Application for a Foreshore Lease to Construct an Offshore Electricity Generating Station

Appendices

February 19th 2007

Business plan contained includes commercially sensitive information
Appendix 1

CER applications
Oriel Windfarm Ltd.

Application for an Authorisation to
Construct or Reconstruct Generating Stations.

February 2007
APPLICATIONS FOR AUTHORISATION TO CONSTRUCT OR RECONSTRUCT GENERATING STATIONS

(UNDER SECTION 16 OF THE ELECTRICITY REGULATION ACT, 1999)

SCHEDULE I

PART I

Where, for any question, insufficient room has been provided, the answer should be continued on a separate sheet.

General Details

1. Full name of the applicant(s).

Oriel Windfarm Ltd.

2. Address of the applicant(s), or in the case of a body corporate, the registered (and where different, principal) place of business. Also, in the case of an overseas applicant, address in Ireland for service of process and other notices.

2 Marine Court
Blackrock
Co. Louth

3. Where the applicant is a company, full names of current directors and the company's registered number. If not incorporated in Ireland, the registration number which the Companies Registration Office in Ireland may have issued and the country in which the company is incorporated.

Brian Britton, Chris Hannevig, Dan Hannevig, Michael McBennett.

Registered number 318186
4. Where a holding of 10 per cent or more of the shares (see Note below) of an applicant is held by a body corporate or partnership or an unincorporated association or a co-operative carrying on a trade or business with or without a view to profit, the name(s) and address(es) of the holder(s) of such shares shall be provided.

\[NA\]

5. If the applicant is not the owner of the proposed generating station, full name and address of the owner(s). In the case of a body corporate, the address should be the registered (and where different, principal) place of business.

\[NA\]

6. Where an owner(s) is a company, the full names of current directors and the company’s registered number.

\[Oriel Windfarm Ltd.\]

\[Brian Britton, Chris Hannevig, Dan Hannevig, Michael McBennett.\]

\[Registered number 318186\]

7. Where a holding of 10 per cent or more of the shares (see Note below) of an owner(s) is held by a body corporate or partnership or an unincorporated association carrying on a trade or business with or without a view to profit, the name(s) and address(es) of the holder(s) of such shares shall be provided.

\[NA\]

8. Full name and address of the intended operator of the proposed generating station (if different from the applicant or owner). In the case of a body corporate, the address should be the registered (and where different, principal) place of business.
9. Name, address and place of incorporation of ultimate parent undertaking(s) (if any) of the applicant.

NOTE

Reference to shares:

a) in relation to an applicant and/or owner with a share capital, are to allotted shares;

b) in relation to an applicant and/or owner with capital but no share capital, are to rights to share in the capital of the applicant and/or owner;

c) in relation to an applicant and/or owner without capital, are to interests;

i) conferring any right to share in the profits or liability to contribute to the losses of the applicant and/or owner; or

ii) giving rise to an obligation to contribute to the debts or expenses of the applicant and/or owner in the event of a winding up.

Details of proposed construction(s) / reconstruction:

10. A sufficient description specifying the actual proposed location of the generating station and associated land use e.g. by reference to townlands, postal address etc, the identity of site owner(s) and the applicant’s legal interest in the site (if any).

*Offshore wind farm in the North West Irish Sea, the location of the proposed wind farm is indicated on a part of Admiralty Chart No 44, a copy is included as appendix C of this application.*

11. Desired date from which the authorisation is to take effect.

Immediate
12. The date when the proposed generating station is expected to be commissioned.

| Phase (1) | 11 Turbines – Jan 2011 |
| Phase (2) | 11 Turbines – Jan 2012 |
| Phase (3) | 11 Turbines – Jan 2014 |
| Phase (4) | 11 Turbines – Jan 2015 |
| Phase (5) | 11 Turbines – Jan 2017 |

13. The capacity (MW), type, expected life and technical specifications of each generating unit within the generating station.

It is proposed to use 55 turbines of commercially proven three bladed type technologies. The average size of turbine is expected to be 6 MW. Currently the largest commercially available turbines are circa 5 MW. Prototype developments currently are for 6 MW turbines with GE declaring an intent to develop a 7.5 MW offshore turbine. The expected life of all units is to be in excess of 30 years.

