.
- Disturbance arising from construction activities in the form of physical disturbance, noise and emissions from construction equipment.
- The impact of construction traffic to and from the site including the potential impact on watercourses and crossings of watercourses along the route.
- Given the nature of the proposed development, it is not considered that there would be any impacts from the operational phase of the development that would be likely to potential give rise to significant effects on identified European sites.

#### 9.4. Identification of Sites that May be Affected (Source – Pathway – Receptor)

9.4.1. The site is not located within any European site and will not have a direct effect on any identified European sites. Effects, such as they may arise, would be indirect.

9.4.2. The proposed development is not directly connected to or necessary for the management of any European site.

9.4.3. The following is a summary of all European sites that are located within the general vicinity (c.15km) of the appeal site:

- River Blackwater (Cork / Waterford) SAC site (site code 002170) is located c.3km to the west of the appeal site at the closest point.
- Dungarvan Harbour SPA site (site code 004032) is located c.7km to the east of the appeal site at the closest point.

- The Blackwater Estuary SPA (site code 004028) is located c.9km to the south west.
- The Helvic Head to Ballyquin SPA (site code 004192) is located c.11.5km to the south east of the appeal site.
- Glendine Woods SAC (site code 2324) is located c.12.5km north east of the appeal site at the closest point.
- Helvic Head SAC (site code 000665) is located c.13km south east of the appeal site.
- Blackwater Callows SPA (site code 004094) is located c.13km to the northwest of the appeal site.
- Ardmore Head SAC (site code 002123) is located c.14 km to the south of the appeal site.
- Comeragh Mountains SAC (site code 001952) is located c.14.5km to the north east of the appeal site at the closest point.

The location of these sites is indicated in Figure 7.11 of Volume C3 of the EIAR.

9.4.4. Using the source – pathway – receptor model, the European sites that may be the subject of indirect effects arising from the proposed development are considered to be as follows:

- The excavation and storage during the construction phase of construction material has the potential to impact on the River Blackwater (Cork / Waterford) SAC site by virtue of the works areas being located within 300 to 1,100 metres of streams that drain to the River Blackwater SAC in either the River Blackwater itself or the Finisk River which is a tributary of the Blackwater and which is part of the SAC.
- The revised haul route for the transport of oversized / turbine components for the Knocknamona Windfarm and the haul route identified for the grid connection project including the transformer and other electrical equipment for the substation, is proposed to be via the N72 and the R671, accessing the local road network at Clogh Crossroads and using the existing Woodhouse Windfarm access roads. This route involves three crossing points of

watercourses that drain to the River Blackwater (Cork / Waterford) SAC and which therefore have some potential to impact on water quality in the event of structural failure of the crossings and therefore possible impacts on the downstream SAC. These crossing points are firstly, on the N72 to the east of the N72/R671 junction, secondly at Whitechurch Bridge c.1.4 km to the south of the N72 / R 671 junction where the R671 crosses the Finisk River at a location where the river forms part of the SAC and thirdly at Keereen Bridge on the R671 where the road crosses what is identified in the 3<sup>rd</sup> Party submissions as the Glenkeereen Stream.

- In the case of the Dungarvan Harbour SPA (site code 004032), the Blackwater Estuary SPA (site code 004028), the Helvic to Ballyquin SPA (site code 004192) and the Blackwater Callows SPA (site code 004194) there is potential for the proposed development to result in disturbance to, and therefore indirect effects on, species that are qualifying interests of these sites during the construction phase of the development.
- In the case of the Glendine Woods SAC (site code 2324), the Helvic Head SAC (site code 000665), the Ardmole Head SAC (site code 002123) and the Comeragh Mountains SAC (site code 001952, there is not considered to be any potential hydrological or other realistic pathway between the appeal site and these European sites. These sites are therefore not included in further consideration as part of this screening assessment.

#### 9.5. **Site Qualifying Interests and Conservation Objectives**

The following are the qualifying interests and conservation objectives of the sites identified above as potentially being the subject of indirect effects arising from the proposed development, together with an assessment of the potential effects on these identified qualifying interests are as follows: :

9.5.1. **Blackwater River (Cork / Waterford) SAC site (site code 002170)**

*Qualifying Interests*

- Estuaries
- Mudflats and sandflats not covered by seawater at low tide
- Perennial vegetation of stony banks
- Salicornia and other annuals colonising mud and sand
- Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*)
- Mediterranean salt meadows (*Juncetalia maritimi*)
- Water courses of plain to montane levels with the *Ranunculus fluitans* and *Callitriche-Batrachion* vegetation
- Old sessile oak woods with *Ilex* and *Blechnum* in the British Isles
- Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion*, *Alnion incanae*, *Salicion albae*)
- *Margaritifera margaritifera* (Freshwater Pearl Mussel)
- *Austropotamobius pallipes* (White-clawed Crayfish)
- *Petromyzon marinus* (Sea Lamprey)
- *Lampetra planeri* (Brook Lamprey)
- *Lampetra fluviatilis* (River Lamprey)
- *Alosa fallax fallax* (Twaité Shad)
- *Salmo salar* (Salmon)
- *Lutra lutra* (Otter)
- *Trichomanes speciosum* (Killarney Fern)

