S. 37

File With _____

SECTION 131 FORM

Appeal NO:_PL 244439 **Defer Re O/H** ☐

TO:SEO

Having considered the contents of the submission ~~dated~~/ received 03/11/15 from

Applicant I recommend that section 131 of the Planning and Development Act, 2000 be/~~not be~~ invoked at this stage for the following reason(s):. As per Board Directions

E.O.: Rob Forde **Date:** 03/11/15

To EO:_____

Section 131 not to be invoked at this stage. ☐

Section 131 to be invoked – allow 2/4 weeks for reply. ☐

S.E.O.:_____ **Date:**_____

S.A.O:_____ **Date:**_____

M R Sutton

Please prepare BP 70 **- Section 131 notice enclosing a copy of the attached submission**

to: _____

Allow 2/4weeks – BP 70 Allow 3 weeks

EO: Rob Forde **Date:** 03/11/15

AA: [signature] **Date:** 04/11/15

File With _____

CORRESPONDENCE FORM

Appeal No: PL 04.244439

M R Sutton

Please treat correspondence received on 03/11/15 **as follows:**

1. Update database with new agent for Applicant/Appellant _____

2. Acknowledge with BP 23

3. Keep copy of Board's Letter ☑

1. RETURN TO SENDER with BP _____

2. Keep Envelope: ☐

3. Keep Copy of Board's letter ☐

Amendments/Comments

4. Attach to file

(a) R/S ☐

(b) GIS Processing ☑

(c) Processing ☑

(d) Screening ☐

(e) Inspectorate ☐

RETURN TO EO ☐

Plans Date Stamped ☐

Date Stamped Filled in ☐

): Rob Forde

te: 03/11/15

AA: [signature]

Date: 04/11/15


1


2


3


4

View 2.5 – Proposed Substation with Proposed 6 Turbine Wind Farm – with landscaping

FEHILY TIMONEY & COMPANY

CONSULTANTS IN ENGINEERING & ENVIRONMENTAL SCIENCES

Our Ref: Q: 2014/LE14/702/02/Let015/MG

The Secretary
An Bord Pleanala
64 Marlborough Street
Dublin 1

AN BORD PLEANÁLA
TIME _____ BY _____
- 3 NOV 2015
LTR-DATED _____ FROM _____
PL _____

02 November 2015

RE: Planning Reference 14/557 and PL 04.244439 – Response to Request for Clarification from An Bord Pleanála

Dear Sir/Madam,

Arran Windfarm Ltd. [**the applicant**] has appointed Fehily Timoney and Company (FTC), Core House, Pouladuff Road, Cork [**the agent**] to prepare a response to the request for clarification from An Bord Pleanála in respect of a proposed development at Barnadivane (Kneeves), Terelton, Co. Cork, Cork County Council Planning Reference 14/557, An Bord Pleanála Reference PL 04.244439.

The proposed development, for which a 10 year permission was granted by Cork County Council, comprises:

The construction of an electricity substation compound, this application is intended to replace the substation already granted permission under PL04.219620 (05/5907) and subsequently extended under 11/6605. The electricity substation layout includes 3 no. control buildings, associated electrical plant and equipment, security fencing and ancillary works.

Please find attached a report prepared in response to clarification request, which addresses the queries of the Board as detailed in its letter dated 06 October 2015.

If you have any further queries please contact the undersigned.

Yours faithfully,

Clodagh O'Donovan
Director
for and on behalf of **Fehily Timoney & Company**

Encl.

AN BORD PLEANÁLA
TIME _____ BY _____
- 3 NOV 2015
LTR-DATED _____ FROM _____

BARNADIVANE 110 KV SUBSTATION, TERELTON, CO. CORK, (CCC PLANNING REF. 14/557) – RESPONSE TO CLARIFICATION REQUEST FROM AN BORD PLEANÁLA

ARRAN WINDFARM LTD.

NOVEMBER 2015

FEHILY TIMONEY & COMPANY

AN BORD PLEANÁLA
TIME _____ BY _____
- 3 NOV 2015
LTR-DATED _____ FROM _____
PL _____

BARNADIVANE 110 KV SUBSTATION, TERELTON, CO. CORK, (CCC PLANNING REF. 14/557) – RESPONSE TO CLARIFICATION REQUEST FROM AN BORD PLEANÁLA

User is Responsible for Checking the Revision Status of this Document

Rev. No.	Description of Changes	Prepared by	Checked by	Approved by	Date
0	Issue to Client	CO'D/MG	COD	COD	02.11.2015

Client: Arran Windfarm Ltd.

Keywords: Barnadivane, 110 kV, substation, planning, appeal, clarification request

Abstract: This report has been prepared by the applicant in response to a clarification request from An Bord Pleanála in respect of a third party appeal currently for decision with the Board in respect of the proposed development of a 110 kV substation at Barnadivane, near Terelton, Co. Cork.

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LIST OF APPENDICES

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1 INTRODUCTION

On 26 September 2014, Arran Windfarm Ltd. submitted a planning application (planning ref 14/557) to Cork County Council for the development of a 110 kV substation at Barnadivane (Kneeves), Terelton, Co. Cork. This application was to replace a previously permitted 110 kV substation granted planning under An Bord Pleanála reference PL04.219620 (Cork Co. Co. reference 05/5907). A 10 year planning permission was sought for a development which consisted of:

The construction of an electricity substation compound, this application is intended to replace the substation already granted permission under PL04.219620 (05/5907) and subsequently extended under 11/6605. The electricity substation layout includes 3 no. control buildings, associated electrical plant and equipment, security fencing and ancillary works.