14. A description of how the generating station will be fuelled or driven, including both primary and back-up fuel sources.

Wind powered turbines.

15. Confirmation that the application does not relate to a generating station involving the use of nuclear fission for any purpose, including for the generation of electricity.

This application does not relate to a generating station involving the use of nuclear fission for any purpose.

16. Details of the ancillary services that the generating station will be capable of providing.

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<th>Reactive Power Capability</th>
<th>kVAr (lead):</th>
<th>kVAr(lag):</th>
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</table>

Operating Reserve capability (as applicable)

Primary Operating Reserve:
Secondary Operating Reserve:
Tertiary Operating Reserve:
Other:
Frequency Control Capability (as applicable):
Black start capability (as applicable):

This information is not currently available as turbine selection is incomplete. However prequalification to tender will be restricted to grid code compliant turbines.
17. A description of the measures to be taken by the applicant to ensure the safety and security of the electrical system, including details of whom shall have responsibility for the engineering and Construction/Reconstruction of the plant.

\[Construction \text{ tender process and turbine selection has not yet been completed.}\]

18. A description of the measures to be taken by the applicant to achieve effective and efficient use and production of energy which shall include energy efficiency calculations.

\[Wind \text{ powered turbines are energy efficient, as there is no conversion of primary thermal energy.}\]

19. Details of all applicable statutory or other consents, permissions or licences held, applied for or being applied for by the applicant, or by affiliates of the applicant, necessary for the construction and operation of the proposed generating station, including planning permission (or exemption from planning permission).

\[\text{Foreshore licence for the assessment of the suitability of a site for the construction of an offshore electricity generating station is held by Oriel Windfarm Ltd. A Foreshore lease application to the Department of Communications Marine and Natural Resources is being prepared which is awaiting completion of an Environmental Impact Assessment, EIA to be completed February 07.}\]

20. Details of any connection agreements made or being sought with the Electricity Supply Board, including modifications to existing connection agreements.

\[\text{Connection agreements will be sought from Eirgrid.}\]

21. Confirmation that the applicant has consulted the relevant Chief Fire Officer on fire safety aspects of the planned building(s) and in relation to the provision of access and facilities for Fire Brigade/Emergency Services in the event of a fire or other emergency.

\[\text{Consultations have been undertaken with the Department of Marine Safety office regarding health and safety systems for the proposed wind farm.}\]
APPLICATIONS FOR AUTHORISATION TO CONSTRUCT OR RECONSTRUCT GENERATING STATIONS

(UNDER SECTION 16 OF THE ELECTRICITY REGULATION ACT, 1999)

SCHEDULE I

PART II

DOCUMENTS TO ACCOMPANY AN APPLICATION FOR

A CONSTRUCTION / RECONSTRUCTION AUTHORISATION

If the applicant is not the owner, please attach relevant documents for both the applicant and the owner. Applicants are requested to submit two copies of each document with their application.

1. Financial history

Refer to attached Business Plan Appendix A.

2. Project planning and feasibility

Refer to attached Business Plan Appendix A.

3. Environmental impact statement

EIS will be forwarded separately upon completion.

4. Construction and commissioning programme

Refer to attached timeline Appendix B.

5. Maps(s) or marine charts sufficient to identify the location of the generating station to which the application relates.

Refer to Appendix C.

6. Planning permission or confirmation of planning exemption from planning authority.

Planning permission is not required for this offshore wind farm. An application for a foreshore lease is to be submitted to the Department of Communications Marine and Natural Resources upon completion of an Environmental Impact Statement.
7. **Connection Offer from the Transmission System Operator or Distribution System Operator or confirmation that modification of an existing connection agreement is being sought.**

*Meetings have taken place between Oriel Windfarm Ltd. and Eirgrid to discuss grid connection of the proposed offshore wind farm. This will be finalised following issuance of a foreshore lease by DCMNR.*
APPLICATIONS FOR AUTHORISATION TO CONSTRUCT OR RECONSTRUCT GENERATING STATIONS

(UNDER SECTION 16 OF THE ELECTRICITY REGULATION ACT, 1999)

SCHEDULE I

PART III

DECLARATION

On behalf of the applicant, I hereby declare that:

(a) the applicant shall at all times comply in every respect with the conditions attached to any authorisation that may be awarded to the applicant;

(b) the applicant shall at all times comply with lawful directions of the Commission for Electricity Regulation;

(c) the information provided by me on behalf of the applicant is accurate and complete in all respects; and

(d) I am authorised to make this declaration on behalf of the applicant.