*Conservation Objectives (Site Specific)*

The conservation objectives for the site are to maintain the favourable conservation condition of the above listed species and habitats in the Blackwater River



(Cork/Waterford) SAC, which is defined by a number of attributes and targets including related to:

- Distribution,
- Population structure,
- Habitat extent,
- Water and substratum quality,
- Vegetation
- Barriers to connectivity,

#### *Potential Effects on Qualifying Interests*

9.5.2. The potential pathways between the construction and material storage areas connected with the proposed development and the Blackwater River (Cork / Waterford) SAC site comprise the presence of a number of watercourses in the vicinity of the construction areas that have a direct hydrological connection with the SAC site. As identified above, there are also a number of crossing points of watercourses along the identified haul route (specifically along the N72 and R671) that connect with the Blackwater River (Cork / Waterford) SAC site. These potential connections are assessed in more detail below. Firstly however, the nature of the proposed construction activities are such that the risk to the conservation objectives derives from the potential mobilisation and release of sediments and construction related contaminants. These potential discharges, and specifically the potential for sedimentation would potentially impact negatively on the favourable conservation condition of a number of species which are qualifying interests for the SAC and which are sensitive to siltation and other reductions in water quality, most notably freshwater pearl mussel but also potentially White-clawed Crayfish, lamprey species and salmon.

9.5.3. In the case of the freshwater pearl mussel, the conservation objectives document indicates that the recorded areas comprise the River Licky catchment to the south of the site which is a tributary of the River Blackwater and to which there is no hydrological connection or pathway with the appeal site, (see Map 8 in the NPWS

Site Specific Conservation Objectives document). Similarly, the recorded locations of crayfish species within the SAC are significantly further upstream in the River Blackwater catchment than the point where the streams in the vicinity of the appeal site discharge to the River Blackwater, (see Map 9 in the NPWS Site Specific Conservation Objectives document). For lamprey species, Map 10 attached to the Conservation Objectives document indicates that the sea lamprey (juveniles) are present in the lower reaches of the River Licky c.9km (direct distance) to the south of the appeal site and where there is no hydrological connection with the appeal site. Having regard to the above, it is not considered that any slight increase in sedimentation that may reach the SAC would be likely to have a significant negative effect on the conservation objectives of the site that relate to these species.

9.5.4. In addition to the above, the following relates to the potential pathways between the appeal site and the Blackwater River (Cork / Waterford) SAC:

#### *Ground Stability Issue*

- On a general issue, the third party appeal submitted by Reid Associates on behalf of Michael and Giancarla Alen Buckley makes reference to ground stability on the environs of the development and that the proposed development could give rise to ground stability issues which would have negative impacts on European sites in the vicinity. Specific reference to the Derrybrien windfarm case is made. Ground stability and the potential for ground slippage or movement is not in my opinion a significant risk in the circumstances of the appeal site. Specifically, the nature of the proposed development comprises a limited degree and scale of excavations which would be undertaken within existing bound and engineered forestry tracks. No deep excavations are proposed and the maximum volume of material that would be excavated at any one time (per 50 linear metre section of the route) would be less than 50 cubic metres. Furthermore, the issue of ground stability was examined by Hydro Environmental Services during the course of the preparation of the application and no areas of deep peat or evidence of potential failures were identified. For these reasons, I do not consider that issues of ground failure or slope stability are such as to lead to potential emissions from the site that could seek a potential pathway to European sites.

#### *Stream / Watercourse to South of Site*

- To the south of the site, the construction areas within the development site are located within c.360 metres of the end of a stream that is tributary of the River Goish. This stream is referred to as the Monageela Stream in the submitted Screening Assessment, (see section 2.7.1.2). This pathway would involve construction or excavated material or other contaminants from the proposed development being mobilised by surface water and being moved c.400 metres across forest scrub and across lands that have a fall of c 10 metres over the 400 metre distance (2.5 percent slope). The pathway then comprises a distance of c. 1.5km in the drain to the River Goish and a further c.8.5 km in the River Goish before it joins with the Blackwater River SAC. Having regard to the distance between the works and materials storage areas and this watercourse (stream), to the nature of and volume of the construction related material that will predominately comprise excavated material comprising soil and sub soil from the cable trench, the nature of the ground across which this material would have to pass to reach the watercourse (drain) in terms of ground cover and slope and the very significant length of the hydrological pathway to the closest point within the Blackwater River (Cork / Waterford) SAC site, I do not consider that this is a viable pathway that could lead to likely significant effects on the SAC. Taken in conjunction with the comments above at 9.3.3 regarding the location of the species that are qualifying interests of the SAC, I conclude that this pathway would not lead to any likely significant effects of the conservation objectives of the SAC.