The proposed substation development is intended to replace that already permitted.

On 13 January 2015, Cork County Council issued a Notification of a Decision to Grant Permission for the proposed development, subject to conditions, stating that:

Having regard to the development plan objectives for the area and the pattern of development in this rural area, it is considered that subject to compliance with conditions attached in the Second Schedule, the proposed development would not seriously injure the amenities of the area and would not be prejudicial to public health and, therefore, would be in accordance with the proper planning and sustainable development of the area.

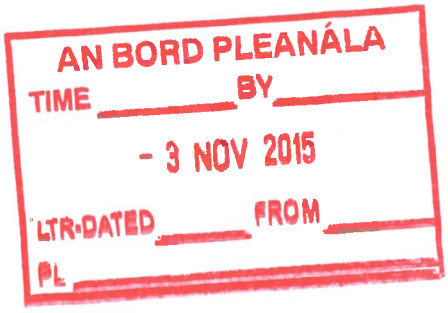
Following the decision by Cork County Council to grant permission, a third party appeal was lodged with An Bord Pleanála by Noonan Linehan Carroll Coffey, Solicitors, on behalf of the following appellants:

- Stephanie Larkin of Moneygaff East, Castletown, Enniskeane, Co. Cork
- Michael O'Donovan of Moneygaff East, Castletown, Enniskeane, Co. Cork
- Denis Buckley of Moneygaff East, Castletown, Enniskeane, Co. Cork
- Noelle Sheehan of Moneygave, Coppeen, Enniskeane, Co. Cork
- Pat Sheehan of Moneygave, Coppeen, Enniskeane, Co. Cork
- Nora Sheehan of Moneygave, Coppeen, Enniskeane, Co. Cork
- Aisling Connolly of Moneygaff East, Enniskeane, Co. Cork
- Gerard Connolly of Moneygaff East, Enniskeane, Co. Cork
- Dan Galvin of Gurranreigh, Lissarda, Co. Cork
- Patrick Manning of Barnadivane, Terelton, Macroom, Co. Cork
- Sabrina Hurley of Moneygaff East, Enniskeane, Co. Cork

The applicant submitted a detailed response to this third party appeal on 09 March 2015, addressing the issues raised by the appellants.

An Bord Pleanála (the Board) has now issued correspondence to the applicant, seeking further information which "*it considers necessary for the purpose of enabling it to determine the appeal*".

This document provides the further information sought by the Board in this respect and deals comprehensively with each of the items sought.



2 SCALE AND LOCATION OF THE PROPOSED SUBSTATION

Item 1 of the request for further clarification from the Board is as follows:

1) *On the basis of the documentation submitted with application and appeal, the Board considers that the applicant has not satisfactorily demonstrated a need for (a) the proposed increase in the scale and capacity of the sub-station from that already permitted in connection with the permitted wind farm at this location and (b) the proposed relocation of the sub-station onto a more elevated and visually dominant area of the wind farm site.*

2.1 Proposed Increase in the Scale and Capacity of the Substation

Both the permitted wind farm (planning reference PL04.219620 (05/5907), with the permission subsequently extended under 11/6605) and the wind farm planning application currently under consideration by Cork County Council (planning reference 14/06760) will need to connect to the national grid.

One of the significant benefits of the proposed wind energy development in this location is the proximity of a 110kV overhead line, which runs through the wind farm site. This allows the energy generated at the wind farm to connect directly to the national grid, avoiding the need for additional overhead cables and also minimising electrical losses.

Eirgrid operates the 110 kV transmission network and therefore any connection to this network, in terms of the connection infrastructure required, such as the substation size and layout, must meet its requirements.

As outlined, the proposed substation will replace an already permitted 110kV substation and switch station within the boundary of the permitted wind farm. The original planning application for the 14 turbine wind farm, made in 2005, was based on a 2003 preliminary design for the 110 kV substation.

At the time, the Transmission System Operator (TSO) was ESB and at that time, the substation layout may have been acceptable to this body. However, in the interim, the role of TSO has passed to Eirgrid plc and the design requirements for 110 kV substations have substantially changed. This is confirmed in a letter from Wind Prospect Ltd. (see enclosed in Appendix 1), who are acting for the applicant in this regard.

The current Air Insulated Switchgear (AIS) 110kV substation required layout from EirGrid is appended to the Wind Prospect correspondence. This layout has evolved from EirGrid's primary 2011 changes as identified in Arran Windfarm Ltd.'s planning submission.

The Wind Prospect letter also states '*As can be seen in the EirGrid drawings the requirements now include that the substation be suitable in its electrical plant layout and overall footprint size to allow for potential future expansion (this is identified in red in the EirGrid drawings). We also note the differences in building sizes and electrical plant configuration. EirGrid will operate the majority of the substation when the construction is completed; however they will not take control of a substation that does not fulfil their current or at the least a very recent specification*'.

To be very clear therefore, this is the only reason behind the increase in footprint for the 110 kV substation, as stated in the planning application, in the applicant's response to the RFI from Cork County Council and subsequently in its response to the third party appeal. The capacity of the substation has remained unchanged. The grid connection was always to the existing overhead 110 kV line and this remains unchanged. The scale is changed only because Eirgrid now has a standard layout substation and will not accept bespoke layouts as was previously permitted.