Signed:

[Signature]

Full name(s) of Signatory(ies):

[Full Name(s)]

Position held (if the applicant is a company, co-operative, partnership, unincorporated association or other body corporate):

[Position]

Date:
Oriel Windfarm Ltd.
Application for a Licence to Generate.

February 2007
APPLICATIONS FOR GENERATION LICENCES
(UNDER SECTION 14 (1) (a) OF THE ELECTRICITY REGULATION
ACT, 1999)

SCHEDULE

PART I

Where, for any question, insufficient room has been provided, the
answer should be continued on a separate sheet.

General Details

1. Full name of the applicant(s).

Oriel Windfarm Ltd.

2. Address of the applicant(s), or in the case of a body corporate, the
registered (and where different, principal) place of business. Also,
in the case of an overseas applicant, address in Ireland for service
of process and other notices.

2 Marine Court
Blackrock
Co. Louth

3. Where applicant is a company, full names of current directors
and the company's registered number. If not incorporated in
Ireland, the registration number which the Companies
Registration Office in Ireland may have issued and the country in
which the company is incorporated.

Brian Britton, Chris Hannevig, Dan Hannevig, Michael McBennett.
Registered number 318186

4. Where a holding of 10 per cent or more of the shares (see Note
below) of an applicant is held by a body corporate or partnership
or an unincorporated association or a co-operative carrying on a trade or business with or without a view to profit, the name(s) and address(es) of the holder(s) of such shares shall be provided.

NA

5. If the applicant is not the owner of the proposed generating station, full name and address of the owner(s). In the case of a body corporate, the address should be the registered (and where different, principal) place of business.

NA

6. Where an owner(s) is a company, the full names of current directors and the company’s registered number.

Oriel Windfarm Ltd.

Brian Britton, Chris Hannevig, Dan Hannevig, Michael McBennett.

Registered number 318186

7. Where a holding of 10 per cent or more of the shares (see Note below) of an owner(s) is held by a body corporate or partnership or an unincorporated association carrying on a trade or business with or without a view to profit, the name(s) and address(es) of the holder(s) of such shares shall be provided.

NA

8. Full name and address of the intended operator of the proposed generating station (if different from the applicant or owner). In the case of a body corporate, the address should be the registered (and where different, principal) place of business.

NA

9. Name, address and place of incorporation of ultimate parent undertaking(s) (if any) of the applicant.

NA
**Note**

**Reference to shares:**

a) in relation to an applicant and/or owner with a share capital, are to allotted shares;

b) in relation to an applicant and/or owner with capital but no share capital, are to rights to share in the capital of the applicant and/or owner;

c) in relation to an applicant and/or owner without capital, are to interests;

**Details of proposed generation:**

10. A sufficient description specifying the actual or proposed locations of those stations. e.g. by reference to townlands, postal address etc. The description should enable the areas and locations concerned to be adequately and readily identified by map, or if the applicant so desires, by any other convenient means.

   *Offshore wind farm in the North West Irish Sea, the location of the proposed wind farm is indicated on a part of Admiralty Chart No 44, a copy is included as Appendix B of this application.*

11. If issued to the applicant, the reference number of the Authorisation(s) to Construct in relation to the generating station(s) specified in Question 10. Desired date from which the Licence to Generate is to take effect.

   *Application to construct or reconstruct a generating station accompanies this application.*

12. The date when any proposed generating stations are expected to be commissioned.

   *Phase (1) 11 Turbines — Jan 2011
   Phase (2) 11 Turbines — Jan 2012
   Phase (3) 11 Turbines — Jan 2014
   Phase (4) 11 Turbines — Jan 2015
   Phase (5) 11 Turbines — Jan 2017*
13. The number of generating stations intended to be operated under the licence (if granted).

*It is proposed to have 55 wind powered turbines in operation at this site.*

14. The capacity (MW) and type of each unit within the generating station(s).

*The average size of turbine is expected to be 6 MW. Currently the largest commercially available turbines are circa 5 MW. Prototype developments currently are for 6 MW turbines with GE declaring an intent to develop a 7.5 MW offshore turbine.*

15. A description of how those stations will, in each case, be fuelled or driven, including both primary and back-up fuel sources.