#### *Stream / Watercourse to South West of Site*

- To the south west of the appeal site and within c.1km of the closest works area related to the proposed development, there is the start of a stream that forms a tributary of the Ballynaparka River which subsequently drains into the River Goish and then discharges to the River Blackwater within the SAC. This pathway would involve construction or excavated material or other contaminants from the proposed development being mobilised by surface water and being moved c.1km across forest scrub and across lands that have a fall of c.50 metres over the 1km distance (c.0.5 percent slope) and the full length of the hydrological part of the pathway is c. 6.5km. Having regard to

the distance between the works and materials storage areas and this watercourse (stream), to the nature of and volume of the construction related material that will predominately comprise excavated material comprising soil and sub soil from the cable trench, the nature of the ground across which this material would have to pass to reach the watercourse (drain) in terms of ground cover and slope and the very significant length of the hydrological pathway to the closest point within the Blackwater River (Cork / Waterford) SAC site, I do not consider that this is a viable pathway that could lead to likely significant effects on the SAC. Taken in conjunction with the comment above at 9.3.3 regarding the location of the species that are qualifying interests of the SAC, I therefore conclude that this pathway would not lead to any likely significant effects of the conservation objectives of the SAC.

#### *Stream / Watercourse to North West of Site*

- To the north west, there is a stream that is a tributary of the Finisk River and which is located c.950 metres from the closest part of the works area connected with the proposed development which is in the vicinity of the substation site. The fall over this c.950 metre distance is c.50 metres across improved grasslands including field boundaries equating to a slope of c. 0.5 percent. The stream then runs for a distance of c.3km north to connect with the Finisk River in an area that is within the boundary of the Blackwater River (Cork / Waterford) SAC. Having regard to the distance between the works and materials storage areas and this watercourse (stream), to the nature of and volume of the construction related material that will predominately comprise excavated material comprising soil and sub soil from the cable trench, the nature of the ground across which this material would have to pass to reach the watercourse (drain) in terms of ground cover and slope and the very significant length of the hydrological pathway to the closest point within the Blackwater River (Cork / Waterford) SAC site, I do not consider that this is a viable pathway that could lead to likely significant effects on the SAC. Taken in conjunction with the comments above at 9.3.3 regarding the location of the species that are qualifying interests of the SAC, I therefore conclude that this pathway would not lead to any likely significant effects of the conservation objectives of the SAC. I note that the third party submission on

file from Reid Associates on behalf of Michael and Giancarla Alen Buckley contends that there is a direct pathway from the Woodhouse substation to the R. Blackwater SAC which is host to the freshwater pearl mussel and that the application should have been accompanied by an appropriate assessment. As set out above, I do not consider that any direct pathway exists, that the separation of the construction area to the watercourse in this area is such that no viable pathway exists and that, in any event, the watercourse referred to by the third party connects with the SAC such that the identified areas of freshwater pearl mussel habitat would not be potentially impacted.

#### *Potential Pathways Arising from Haul Route*

- Construction access to the grid connection project involves access south along the R671 from the junction with the N72 and this access is proposed to be used for all grid connection project traffic as well as oversized / turbine component traffic associated with Knocknamona Windfarm. The route involves crossing a number of watercourses between the N72 / R671 junction and Clogh Crossroads, notably the Finisk River at Whitechurch Bridge c.1.3km south of the junction and watercourse referred to in the bullet point above, which crosses the R671 at Keereen Bridge approximately 1km north east of Clogh Crossroads. The haul route also crosses the Finisk River at Finisk Bridge on the N72, to the east of the N72 / R671 junction. This crossing point is however on a national road and, while it was not the subject of specific structural assessment in the information available on file, I do not consider that it is such that there is a potential for structural damage to arise such as would lead to a likely significant effect on the SAC. Regarding national routes, it is noted that TII made two submissions to the Planning Authority on the project, both of which stated that it had no comment to make on the proposed development.
- The third party submission on file submitted by Reid Associates on behalf of Michael and Giancarla Alen Buckley raises particular concerns regarding the structural stability of Keereen Bridge (over what is referred to by the third party as the Glenkeereen Stream) and notes that a collapse at this location would have potential negative effects on the water quality in the Finisk River c.2km to the north which is part of the Blackwater River (Cork / Waterford)

SAC, such as to have likely significant effects on the conservation objectives of this site and require the submission of a Stage 2 Appropriate Assessment. With regard to this issue, I note the fact that the request for further information made by the Planning Authority, included a request for further details of the condition and potential impact of the proposed development on, structures along the haul route. In response to this request, the first party submitted details of the structural stability of bridges along the haul route, including Keereen Bridge (Assessment Structure AS13) in the report titled '*Architectural Heritage Impact Assessment along construction traffic haul routes*' and Buried Structure (BS6) in report '*Structural Inspection of Bridges*'. These assessments concluded that this bridge is suitable for construction traffic associated with KWF Grid Connection and the Knocknamona WF and that there is no indication of any risk of structural collapse that would impact on the watercourse. Similarly, in the case of Whitechurch Bridge, the assessments referred to above, (structure identified as BS1 in structural assessment and AS6 in the architectural assessment) do not identify any significant risk of structural issues arising as a result of the proposed development. On this issue, I would also note that this haul route was used during the construction of the Woodhouse Windfarm and there is no indication that significant damage to this or any other structures on the haul route that could impact on European sites arose at this time. In addition, no engineering basis for the case made by the third party is presented with the appeal. Having regard to these factors, I do not consider that the impact of construction traffic travelling to the site would be such as to have likely significant effects on any European site.