The application is therefore required so as to allow the currently permitted wind farm (or the revised wind farm if permitted) connect to the electricity grid via an approved Eirgrid substation layout regardless of the size of the wind farm. The size of the substation is dictated by the fact that the connection is to a 110kV overhead line.

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The updated planning application seeks to address the required changes in layout, the potential requirement for future expansion, the increased building size and increased overall substation footprint. These amendments are required in order for EirGrid to assume operational control of the majority of the substation. Eirgrid will not connect the wind farm if the substation is not compliant with its operational requirements.

If these changes are not made, connection of either the permitted wind farm (planning reference PL04.219620 (05/5907), with the permission subsequently extended under 11/6605) or the proposed wind farm (planning reference 14/06760) to the national grid will not be possible, with the result that the wind farm (permitted or proposed) cannot be developed. This in turn will reduce our capacity to meet Ireland's 2020 targets and could result in significant fines for the state.

The final layout was confirmed following a review of the interaction of all elements that were assessed during the environmental assessment. The proposed layout is presented on the planning drawings accompanying this application.

The need therefore, for the increased scale of the substation is clearly demonstrated. It is also clearly demonstrated that there is no increase in capacity of the substation, over that previously permitted.

In respect of the proposed development facilitating the connection of multiple other wind farms to the national grid, this is not the case, certainly from the applicant's perspective. For clarity, the substation, is being developed as 'contestable works', with the asset being transferred to Eirgrid once complete. The applicant therefore will have no control over what future connections are made to this substation, while it is acknowledged that Eirgrid have a standing (and reasonable) corporate requirement for new substations to be capable of expansion in the event of changing technology and future national grid requirements, should these become necessary. The size of the substation relates specifically from the need to connect to a 110 kV line via an Eirgrid approved substation.

The applicant is also clear that the application by Barna Wind Energy (B.W.E.) Ltd. for permission to develop a 6 turbine wind farm (planning reference 14/06760) is intended to replace the 14 turbine wind farm currently permitted. If planning is not granted for this proposed 6 turbine wind farm, the applicant intends to develop the permitted 14 turbine wind farm. The substation will therefore connect either the 14 turbine permitted wind farm or its proposed replacement 6 turbine wind farm, if permitted.

The applicant has further confirmed that it has no plans for further phases of wind energy development, in the immediate area surrounding this proposed Barnadivane Wind Farm, particularly as a constraints assessment has indicated that there is no suitable or viable area for wind farm development in this location.

Since the submission of the planning application for the proposed substation, another development is now proposed to connect to this substation. This development relates to the permitted (under appeal) Shehy More Wind Farm (planning reference 13/551, An Bord Pleanála reference PL.04.243486).

Eirgrid, who will take ownership of the Barnadivane Substation once operational (and takes ownership of all such substations), can make any further connection to it that they wish, subject to any necessary statutory approvals. The Shehy More Wind Farm is now to connect to the proposed (or permitted) Barnadivane Substation.

While this is the case, it must be clearly stated that the proposed Shehy More Wind Farm does not form part of either the Barnadivane substation application or the proposed Barnadivane Wind Farm project. The success or otherwise of the Shehy More planning application will therefore not determine whether or not the Barnadivane substation or wind farm can proceed. In that regard, the Shehy More grid connection is not an integral part of the overall development (the subject matter of this application). It does not form part of the 'one project' for the substation, the subject matter of this application, having regard to the concept of 'one project' as determined in the O'Grianna decision.

It must also be stated that the proposed Shehy More grid connection has been fully assessed as part of the application for the Shehy More Wind Farm, which is currently with the Board (PL.04.243486).

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2.2 Relocation of the Substation

In relation to the change in location of the substation, this has been dealt with in the planning application, in further detail in the response to the RFI from Cork County Council and in the applicant's response to the third party appeal. For the applicant's response to the RFI, a drawing was prepared, (LE14-702-02_Figure 1_Layout_SubStationConstraints - See Appendix 2 herein for a copy) showing the constraints associated with the location of the substation as currently permitted. It is clear that the new proposed substation (as required by Eirgrid) is substantially bigger than the original permitted substation.

The permitted location is constrained, as you can see from this figure, in a number of ways. Firstly, there is very little room between the road and the overhead line, as is demonstrated by the drawing. If the proposed substation was to be located in the permitted location, then the existing overhead line (110 kV) would need to be diverted around the substation compound. If this is diverted to the west, it brings it closer to the permitted turbines, and diverting to the east, will require it to be diverted to the other side of the road. Any relocation of this overhead line would require consent from Eirgrid plc, the landowners and the requisite planning consent.

The proposed substation, given its larger footprint, would also require the removal of significant lengths of hedgerow, to the north of the permitted site, with the attendant impacts on local ecology. Further, additional land agreements would be required, to facilitate expansion to the north.

Should the proposed substation be provided at the previously approved location it would be in closer proximity to dwellings (approximately within 200 metres).

It was for these reasons that the applicant made the decision to move the substation from the permitted location, to the proposed location, which is not constrained in such a way. It was considered that the impact of moving the substation to the proposed location would result in considerably less impact on the local environment, than attempting to design suitable mitigation for the constraints identified at the permitted site, given the change in substation footprint.