*Wind powered turbines.*

16. Confirmation that the applicant has consulted the relevant Chief Fire Officer on fire safety aspects of the planned building(s) and in relation to the provision of access and facilities for Fire Brigade/Emergency Services in the event of a fire or other emergency.

*Consultations have been undertaken with the Marine Safety office regarding health and safety systems for the proposed wind farm.*

*The below questions 17 to 21 are only required to be completed if the applicant has not been issued with an Authorisation(s) to Construct or Reconstruct a Generating Station under Section 16 of the Electricity Regulation Act, 1999, or if the applicant has not received a formal acknowledgment by the Commission for receipt of a completed Authorisation application form(s), with respect to the station(s) specified in Question 10.*

17. Confirmation that the application does not relate to a generating station involving the use of nuclear fission for any purpose, including for the generation of electricity.

*This application does not relate to a generating station involving the use of nuclear fission for any reason.*
18. Details of the ancillary services that the generating station(s) will be capable of providing.

Reactive Power Capability  kVAR (lead): kVAR(lag):

Operating Reserve capability (as applicable)
Primary Operating Reserve:
Secondary Operating Reserve:
Tertiary Operating Reserve:
Other:

Frequency Control Capability (as applicable):

Black start capability (as applicable):

This information is not currently available as turbine selection is incomplete. However prequalification to tender will be restricted to grid code compliant turbines.

19. A statement confirming the declared gross efficiency of the generating station(s).

Wind powered turbines are energy efficient, as there is no conversion of primary thermal energy.

20. Details of all applicable statutory or other consents, permissions or licences held, applied for or being applied for by the applicant, or by affiliates of the applicant, necessary for the construction and operation of the proposed generating station, including planning permission (or exemption from planning permission).

Foreshore licence for the assessment of the suitability of a site for the construction of an offshore electricity generating station is held by Oriel Windfarm Ltd. A Foreshore lease consent application to the Department of Communications Marine and Natural Resources is being prepared which is awaiting completion of an Environmental Impact Assessment, EIA to be completed February 07.

21. Details of any connection agreements made or being sought with the Electricity Supply Board, including modifications to existing connection agreements.

Connection agreements will be sought with Eirgrid.
APPLICATIONS FOR GENERATION LICENCES

UNDER SECTION 14 (1) (a) OF THE ELECTRICITY REGULATION ACT, 1999

SCHEDULE

PART II

DOCUMENTS TO ACCOMPANY AN APPLICATION FOR A GENERATION LICENCE

Applicants are requested to submit two copies of each document with their application.

1. (i) Financial history for plants greater than 5Mw

   Refer to Business Plan attached as appendix A.

(ii) Project planning and feasibility

   Refer to Business Plan attached as appendix A.

2. Maps(s) or marine charts sufficient to identify the location of the generating station to which the application relates.

   Refer to appendix B.

3. Environmental Impact Statement

   EIS will be forwarded separately upon completion.

4. Planning permission or confirmation of planning exemption from planning authority.

   Planning permission is not required for this offshore wind farm. An application for a foreshore lease is to be submitted to the Department of Communications Marine and Natural Resources upon completion of an Environmental Impact Statement.

5. IPC Licence.

   An IPC licence is not necessary for this proposal.


   No water will be used during the operation of this proposed windfarm.
7. **Connection Offer from the Transmission System Operator or Distribution System Operator or confirmation that modification of an existing connection agreement is being sought.**

*Meetings have taken place between Oriel Windfarm Ltd. and Eirgrid to discuss grid connection of the proposed offshore wind farm. This will be finalised if a foreshore lease is granted by DCMNR.*

8. **Power Purchase Agreement.**

*The single electricity market will be in operation prior to completion of the wind farm.*
APPLICATIONS FOR GENERATION LICENCES

(UNDER SECTION 14 (1) (a) OF THE ELECTRICITY REGULATION ACT, 1999)

SCHEDULE

PART III

DECLARATION

On behalf of the applicant, I hereby declare that:

(a) the applicant shall at all times comply in every respect with the conditions attached to any licence that may be awarded to the applicant;

(b) the applicant shall at all times comply with lawful directions of the Commission for Electricity Regulation;

(c) the information provided by me on behalf of the applicant is accurate and complete in all respects; and

(d) I am authorised to make this declaration on behalf of the applicant.