#### *Stream / Watercourse to East of Site*

- I also note that there is a stream located to the east of the appeal site which is the closest watercourse to any part of the proposed development. This is identified as The Roaring Waters on the OS Map and referred to as the Mountodell Stream in the submitted AA Screening Report. The separation distance to this watercourse is c.280 metres from the closest part of the works area and the stream is at a level c.50 metres lower than the site at this point. The Roaring Waters connects with the River Brickey c.3.2km from the appeal

site and then flows a further c.5.5km to Dungarvan Harbour where it connects with the Dungarvan Harbour SPA. Given the separation distance and having regard to the conservation objectives of the Dungarvan Harbour SPA site no significant effects on the European site arising from the hydrological pathway between the appeal site and the SPA are considered likely to arise.

#### 9.5.5. **Dungarvan Harbour SPA (site code 004032)**

- Great Crested Grebe (*Podiceps cristatus*)
- Light-bellied Brent Goose (*Branta bernicla hrota*)
- Shelduck (*Tadorna tadorna*)
- Red-breasted Merganser (*Mergus serrator*)
- Oystercatcher (*Haematopus ostralegus*)
- Golden Plover (*Pluvialis apricaria*)
- Grey Plover (*Pluvialis squatarola*)
- Lapwing (*Vanellus vanellus*)
- Knot (*Calidris canutus*)
- Dunlin (*Calidris alpina*)
- Black-tailed Godwit (*Limosa limosa*)
- Bar-tailed Godwit (*Limosa lapponica*)
- Curlew (*Numenius arquata*)
- Redshank (*Tringa totanus*)
- Turnstone (*Arenaria interpres*)
- Wetland and Waterbirds

#### *Conservation Objectives (Site Specific)*

To maintain the favourable conservation condition of the above listed species in Dungarvan Harbour which is defined by the following targets:

- That the long term population trend is stable or increasing.
- That there should be no significant decrease in the numbers or range of areas used by waterbird species, other than that occurring from natural patterns of variation.

In the case of the wetland habitat, the conservation objective is to maintain the favourable conservation condition of the wetland habitat in Dungarvan Harbour SPA as a resource for the regularly-occurring migratory waterbirds that utilise it. This is defined by the following target:

- *'The permanent area occupied by the wetland habitat should be stable and not significantly less than the area of 2,219ha, other than that occurring from natural patterns of variation'.*

#### *Potential Effects on Qualifying Interests*

- 9.5.6. The potential effects of the proposed development that could impact on the conservation objectives of this SPA site relate to changes in vegetation / groundcover and resulting impacts on habitat, new structures that could impact on flightpaths and potential pollution of habitat arising from construction activities.
- 9.5.7. Firstly, as described above, while there is a potential hydrological pathway between the appeal site and the SPA via the Roaring Waters stream, the scale of development proposed, the separation distance involved between the works area and this watercourse, the length of the hydrological connection and the nature of the conservation objectives are such that the proposed development would not have any likely significant effects on the conservation objectives of the SPA.
- 9.5.8. With regard to changed habitat, the proposed development would result in a temporary loss / change of habitat during construction of the cable route. For the majority of the alignment of the project, these works would be within existing forestry tracks which have negligible habitat value to any bird species. The exception to this is the proposed c. 190 metre long section of new track where an area of c. 855 sq. metres of existing scrub (190 metres by 4.5 metres) would be changed to forestry track. This scrub comprises secondary rotation forestry.



9.5.9. A limited number of the species listed as qualifying interests of this SPA and for which conservation objectives are identified, are recorded in the surveys for either the grid connection project or the Knocknamona WF development. Specifically, 3 no. golden plover were observed in the winter 2018 vantage point surveys and a number of sightings of gulls (waterbirds) were also recorded. Given this, the temporary nature of any loss of habitat arising, the abundance of other similar habitat in the general area to that which would be permanently lost (scrub), and to the significant separation distance between the appeal site and the SPA, I agree with the conclusion of the submitted AA Screening which states at paragraph 2.7.2 that there is no potential for indirect effects on the conservation objectives of this SPA to arise.

9.5.10. **Blackwater Estuary SPA (site code 004028)**

- Wigeon *Anas penelope* wintering
- Golden Plover *Pluvialis apricaria* wintering
- Lapwing *Vanellus vanellus* wintering
- Dunlin *Calidris alpina* wintering
- Black-tailed Godwit *Limosa limosa* wintering
- Bar-tailed Godwit *Limosa lapponica* wintering
- Curlew *Numenius arquata* wintering
- Redshank *Tringa totanus* wintering
- Wetlands

*Conservation Objectives (Generic) as follows:*

- To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA.

Second objective relating to wetland habitat:

- To maintain or restore the favourable conservation condition of the wetland habitat at Blackwater Callows SPA as a resource for the regularly-occurring migratory waterbirds that utilise it.