The purpose of the proposed substation is to replace that previously permitted under An Bord Pleanála reference PL04.219620 (Cork Co. Co. reference 05/5907). The substation is required to connect the Barnadivane Wind Farm (either that permitted under the same planning reference as above, or the amended proposal currently in the planning process, reference 14/06760) to the national grid. As such, proximity to the wind farm and to the grid connection point (existing 110 kV overhead line in the vicinity of the wind farm) is the key factor in site selection.

A review of the entire area within the permitted wind farm site boundary was carried out to identify the most suitable location in terms of technical, planning and environmental requirements. The following key criteria were considered when selecting the location for the proposed substation:

Capacity for accommodating future expansion:
The substation will form part of the national grid network and Eirgrid plc will take operational control of the majority of it. One of Eirgrid's requirements for new substations is to ensure that there is a sufficient area for expansions or change of plant if such works were required at a future date. So this requirement needed to be accommodated in any new site.

Siting of the substation to be in proximity to the permitted wind farm
The substation has to be located in proximity to the permitted wind farm as it is being proposed to connect the wind farm to the grid. The site selection process for the substation has been fully informed through reviewing the EIS and EIA that was carried out under the previous wind farm application. The EIS study area comprised an area of approximately 355ha in the vicinity and the sensitivity of the receiving environment within the study was characterised at the time. The outcomes of this study and the various assessments allowed the environmentally sensitive areas within proximity to the permitted wind farm to be avoided.

Proximity to transmission system:
The substation site needs to be capable of connecting directly to the existing 110kV overhead cable traversing the site, and therefore needs to be along the line of the cable.

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Visual screening:
The substation should not be excessively dominant or visually obtrusive in the landscape and should be sited and designed accordingly.

Land Owner Consent:
The permitted wind farm and surrounding lands are situated on private lands. Land owner consent is required for the proposed development.

The proposed substation location was considered the most favourable from a technical, planning and environmental perspective considering all the relevant criteria.

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3 VISUAL IMPACT OF THE PROPOSED DEVELOPMENT

Item 2 of the request for further clarification from the Board is as follows:

2) *In order to facilitate adequate appraisal of the visual impact of the proposed development, the Applicant is required to provide large scale photomontages of high quality and resolution to demonstrate the visual impact of the proposed development including the cumulative impact of the proposed development together with both existing and permitted development.*

3.1 Landscape and Visual Impact Assessment

A detailed landscape and visual impact assessment was carried out by MosArt, as part of the Environmental Report, which accompanied the planning application for this proposed development. As detailed therein, the proposal site is located in a landscape of rolling pastoral farmland where a network of relatively modest sized fields defined by broadleaf hedgerows and coniferous tree lines meets a more extensive field pattern of rough grazing and semi-natural grassland. The latter occurs immediately to the west of the site and has a more open character than the landscape to the east due to the low scrubby hedgerows that prevail. The site is located near the top of a south facing slope that overlooks the headwaters of the River Bride.

The proposed substation site is within a landscape type defined as *Fissured Fertile Middle Ground* in the County Development Plan known as Type 10(a) as shown in the Landscape maps in the Cork County Development Plan 2014.

The draft strategy states that landscape Type 10(a) – Fissured Fertile Middle Ground has a landscape value of **"low",** a landscape sensitivity of **"low"** and a landscape importance of **"local"**. The nearest designated scenic route is located on a third class road near the village of Terelton, with the nearest point being approximately 1.75 km northwest of the proposed substation.

As the proposed substation is most exposed to uphill views from the south and southeast, it is proposed that the perimeter of the site (where slope and land availability allows) will, where possible, be planted with semi-mature native trees to provide year round screening of the substation infrastructure. This type of planting is a familiar feature in this landscape, particularly surrounding the fields a short distance to the east of the site. A detailed landscaping plan was submitted as part of the response to the request for further information from Cork County Council. A copy of this landscaping plan was also submitted with the response to the third party appeal. In response to the clarification request from the Board, further detail has now been provided in respect of the planting/landscaping of the site (see Section 4 herein) and an updated landscaping plan is now attached in Appendix 3.

From a visual impact perspective the proposed substation is uphill from the nearest residential receptors who enjoy a higher degree of amenity from the southward views over the valley in the opposite direction. Indeed several of these dwellings utilise shelter vegetation to their uphill sides, which will screen views of the substation. The substation will draw the eye of viewers in the immediate vicinity and as a cluttered industrial form of development it will detract from the amenity of the broad rural views. However, it represents a minor intrusion on such views and not a visual obstruction. It will also blend into the visual context to a greater degree as any mitigation planting which can be planted, matures.

For people travelling along the R585 nearer the base of the valley, the proposed substation will intrude on pleasant uphill views. However, it will be a small scale feature in such views, particularly in the context of the existing Garranereagh and permitted Barnadivane wind turbines, which also make it a less incongruous feature in the landscape. The substation is likely to be difficult to discern once mitigation planting matures.

Indeed the Planners Report on file for this application states that *"the site is not visible from the nearest scenic route which is located towards the settlement of Terelton to the north of the proposed development".*

The visual assessment included in the Environmental Report concluded that, overall, it is considered that the proposed substation at Barnidivane will not give rise to significant landscape and visual effects. Instead the effects will be slight and localised in nature.

Further to the request from An Bord Pleanála, large scale photomontages have been prepared to demonstrate the visual impact of the proposed development. These photomontages are included in Appendix 4. The photomontages also include the cumulative impact of the proposed development together with both existing and permitted development.