Signed:

Full name(s) of Signator(y/ies):

Brian Britton
Managing Director

Position held (if the applicant is a company, co-operative, partnership, unincorporated association or any other body corporate):

Chris Hannevig
Company Secretary

Date:
Mr. Chris Hannevig  
Oriel Windfarm Ltd  
2 Marine Court  
Blackrock  
Co. Louth Dublin

13th February 2007  

Ref: Auth 2007/02-02  
Gen 2007/02-02

Re: Acknowledgement of a(n) application for an Authorisation to Construct or Reconstruct a Generation Station and a Generation Licence

Dear Mr. Hannevig,

On behalf of the Commission for Energy Regulation, I hereby acknowledge receipt of Oriel Windfarm Limited’s completed application form for an Authorisation to Construct or Reconstruct a Generation Station and a Generation Licence under Section(s) 14 (1)(a) and 16 of the Electricity Regulation Act, 1999. I also acknowledge receipt of two cheques for the amount €16,590 and €3,320.

During the detailed assessment of your applications, it may be necessary for the Commission to request further information. I understand that our point of contact will be yourself.

For this application, I will be your main point of contact at the Commission. If you have any questions, do not hesitate to contact me at +353 (0) 1 4000 800 or mwhelan@cer.ie.

Please note all applicants are advised that in order to trade in the market, in addition to holding the necessary licences from the Commission, accession to the Trading and Settlement Code is required. Applications for market accession are to be made to ESB National Grid (Settlement System Administrator – Market Support Division) once the relevant licence from the Commission has issued.

To facilitate timely accession to the market, applications should be made as early as possible. Please contact the Settlement System Administrator (Market Support Division) of ESB National Grid on 01-7027939 or marketsupport@eirgrid.com for information on this process.

Yours sincerely,

Michelle Whelan  
Licence Administrator
Appendix 2

Admiralty Charts
Appendix 3

Drawings
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Appendix 4

Estimation of impact on VRP 12
Viewpoint 12 – Cooley Point

Description of the existing view
This location was chosen due to its amenity value as well as because it is the closest on-shore point to the proposed Oriel wind farm. A caravan park, car park and popular sandy beach can be found at Templetown. The beach is enclosed in a shallow bay and protected from the west by a low ridge of grassy sand dunes. Both ends of the bay are defined by rocky outcrops. There are no prominent elements located out at sea and the sandy beach itself is also without notable features of distinction. The sense of scale at this location appears almost limitless, therefore. The view is panoramic, uninterrupted and generally naturalistic.

Prediction of Impact
At 5.5km, this location would provide the most exposed view of the turbines and would enable the visibility of more detail than any other VRP assessed in this study. All turbines would be visible from this location occupying approximately 29 degrees on the horizontal and approximately 27% of the visible sea horizon. The turbines will appear taller than the low cliff edge defining the left hand side of the beach as viewed in Figure 12 but are sufficiently set back from it so as not to be problematic. In terms of visual presence, the development will be highly dominant due to proximity and lack of screening.

Considering next the issue of aesthetic impact, the design of the wind farm on a grid layout can be fully appreciated from this perspective. Two clear alleys of turbines are seen in the middle of the wind farm, with a loose arrangement of turbines extending from this centre to the left and right. There is no dense ‘wind wall’ created, therefore, which can be a problematic issue with offshore wind farm projects. The turbines will appear as tall and therefore slender elements from this perspective due to the proximity of view and resulting lack of vertical screening by earth curvature. It will probably be possible to see the proposed offshore station from this location but this will not be problematic from an aesthetic perspective. Overall aesthetic impact is therefore judged to be Minor Adverse.

Overall Impact
This location is of High landscape sensitivity and the wind farm will be Highly Dominant in terms of visual presence. The aesthetic impact of the project will be in the order of Minor Adverse, however. Overall significance of impact is therefore judged to be Moderate.
Appendix 5

Correspondence
13 April 2006

Our Ref: G2006/269

Dr Caroline Roche,
Aqua-Fact International Services Ltd.,
12 Kilkerrin Park,
Liosbaun,
Galway.