*Potential Effects on Qualifying Interests*

- 9.5.11. The potential effects of the proposed development that could impact on the conservation objectives of this SPA site relate to changes in vegetation / groundcover and resulting impacts on habitat, new structures that could impact on flightpaths and potential pollution of habitats arising from construction activities.
- 9.5.12. Firstly, as described above, while there is a potential hydrological pathway between the appeal site and the SPA via streams in the general vicinity of the site which finally discharge to the River Blackwater, the nature and scale of the proposed construction works, the separation distance involved between the works area and these streams, the length of the hydrological connection to the SPA and the conservation objectives are such that the proposed development would not have any likely significant effects on the conservation objectives of the SPA.
- 9.5.13. With regard to changed habitat, the proposed development would result in a temporary loss / change of habitat during construction of the cable route. For the majority of the alignment of the project, these works would be within existing forestry tracks which have negligible habitat value to any bird species. The exception to this is the proposed c. 190 metre long section of new track where an area of c. 855 sq. metres of existing scrub (190 metres by 4.5 metres) would be changed to forestry track. This scrub comprises secondary rotation forestry.
- 9.5.14. A total of 3 no. golden plover were observed in the winter 2018 vantage point surveys undertaken for the grid connection project. Given this limited number, the temporary nature of any loss of habitat arising, the abundance of other similar habitat in the general area to that which would be permanently lost (scrub) and to the significant separation distance between the appeal site and the SPA, I agree with the conclusion of the submitted AA Screening which states at paragraph 2.7.2 that there is no potential for indirect effects on the conservation objectives of the SPA to arise.

#### 9.5.15. Helvic Head to Ballyquin SPA (site code 004192)

- Cormorant (*Phalacrocorax carbo*)
- Peregrine (*Falco peregrinus* )
- Herring Gull (*Larus argentatus*)
- Kittiwake (*Rissa tridactyla*)
- Chough (*Pyrrhocorax pyrrhocorax*)

*Conservation Objective (Generic) as follows:*

- To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA.

*Potential Effects on Qualifying Interests*

- 9.5.16. The potential effects of the proposed development that could impact on the conservation objectives of this SPA site relate to changes in vegetation / groundcover and resulting impacts on habitat, new structures that could impact on flightpaths and potential pollution of habitats arising from construction activities.
- 9.5.17. Firstly, as described above, while there is a potential hydrological pathway between the appeal site and the SPA via streams in the general vicinity of the site which finally discharge to the River Blackwater, the separation distance involved between the works area and these streams, the length of the hydrological connection to the SPA and the conservation objectives are such that the proposed development would not have any likely significant effects on the conservation objectives of the SPA.
- 9.5.18. With regard to changed habitat, the proposed development would result in a temporary loss / change of habitat during construction of the cable route. For the majority of the alignment of the project, these works would be within existing forestry tracks which have negligible habitat value to any bird species. The exception to this is the proposed c. 190 metre long section of new track where an area of c. 855 sq. metres of existing scrub (190 metres by 4.5 metres) would be changed to forestry track. This scrub comprises secondary rotation forestry.

9.5.19. None of the species listed as qualifying interests of this SPA and for which conservation objectives are identified, are recorded in the surveys for either the grid connection project or the Knocknamona WF development. Given this, the nature and extent of the construction works, the temporary nature of any loss of habitat arising, the abundance of other similar habitat in the general area to that which would be permanently lost (scrub) and to the significant separation distance between the appeal site and the SPA, I agree with the conclusion of the submitted AA Screening which states at paragraph 2.7.2 that there is no potential for indirect effects on the conservation objectives of the SPA to arise.

**9.5.20. Blackwater Callows SPA (site code 004094)**

- Whooper Swan (*Cygnus cygnus*)
- Wigeon (*Anas penelope*)
- Teal (*Anas crecca*)
- Black-tailed Godwit (*Limosa limosa*)
- Wetland and Waterbirds

*Conservation Objective (Generic) as follows:*

- To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA.

*Potential Effects on Qualifying Interests*

9.5.21. The potential effects of the proposed development that could impact on the conservation objectives of this SPA site relate to changes in vegetation / groundcover and resulting impacts on habitat, new structures that could impact on flightpaths and potential pollution of habitats arising from construction activities.

9.5.22. Firstly, there are no direct pathways that would connect the proposed development site and the SPA that would have any significant impacts on water quality such as to impact on conservation objectives for the site.

9.5.23. With regard to changed habitat, the proposed development would result in a temporary loss / change of habitat during construction of the cable route. For the majority of the alignment of the project, these works would be within existing forestry tracks which have negligible habitat value to any bird species. The exception to this is the proposed c. 190 metre long section of new track where an area of c. 855 sq. metres of existing scrub (190 metres by 4.5 metres) would be changed to forestry track. This scrub comprises secondary rotation forestry.