The viewpoints selected represent views from a local road in the vicinity of the site and a view from the R585, which runs to the south of the substation site. These were selected as the substation is likely to be most visible from uphill views from the south and southeast. The two viewpoints selected represent the best locations along both roads, in terms of providing open views of the proposed substation. Viewpoint No.1 from the local road represents a local view, with Viewpoint No. 2, from the R585, representing a location along this route between Crookstown and Kealkill.

Pederson Focus Ltd prepared the photomontages, which are provided in Appendix 4 herein. Details of the focal length, location of each viewpoint, elevations, etc are also provided in Appendix 4. A viewpoint location map is also provided therein.

Five views from each location are presented in Appendix 4, as follows:

- Existing view, showing permitted 14 turbine wind farm only
- Proposed view, showing permitted 14 turbine wind farm and proposed substation (without landscaping)
- Proposed view, showing permitted 14 turbine wind farm and proposed substation (with landscaping)
- Proposed view, showing proposed 6 turbine wind farm and proposed substation (without landscaping)
- Proposed view, showing proposed 6 turbine wind farm and proposed substation (with landscaping)

In respect of the landscaping, this has been modelled in the photomontages, based on the landscaping plan (Appendix 3 herein) and assuming a landscaping height of approximately 4.5 m.

3.1.1 View No.1 – View from Local Road to Southwest of Substation Site

This viewpoint is from a local road running in a north-west south-east direction, to the southwest of the proposed substation site. The viewpoint is c. 1.5 km from the substation site.

This view shows the rolling, pastoral nature of the landscape, with the dominant landuse being agriculture, with some forestry also present. Existing overhead lines, including the existing 110 kV overhead line to which the substation is proposed to connect are also evident from this viewpoint. Turbines from the Garranereagh operational wind farm are also evident from this viewpoint (2 no. turbines visible to the right of each photomontage).

View No.1.1 shows the existing view, with the permitted 14 turbines wind farm also included. View 1.2 shows the same view, but with the proposed substation added, without any landscaping shown. The proposed substation is visible in the middle background, towards the top of the hill. It is not considered a dominant feature within the view, although the control buildings, electrical infrastructure and fencing are clearly visible. View 1.3 shows the same view, but with the landscaping proposals added to the photomontage. This clearly shows the screening proposed around the substation site, which will significantly screen the substation from view from this viewpoint.

Views No.'s 1.4 and 1.4 show the same view, with the proposed 6 turbine wind farm shown in place of the permitted 14 turbine wind farm. View No. 1.4 shows the proposed substation without landscaping in this context, with View No. 1.5 showing the substation with the addition of the proposed landscaping. The substation visibility is identical in these views to those shown in Views 1.2 and 1.3, albeit that the number of turbines visible is significantly reduced.

3.1.2 View No. 2 – View from R585

This viewpoint is from the R585 looking northward towards the proposed substation site, which is located in the background, at the top of the hill. The viewpoint is c. 2 km from the substation site.

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This view shows the generally pastoral nature of the area, with the dominant landuse being agricultural, with some forestry also present. This location represented one of the few open views towards the proposed substation along this section of road.

The existing 110 kV overhead line is visible in this view, running generally in a north-south direction, with the proposed substation located adjacent to the overhead line. There is also an existing turbine from the adjacent Garranereagh wind farm visible in the view. A farmhouse is also visible in the middleground of the view.

View 2.1 shows the existing view, with the permitted 14 turbines wind farm also included. View 2.2 shows the same view, but with the proposed substation added, without any landscaping shown. The proposed substation is not considered dominant in this view. The two substation control buildings, fencing and the electrical infrastructure are visible in the view, directly to the east of the existing overhead line. View 2.3 shows the same view, but with the landscaping proposals added to the photomontage. This clearly shows the screening proposed around the substation site, which will significantly screen the substation from view from this viewpoint.

Views 2.4 and 2.5 show the same view, with the proposed 6 turbine wind farm shown in place of the permitted 14 turbine wind farm. View 2.4 shows the proposed substation without landscaping in this context, with View 1.5 showing the substation with the addition of the proposed landscaping. The substation visibility is identical in these views to those shown in Views 2.2 and 2.3, albeit that the number of turbines visible is significantly reduced.

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4 LANDSCAPING PROPOSALS

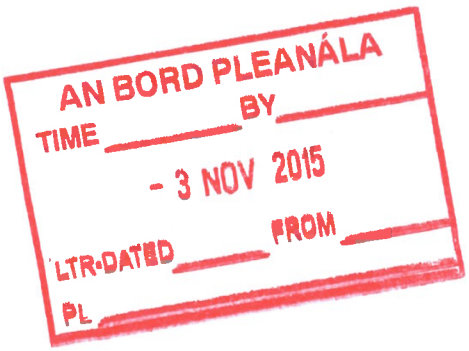
Item 3 of the request for further clarification from the Board is as follows:

3) *The Applicant is invited to indicate any proposals that they may have for the provision of landscaping in the vicinity of the proposed sub-station in order to help soften its impact and visual integration into the existing landscape.*

The proposed substation is located on a south-facing plateau within the Bride River valley approximately 500m south west of the permitted substation. The proposed substation site ranges in elevation from 250 m on the southern boundary to 260 m along the northern boundary. The land to the south slopes downwards towards the River Bride and low-lying rolling farmland. To the north, outside the substation site boundary, the land slopes to the River Lee, which lies at approximately 70 m OD. The land to the east of the study area drops to below 200 m OD, with hills separated by river valleys. To the west of the site there is a series of hills with peaks in the region of 220 m OD to 240 m OD.