Re: Energy Project in the Irish Sea – Clogher Head area

Dear Dr Roche,

I wish to acknowledge receipt of your recent correspondence in relation to the above.

Your enquiry has been allocated the above reference number which should be used in all correspondence with this office. In addition your enquiry has been circulated to a number of relevant individuals/divisions within the Department for their comments and we will revert to you in due course.

If you need any further assistance please contact the undersigned.

Mise le meas,

Mairead O'Boyle
Development Applications Unit.
4th May 2006

Our Ref.: G2006/269
Your Ref.: AF/N798

Aqua-Fact International,
12 Kilkerrin Park,
Liosbaun,
Galway,
Ireland

Re: Scoping document for proposed windfarm off Clogher Head.

A Chara,

We refer to your letter of the 27th March 2006 in reference to the above. Outlined below are the underwater archaeological (UAW) comments of the Department of the Environment, Heritage and Local Government.

The shipwreck records held by the UAW lists a large number of wrecks for this area of the east coast of Ireland. It would therefore be regarded as an area of high underwater archaeological potential. Any proposed invasive works in this area would have the potential to negatively impact underwater archaeology. Similarly the foreshore areas and areas proposed for landfalls for the windfarm would also be areas of archaeological potential.

As such the recommendation of this Department is that a full underwater archaeological assessment of all areas to be impacted by the proposed windfarm, including the offshore, inshore and landfall zones, should be carried out. It is further recommended that results from investigation cores and samples should also be made available to the archaeologist undertaking the assessment, so that any notable inclusions, such as organic layers, can be noted in the archaeological assessment report. This underwater archaeological assessment should take the following format and all results should be included in the archaeological report section of the Environmental Impact Statement.

Underwater Archaeological Impact Assessment:
- The developer should engage the services of a suitably qualified archaeologist to carry out an underwater archaeological assessment of all areas to be impacted.
- The archaeologist should carry out any relevant documentary research including consulting with the Shipwreck Archive and Piers and Harbours Archive held in the Department of Environment, Heritage and Local Government, Register of Monuments and Places held with the Archive Unit, relevant Analytical sources, local sources and Topographical Files held in the National Museum of Ireland.
- The archaeologist should undertake a terrestrial and foreshore survey of all areas to be impacted for the proposed landfall works. This should include field
walk-over with hand-held metal detection.

- The offshore area proposed for the windfarm proper should be subject to a geophysical survey of the entire area to be impacted (which should include side scan, sub-bottom profile and magnetometer survey). This should be undertaken to the specifications as issued by the UAU for geophysical survey undertaken for archaeological purposed. The results of the geophysical survey should be interpreted by a suitably qualified archaeo-geophysicist.

- All identified anomalies should be archaeologically diver-truthed by a suitably qualified archaeologist and underwater with metal detection survey. This Department advises that all diving be undertaken to the Health and Safety Authority’s Safety in Industry (Diving Operations) Regulations 1981, SI422.

- All surveys should be licensed under the National Monuments Acts 1930-2004 (foreshore, underwater, geophysical & metal detection surveys).

- The archaeological assessment report should include a detailed Impact Statement detailing the scope of the proposed works, potential impacts of all proposed works and the nature and extend of all aspects of the proposed works. Where construction plans, landfall details, etc. have not been finalised, this should be clearly indicated within the Archaeological Impact Statement.

Where archaeological material/features are shown to be present, preservation in situ, preservation by record (excavation) or monitoring may be required.

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

Mise le mens,

Helen Francis,
Development Applications Unit
Aqua-fact International Services Ltd.
12 Kilkerrin Park
Liosbaun
Galway
14/4/06

Re: Oriel Windfarm consultation

Dear Caroline

Thank you for your letter of 27/3/06 regarding the installation of a Windfarm near Dundalk. Warrenpoint Harbour Authority has considered the scoping document and can raise the following concerns,

- The Foreshore License Area has a considerable square mileage, we would like greater detail of exactly where the turbines are proposed to be placed within the area when this has been established.

- We wish to have more detail on the actual construction phases mentioned, with particular regard to vessel movements, vessel numbers, vessel types, base harbours, anchorage areas, laydown areas, clearances required by shipping from construction sites, marking of construction sites, lighting of construction sites.