9.5.24. Surveys undertaken for the grid connection project recorded Whooper Swans in the vicinity of Clogh Bog to the west of the appeal site across four survey dates in winter 2018. The location of these sightings is c.2.5 km to the west of the nearest works area related to the proposed development (at the Woodhouse substation compound) and is approximately 9km to the north of the SPA site. The nature of the habitat on site is not suitable for whooper swan nesting or foraging, and no evidence of the presence of the species in the immediate vicinity of the works area was recorded suggesting that it is not on a flight path and that the appeal site is not located on a path between the sighting location (at Clogh Bog) and the SPA site to the south. The third party appellants (Reid Associates on behalf of Michael and Giancarla Alen Buckley) raise the issue of potential bird collisions and electrocution and that this issue should be undertaken in an integrated manner with the wind farms. While the proposed development does incorporate lightening masts 17.5m in height & ancillary electrical equipment, the information available does not indicate the presence of Whooper Swans on the appeal site or flying over the site and no additional turbines or other above ground high structures that could comprise a collision risk are proposed as part of the development. Given these facts, the temporary nature of any loss of habitat arising, the abundance of other similar habitat in the general area to that which would be permanently lost (scrub) and to the significant separation distance between the appeal site and the SPA, I agree with the conclusion of the submitted AA Screening which states at paragraph 2.7.2 that there is no potential for indirect effects on the conservation objectives of the SPA to arise.

## 9.6. In Combination Effects Arising from Other Plans and Projects

9.6.1. The following is my assessment of the potential for other permitted or proposed plans and projects to combine with the proposed development to give rise to likely significant effects on the above identified European sites.

- The permitted but not yet constructed Knocknamona WF,
- The constructed and operational Woodhouse WF,
- The constructed and operational Woodhouse substation.

9.6.2. The situation with regard to the Knocknamona WF is that permission was granted by the Board (Ref. PL93.244006) on the basis that significant adverse effects on the conservation objectives of European sites were screened out. This approach followed the recommendation of the inspector in that case and was adopted by the Board despite the fact that a Stage 2 appropriate assessment had been submitted by the first party. The Board Direction in this case states that *'the Board adopted the Planning Inspector's reports and concurred with his analysis and conclusions and concluded that, by itself and in combination with other plans or projects in the area, the proposed development would not be likely to have significant effects on European sites.'*

9.6.3. In the case of the **Woodhouse Windfarm and substation projects**, these developments have been completed and commissioned for a number of years. The potential impacts of both of these developments on European sites relate primarily to the construction phase of the projects which are now complete and, given the fact that construction is completed, it is not considered that there is potential for construction phase emissions from the Woodhouse developments that would have the potential to impact on the conservation objectives of European sites. Having regard to this fact, and to the very limited likelihood of significant effects on European sites arising from the development of the grid connection project which is the subject of this appeal as set out in Section 9.5 of this screening assessment above, I do not consider that likely significant in combination effects would arise when the proposed development is assessed in combination with these projects.

9.6.4. In the case of the permitted but not yet constructed **Knocknamona Windfarm**, there is potential for the windfarm to act in combination with the grid connection project, especially given that it is likely that construction activity would be undertaken on the two projects at the same time and also having regard to the fact that the proposed development the subject of the current appeal proposes changes to the haul route for windfarm components and such that this haul route would be via the N72 and R671. Under the heading of 'Potential Pathways Arising from Haul Route' at paragraph 9.5.4 above it has been demonstrated that the revised haul route for oversized / turbine components connected with the Knocknamona Windfarm project will not have impacts on the proposed haul route (N72 and R671) such as would lead to likely significant effects on any European sites. In addition, it should be noted the two projects physically overlap to a very limited extent with the overlap in construction area limited to a section of c.300 metres at the southern end of the alignment of the Grid Connection Project where the proposed grid connection cable would run in close proximity to a cable connecting the permitted windfarm substation with the met mast.

9.6.5. In assessing the potential for in combination effects on water quality and hydrological pathways to European sites, it is noted that Chapter 9 of the submitted EIAR (relating to Water) identifies that the Grid Connection Project works are largely located in a different sub basin from those of the Knocknamona Windfarm, (see Figure 9.2.1 of Volume C3 of EIAR). While both these sub catchments have the potential to ultimately discharge to the River Blackwater in areas within the SAC, it should be noted that the discharge locations are located relative to the recorded populations of water quality sensitive species of qualifying interests (notable freshwater pearl mussel, lamprey species and white clawed crayfish) such that no indirect effects on the conservation objectives connected with these qualifying interests are considered likely to arise, (see Maps 8, 9 and 10 of the Site Specific Conservation Objectives document for the Blackwater River (Cork / Waterford) SAC site. Fundamentally, the likely construction phase impacts arising from the grid connection project would be very localised in extent, the likelihood of significant effects arising from the grid connection project is considered to be very low and when considered in combination with the Knocknamona WF project, which itself was screened out from the requirement for Stage 2 appropriate assessment, the

likelihood of any effects on the conservation objectives of European sites can be excluded.