As the proposed substation is most exposed to uphill views from the south and southeast, it is proposed that the perimeter of the site (where slope and land availability allows) will, where possible, be planted with semi-mature native trees to provide year round screening of the substation infrastructure. This type of planting is a familiar feature in this landscape, particularly surrounding the fields a short distance to the east of the site. A detailed landscaping plan was submitted as part of the response to the request for further information from Cork County Council. A copy of this landscaping plan was also submitted with the response to the third party appeal.

Further to the request for clarification from An Bord Pleanála, additional detail on the landscaping proposals, including details of plant sizes and numbers have been included. A copy of the revised landscaping plan is included in Appendix 3 herein.



5 CONCLUSION

The applicant, Arran Windfarm Ltd. has applied for permission to develop a 110 kV substation at Barnadivane (Kneeves), near Terelton, Co. Cork.

In so doing, the applicant has followed all relevant policy, legislation and best practice in respect of such a planning application.

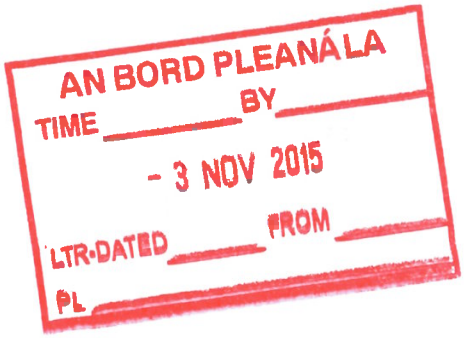
The need for the development has been clearly demonstrated in terms of compliance with EU, national and local policy. The applicant has also demonstrated the need both for the re-location and the increase in scale of the substation.

The applicant has explained the rationale for the required changes to the substation, in terms of location, scale, layout and design. These are necessitated to meet current Eirgrid requirements and the applicant, since this development will become an asset of Eirgrid once complete, has no control over any future connections to this substation. Notwithstanding this, the applicant has stated that it does not intend any further phases of wind energy development in the immediate vicinity of this site.

Further to the information provided in the EIS Screening Report, Environmental Report and associated documentation, we have provided herein additional detail in respect of the landscape and visual impact of the proposed development and suitable mitigation proposed in terms of landscaping plans, to minimise this impact.

It is clear from all of the above, that this proposal represents a robust planning application, which has been prepared in full accordance with the statutory and best practice requirements, has assessed all relevant potential impacts on the surrounding environment and is in line with European, national and local energy and planning policy.

The applicant therefore requests that An Bord Pleanála upholds the decision of Cork County Council to grant permission for this proposed development.



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- 3 NOV 2015
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Appendix 1

Letter from Wind Prospect re: Eirgrid Requirements




Response to FI Request
Planning Reference 14/00557
Planning Department West,
Cork County Council,
Norton House,
Skibbereen,
Co. Cork

AN BORD PLEANÁLA
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8th December 2014

Re: Planning file 14/00557 Application for an electricity substation, further information submission.

To whom it may concern,
Wind Prospect Ireland Ltd. (WPIL) has been assisting Arran Windfarm Ltd in the preparation of the proposed layout of the substation included as part of the above referenced planning submission.

WPIL are project managers and engineering consultants who work on behalf of wind farm developers for the design, pre-construction and construction of wind farms and associated infrastructure across the island of Ireland. WPIL have directly managed the design and construction of five 110kV AIS substation over the last 7 years and are currently managing the post planning design stage of a further five 110kV AIS substations, all of these substations are 'contestable' i.e. constructed on behalf of EirGrid to facilitate the connection of wind farms. We have also directly managed and assisted in numerous smaller 'contestable' substation and grid works on behalf of ESB Networks as Distribution System Operator (DSO).

We note items 2 & 3 in the request for further information made by Cork County Council dated 18/11/2014. For clarity item 2 and 3 state;

2. *A copy of the guidelines issued by EirGrid in relation to the upgrade and size of the increase required under the new standards for substation by EirGrid in 2011 in the interest of clarity.*
3. *A detailed rational as to why the original site of the substation granted permission under 11/6605 is considered unsuitable. The justification should clearly demonstrate the constraints of the previous site in relation to the current site and the new standards for substations issued by EirGrid in 2011.*

In response to Item 2, WPIL notes that the initial submission made in 2005 includes 110kV substation layouts from 2003, these layouts may have been acceptable at that time to the Transmission System Operator (TSO) who was then ESB. The role of TSO has subsequently been transferred to EirGrid plc. We have appended the current AIS 110kV substation required layout from EirGrid to this letter; this has evolved from the EirGrid's primary 2011 changes as identified in Arran Windfarm's planning submission.

As can be seen in the EirGrid drawings the requirements now include that the substation be suitable in its electrical plant layout and overall footprint size to allow for potential future expansion (this is identified in red in the EirGrid drawings). We also note the differences in building sizes and electrical plant configuration. EirGrid will operate the majority of the substation when the construction is completed; however they will not take control of a substation that does not fulfil their current or at the least a very recent specification.

With respect to item 3, the original planning approved substation layout site is constrained between the existing 110kV overhead line and the road. As per the appended drawing the EirGrid required substation layout does not fit in the existing site within the site constraints of the overhead line and the local road. It is Arran Windfarm's opinion that the impact of relocating either of these two site constraints has a more significant impact than relocating the substation.