9.6.6. For the reasons set out above, I do not agree with the contention of the third party appellants (Michael and Giancarla Alen Buckley c/o Reid Planning and Development Consultants) that it is inconceivable that if these projects are assessed in combination and the correct test applied that a stage 2 assessment is not required. Similarly, I note but do not agree with the contention of this party that as the grid connection project and Knocknamona Windfarm forms part of an overall project and that the permission granted for the Knocknamona WF was on the basis of a Stage 2 Appropriate Assessment that a screening assessment conclusion of no significant effects cannot be reached. As noted above, while the application for the Knocknamona WF submitted to the Planning Authority and considered on appeal by the Board (Ref. PL09.244006) was accompanied by a Screening Assessment and a Stage 2 Appropriate Assessment, the assessment undertaken by the Board Inspector and adopted by the Board in its decision was that the likelihood of significant effects on a European site could be ruled out at Screening Stage. The appellants are not therefore correct in their statement that a stage 2 assessment of Knocknamona Windfarm has been undertaken and that by extension a Stage 2 assessment of the Grid Connection Project is therefore required. In my opinion, even had the Knocknamona WF been permitted on foot of a Stage 2 Appropriate Assessment it would not in itself mean that a screening assessment for a subsequent application for a grid connection would have to be accompanied by a Stage 2 AA.

#### 9.7. **Conclusion of Screening Assessment**

The proposed development was considered in light of the requirements of Section 177U of the Planning and Development Act, 2000 as amended. Having carried out screening for appropriate assessment, it has been concluded that the proposed development individually or in combination with other plans or projects would not be likely to have significant effects on European site No. 002170 (Blackwater River (Cork / Waterford) SAC), or any other European site, in view of the sites



conservation objectives, and appropriate assessment (and submission of a NIS) is not therefore required.

This determination is based on the following:

- The nature and scale of the proposed development and the amount and type of materials that would be stored and present on site during the construction phase,
- The separation distance between the proposed works areas and the nearest watercourses to the site, the nature of the topography and ground cover over the areas between the proposed works / materials storage areas and these watercourses, the length of the hydrological connections between the closest part of the identified watercourses and the SAC and the recorded locations within the SAC of species vulnerable to siltation and deterioration in water quality relative to the discharge points of the identified watercourses to the SAC,
- The nature and condition of the watercourse crossing along the haul route (specifically Whitechurch Bridge and Keeleen Bridge) and the limited potential for structural impacts to arise at these locations such as would give rise to likely significant effects on any European site,
- The separation of the appeal site from identified SPA sites and limited survey evidence of the presence of bird species that are qualifying interests of the identified SPA sites within or close to the appeal site, and
- The nature of existing habitats on site which are frequently occurring in the general vicinity of the site and the wider area and the limited extent of long term change to these habitats arising on foot of the proposed development.

## 10.0 Recommendation

- 10.1. Having regard to the above, it is recommended that permission be granted based on the following reasons and considerations and subject to the attached conditions:

## 11.0 Reasons and Considerations

Having regard to

- (a) European and national policies to increase the proportion of energy that is generated from alternative, indigenous and renewable energy sources including wind and the minimisation of emissions of greenhouse gases as set out in the Renewable Energy Directive 2009/28/EC and the National Climate Action Plan and the National Planning Framework,
- (b) the policies set out in the Regional Spatial and Economic Strategy for the Southern Region, ,
- (c) the policies of the planning authority as set out in the Waterford County Development Plan 2011-2017 (as extended and varied),
- (d) the provisions of the Renewable Energy Strategy for Waterford City and County 2016 -2030,
- (e) the nature of the proposed development that comprises infrastructure that facilitates the connection of a permitted wind energy development that is located in an area identified in the Waterford County Council Development Plan as a 'Strategic Area' where it is the policy of the planning authority to facilitate the development of appropriate wind energy proposals,
- (f) the distances of the proposed development to dwellings or other sensitive receptors,
- (g) the nature and scale of the proposed development and the contents of the Environmental Impact Assessment Report, Screening for Appropriate Assessment Report and further information submitted by the applicant,
- (h) the range of mitigation measures set out in the documentation received, including the Environmental Impact Assessment Report and further submissions from the Applicant to the Board in the course of the appeal,
- (i) the separation distance from the site of the proposed development to sites designated as part of the Natura 2000 network and the nature of the connections between them,

- (j) the topography and character of the landscape of the area and the character of the landscape through which the indicated grid connection would be provided,
- (k) the planning history of the site and the pattern of existing and permitted development in the area, and
- (l) the submissions made in the course of the planning application and appeal,

it is considered that, subject to compliance with the conditions set out below, that the proposed development:

- would be in accordance with national and regional policy on wind energy, wind energy infrastructure and the facilitation of renewable energy projects,
- would be in accordance with the provisions of the *Waterford County Development Plan, 2011-2017*, including the policies relating to wind energy, and the protection of landscapes and scenic amenity,
- would not seriously injure the visual amenities of the area or have a significant negative impact on the landscape,
- would not seriously injure the amenities or depreciate the value of properties in the vicinity of the site,
- would not give rise to a risk of pollution,
- would not detract from archaeological features or from architectural heritage,
- would be acceptable in terms of traffic safety and convenience and
- would not be prejudicial to public health.

The proposed development would, therefore, be in accordance with the proper planning and sustainable development of the area.