Wind Prospect Ireland Ltd. • Hyde Building • The Park • Carrickmines • Dublin 18 • Ireland
Tel: +353 (1) 8455031; Fax +353 (1) 8455612
Company Registered in Ireland Number: 404893

The updated planning application seeks to address the required changes in layout, the potential requirement for future expansion, the increased building size and increased overall substation footprint. These amendments are required in order for EirGrid to assume operational control of the majority of the substation. It is as a result of these changes in the TSO's requirements that the planning submission has been made.

If you require any further information on these works, please do not hesitate in contacting me.

Kind regards,

Joe Purser

Joe Purser

Key Account Manager
Wind Prospect Ireland Ltd.
Hyde Building, The Park, Carrickmines,
Dublin 18, Ireland.

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TIME _____ BY _____
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Appendix 1 EirGrid's 110kV AIS Standard Station Design Plan and Elevations
Appendix 2 Drawing reference: RFI Figure 1, EirGrid's current required 110kV AIS substation layout in the old permitted substation location.

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Appendix 2

Figure showing Constraints associated with Substation Site Selection

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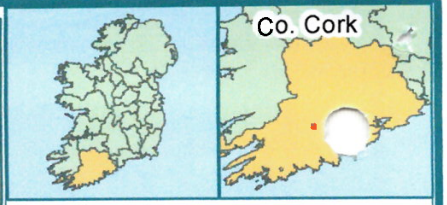

Legend

Proposed Substation location

- Future Expansion Area
- Fenceline of Proposed Substation

Substation footprint at permitted location

- Expansion Area
- Fenceline of Proposed Substation

Constraints

- Permitted Turbines
- Adjacent House
- Residential Visual Impact Constraints (200 meters)
- Existing 110kV Line Constraint (10 meters)
- Road Constraints (15 meters)
- Turbine (Permitted) Constraints 115.5m
- Study Area

Date 05/12/2014

Name Of Client

Barna Wind Energy Ltd.

Name Of Job

EIS for Barnadavine Wind Farm

Title Of Figure

Proposed Substation Constraints

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FROM
- 3 NOV 2015
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Scale Used	1:8,000 @ A4	
Figure No.	1	Rev 0

FEHILY TIMONEY & COMPANY
CONSULTANTS IN ENGINEERING & ENVIRONMENTAL SCIENCES
Core House, Pouladuff Rd, Cork, Ireland.
T:+353-21-4964133, F:+353-21-4464
Unit 16 J5 Plaza, North Park Business Park, Dublin 11, Ireland.
T:+353-1-6583500 F:+353-1-6583501
W:www.fehilytimoney.ie, E: info@ftco.ie

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Appendix 3

Revised Landscaping Plan for Proposed Substation




Sheet FTC-A1-2006 rev C template filed in O:\Acad\Templates\Layo...
emplate externally referenced

Planting Notes

Only hedgerow to be removed is where indicated.
All additional planting to be sympathetic with existing flora & Irish sourced.

Proposed list of species & planting density :-

1. GORSE (ULEX EUROPAEUS) - 10%
2. GREY WILLOW (SALIX CINEREA) - 15%
3. SILVER BIRCH (BETULA PENDULA) - 15%
4. WILD CHERRY (PRUNUS AVIUM) - 5%
5. ASH (FRAXINUS EXCLSIOR) -5%
6. HOLLY (ILEX AQUIFOLIUM) -5%
7. WYCH ELM (ULMUS GLABRA) -5%
8. HAWTHORN (CRATEGUS MONOGYNA) -40%

All trees planted as rootballed stock in the first available planting season after earthworks & fencing are completed.
Trees to be 20-25mm in girth
Hawthorn to be 600mm long
Gorse to be rooted cuttings

Areas to be planted :-
The areas as indicated on plan (see legend).
In general the areas that is to be planted will be level or a slope of 1:3 approx. in both cut & fill situations.
In all cases there is to be 500mm of topsoil to be placed on the ground before planting takes place.

Trees are to be planted in groups of 5 to 7 at 3.0m c/c down the slope at 45° & at 3.0m across the slope.
All trees to be planted a hole 300mm bigger than the diameter of the rootball.
All trees to be staked .

After care :-
All planting to be carried out by competent landscaper.
All planted material to be watered & maintained for 12 months after planting or to such time that the plants are established.
All failed plants to be replaced by an identical species for 5 years.
All plants to be protected from vermen & livestock.
The base of all trees to be kept weed free until trees are established.
Pruning & plant welfare visits to be carried out over the first two years(allow 10 visits) .

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Note:
Implementation of the landscaping plan will coincide with construction completion. Should completion occur between May and August tree planting will follow in the subsequent planting season commencing in September.

Legend

- Site Boundary
- Palisade Fence
- Native hedgerow to incorporate mixture of crategus monogyna, salix, llex verticillata & Acacia Falcata (Hawthorn,Willow, Holly & Sally) to be provided as indicated, 1000 plants for every 300m embankment distance.
- Existing boundary to be removed to ensure adequate sight lines are provided in accordance with requirements of TD41-42

NOTE:
INDICATIVE SUBSTATION ARRANGEMENT, FINAL LAYOUT SUBJECT TO DETAIL DESIGN TO EIRGRID REQUIREMENTS.

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Rev.	Drawn	Chk'd	App'd	Date	Description
B				Cork 29-Oct-15	ISSUE IN RESPONSE TO REQUEST FOR FURTHER INFORMATION
				Rev Origin	

Revision History: A | B

Name of Client
ARRAN WINDFARM LIMITED

Name of Job
PROPOSED 110kV SUBSTATION

Title of Drawing
PROPOSED LANDSCAPING PLAN

Scales Used: 1:500
This Drawing was printed to A1.

Dwg. No. LE14-702-02-123
Rev. B

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CONSULTANTS IN ENGINEERING & ENVIRONMENTAL SCIENCES
W: www.fehilytimoney.ie, E: info@ftco.ie
Core House, Pouladuff Rd, Cork, Ireland.
T:+353-21-4964133, F:+353-21-4964464
J5 Plaza, North Park Business Park, North Road, Dublin 11, Ireland
T:+353-1-6583500, F:+353-1-6583501

0m 5m 10m 15m 20m 25m 30m 35m 40m 45m 50m
1:500

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OS Sheet Numbers 6460,6461, 6462, 6499, 6500, 6501

ORIGINAL DRAWING SIZE A1 - (841 x 594)
SCALE VERTICAL
SCALE HORIZ

Appendix 4

Photomontages

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Title: Planning Application Photomontages

Client: Arran Windfarm Limited

Arran Windfarm Ltd

Project: Proposed Barnadivane Substation

Prepared By: Pedersen Focus

PEDERSEN FOCUS

Date: 29/10/2015

AN BORD PLEANÁLA
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Pedersen Focus Ltd.
4 Combermere,
Glounthaune,
Co. Cork,
Ireland.

Architectural Visualisation

V.A.T. No. IE9581693J

Project: **Barnadivane Substation, Co. Cork.**

29th of October, 2015.

To whom it may concern,

The computer generated images of the proposed development were prepared by Pedersen Focus Ltd.

Data Collection.
Drawings, landscaping layout and site survey was provided by Arran Windfarm Ltd. The 3d model of the proposed solar array and site was prepared by Pedersen Focus Ltd. Camera locations, survey data and the 3d digital model were integrated by Pedersen Focus.

Site photography was carried out by Pedersen Focus. Surveying of camera locations was carried out by Max Buttimer, surveyor.

3d Model.
The 3d model of the proposed development was rendered using lighting conditions corresponding to the respective site photograph. Materials for the proposed elements were prepared according to the clients' specifications.
The 3d models of the adjacent windfarms were superimposed by Arran Windfarm Ltd.

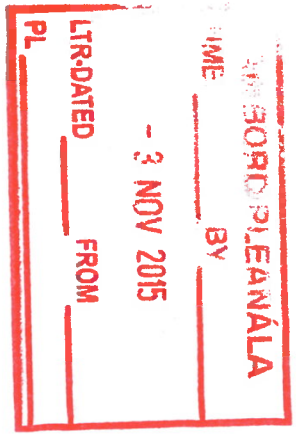
Control point verification.
Each photomontage was verified with survey control points matching consistently.

Photomontage.
The photomontages were prepared using industry standard image handling software. The rendered 3d model was inserted between foreground and background elements. Site photographs by Pedersen Focus were cross-referenced to help estimate the amount of mitigation provided by existing trees.

All views are presented with the "proposed" version showing the proposed substation in the site photograph and "...with landscaping" showing mitigation indicative of that shown in the landscape masterplan at a height of approximately 4.5 meters. Pedersen Focus have attempted to realistically reflect the proposed planting shown in the photomontages, however, mitigation should be considered indicative only.

Any questions relating to the preparation of the computer generated images may be referred to:

Jesper Pedersen, B. Eng.
Pedersen Focus Ltd.,
Combermere,
Glounthaune,
Co. Cork,
Ireland



Viewpoint	Camera / Lens	Horizontal field of view	Date	Time		Tripod/camera height
View 1	Canon 5D II / 50mm	38.7deg	19/10/2015	14.28pm	134224.65, 60903.40, 174.79m	1.58m
View 2	Canon 5D II / 50mm	38.7deg	19/10/2015	14.40pm	133534.03, 61728.740, 202.30m	1.52m

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Project:	Proposed Barnadivane Substation,		
Client:	Arran Windfarm Ltd		
Drawing title:	Photo data sheet (1 of 1)		
Date: Oct. 2015	Scale: NTS	Drawn by: JP	
Prepared by:	Pedersen Focus Ltd.		

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TIME _____ BY _____
- 3 NOV 2015
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Drawing title: Viewpoint location map		
Date: Oct. 2015	Scale: NTS	Drawn by: JP
Prepared by: Pedersen Focus Ltd.		

View 1.1 – Existing view including the Permitted 14 Turbine Wind Farm

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View 1.2 – Proposed Substation with Permitted 14 Turbine Wind Farm – without landscaping

View 1.3 – Proposed Substation with Permitted 14 Turbine Wind Farm – with landscaping

View 1.4 – Proposed Substation with Proposed 6 Turbine Wind Farm – without landscaping

View 1.5 – Proposed Substation with Proposed 6 Turbine Wind Farm – with landscaping

View 2.1 – Existing view including the Permitted 14 Turbine Wind Farm

View 2.2 – Proposed Substation with Permitted 14 Turbine Wind Farm – without landscaping

View 2.3 – Proposed Substation with Permitted 14 Turbine Wind Farm – with landscaping

View 2.4 – Proposed Substation with Proposed 6 Turbine Wind Farm – without landscaping