## 12.0 Conditions

1. The development shall be carried out and completed in accordance with the plans and particulars lodged with the application as amended by the further plans and particulars submitted on the 22<sup>nd</sup> day of October 2019, except as may otherwise be required in order to comply with the following conditions. Where such conditions require details to be agreed with the planning authority, the developer shall agree such details in writing with the planning authority prior to commencement of development and the development shall be carried out and completed in accordance with the agreed particulars.

**Reason:** In the interest of clarity.

2. All mitigation measures and environmental monitoring requirements identified in the EIAR and other plans and particulars submitted with the application shall be complied with in the development.

**Reason:** In the interests of clarity and the protection of the environment.

3. The period during which the development hereby permitted may be carried out shall be 6 years from the date of this order.

**Reason:** Having regard to the nature of the development, and the timeline of the extant permission granted by the Board under Ref. PL93.244006 for the construction of the Knocknamona Windfarm which expires on 13<sup>th</sup> December, 2026, the Board considers it appropriate to specify a period of validity of this permission in excess of five years.

4. With the exception of works permitted within the boundary of the Woodhouse substation, and unless authorised by a further grant of permission, this permission shall be for a maximum period of 25 years from the date of commissioning of the windfarm permitted by the Board under Ref. PL93.244006.

**Reason:** To clarify the duration of the permission and to enable the planning authority to review the operations of the development in the light of the circumstances then prevailing.

5. Within 3 months of the full or partial decommissioning of the wind farm development permitted under Board Ref. PL93.244006 to which this grid connection relates, or if the wind farm ceases operation for a period of more than one year, a plan for the decommissioning and removal of all permitted grid connection infrastructure located outside of the Woodhouse substation compound shall be submitted for the written agreement of the Planning Authority. Such a plan shall include a timescale for implementation.

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

6. The operation of the proposed development, by itself or in combination with any other permitted wind energy development, shall not result in noise levels, when measured externally at nearby noise sensitive locations, which exceed:

- (a) Between the hours of 7am and 11pm:  
the greater of 5 dB(A)  $L_{90,10min}$  above background noise levels, or 45 dB(A)  $L_{90,10min}$ ,
- (b) 43 dB(A)  $L_{90,10min}$  at all other times.

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, including any mitigation measures. 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 R 1996-

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 proposed development and the wind farm permitted under Ref. PL93.244006.

**Reason:** In the interest of residential amenity.

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

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

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

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

9. Prior to the commencement of development, the developer shall submit and receive the written agreement of the Planning Authority for a plan for the management of dust during the construction phase of the development. This plan shall include details of the locations and methodology for the monitoring of dust emissions at sensitive locations in the vicinity of the site and shall ensure that the development shall not give rise to emissions of dust that exceed 350mg/m<sup>2</sup>/day at the identified sensitive locations.

**Reasons:** In the interests of environmental protection and residential amenity.

10. 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) relating to 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.

11. (a) Prior to the commencement of development, details of the following shall be submitted to and agreed in writing with the Planning Authority:

- (i) A Transport Management Plan, including details of the road network, haulage routes and a schedule of control measures for exceptionally large and / or heavy loads,
- (ii) a condition survey of the roads and bridges along the haul route to be carried out at the developer's expense by a suitably qualified person both before and after construction of the development. This survey shall include a schedule of required works to enable the haul routes to cater for construction related traffic. The extent and scope of the survey and the schedule of works shall be agreed with the planning authority prior to the commencement of development,
- (iii) Detailed proposals for the rectification of any construction damage which arises,
- (iv) Detailed arrangements for any temporary traffic arrangements / controls required on roads in the vicinity of the site,
- (v) A programme indicating the timescale within which it is intended that public roads would be used to facilitate construction of the development,

(b) All works arising from the above requirements shall be undertaken at the developer's expense.

**Reason:** In the interest of traffic safety.

12. Prior to commencement of development, the developer shall lodge with the planning authority a cash deposit, a bond of an insurance company, or such other security as may be acceptable to the planning authority, to secure the reinstatement of public roads which may be damaged by the transport of materials to the site, coupled with an agreement empowering the planning authority to apply such security or part thereof to the satisfactory reinstatement of the public road. The form and amount of the security shall be as agreed



between the planning authority and the developer or, in default of agreement, shall be referred to An Bord Pleanála for determination.

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

13. The developer shall pay to the planning authority a financial contribution of €243 (two hundred and forty three euro) in respect of public infrastructure and facilities benefiting development in the area of the planning authority that is provided or intended to be provided by or on behalf of the authority in accordance with the terms of the Development Contribution Scheme made under section 48 of the Planning and Development Act 2000, as amended. The contribution shall be paid prior to commencement of development or in such phased payments as the planning authority may facilitate and shall be subject to any applicable indexation provisions of the Scheme at the time of payment. The application of any indexation required by this condition shall be agreed between the planning authority and the developer or, in default of such agreement, the matter shall be referred to An Bord Pleanála to determine.

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



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**Stephen Kay**  
Planning Inspector

21<sup>st</sup> December, 2020

DECISION QUASHED