- We wish to have more detail on the maintenance aspect with particular regard to vessel movements, vessel numbers, vessel types, base harbours, anchorage areas, clearances required by shipping, frequency of maintenance.
• Shipping movements to Warrenpoint total around 1000/yr, these are made up from ferries on a regular route to Heysham and also general cargo vessels around the 2-5000 GRT size which approach Carlingford Lough from both North and South. North bound/arriving vessels will obviously be little affected by this development however South bound/arriving vessels currently pass through and close to the NE edge of the license area.

• Details of several operators into the Port, who will also have an interest but are absent from your original contact list, are as follows;

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Yours Sincerely,

[Signature]

Captain P. K. McJury MNI MRIN
Harbourmaster
Dr. Caroline Roche
Aqua-Fact International Services Ltd
12 Kilkerrin Park
Liosbaun
Galway

Yr ref: AF/IN798
Our ref: W006
04.04.06
Re: Wind farms in Dundalk Bay

Dear Dr. Roche

I refer to the above and your enclosures dated 27.03.06

At the outset, I must advise that the area noted in your enclosed drawing/map is outside the defined jurisdiction of the Drogheda Port Company harbour and Pilotage limits.

The Port Company has no comments in respect of this development.

Those said, in general navigational terms vessels bound to the port would pass through the area in question. As a general observation in navigational terms I do not see foresee any difficulties to surface navigation provided the area is appropriately marked consistent with similar structures, which its location is charted and structures position information promulgated to mariners in keeping with standard navigational information practices.

Yours sincerely,

Capt. Donnelly
Harbourmaster
Consultation Response

Telephone Call 5th April 2006 with Caroline Roche
Frank Allen Dundalk Harbour Master

Frank Allen was curious as to whether the discussed shipping channel through the wind farm is still the plan. He was told it was. He also asked to be kept in mind for the infrastructure stage as he has vessels that can be used out of Dundalk.
From: r.mccabe@cil.ie
Subject: Oriel Wind Farm Ltd
Date: 4 May 2006 10:16:45 IST
To: caroline@aquafact.ie
Cc: s.hickey@cil.ie

Caroline

I refer to your letter dated 27th March 2006 regarding the above.

As you will be aware our role in relation to these issues is limited to consideration of safety of navigation issues and subsequent marking of any future development.

The area covered by this application has direct implications for vessels trading to Dundalk Port and indirectly effects coastal traffic to Drogheda and Carlingford Lough.

The Western boundary of the site closes the route past the Dunany buoy to an unacceptable extent. Similarly the Northwest boundary and Northern extremity limits the route from the Carlingford buoy to the Imogene buoy. These are important coastal and approach routes which should be maintained.

The central approach to Dundalk is entirely closed off by this application. This would require a significant diversion for vessels approaching the port from the East and also have the effect of creating areas of higher traffic density around the periphery of the site.

I note that all relevant Ports have been contacted and we will also seek their opinions when we are preparing our response to CZMD.

With regard to the EIS we would request that it include a navigational risk assessment following the guidelines set out in the UK DTI Guidance document "Methodology for Assessing the Marine Navigational Safety Risks of Offshore Wind Farms". If you have any difficulty in obtaining this document please let me know.

If a licence is granted the site will require marking in accordance with the guidelines in IALA recommendation O117 and the IAA OAM 09/2002.

Should you have any queries please let me know.

Regards

Robert Mc Cabe.
Captain Robert Mc Cabe.
Aids to Navigation Inspector.
Commissioners of Irish Lights.
16, Lower Pembroke Street,
Dublin 2.
Telephone 01 6321900.
Fax 01 6321946.

*******************************************************************************

This email and any files transmitted with it are confidential and intended solely for the use of the individual or entity to whom they are addressed. If you have received this email in error please notify the system manager.
From: s.hickey@cil.ie
Subject: Oriel windfarm
Date: 13 June 2006 10:09:44 IST
To: caroline@aquafact.ie
Cc: sureng@iol.ie, r.mccabe@cil.ie

Caroline,
At the request of Chris Hannavik I write to refer to Captain Robert McCabes e-mail of 4th May and previous meetings and discussions with Sure Engineering.

In the course of the meetings and discussions referred to it was indicated to Sure Engineering that, without prejudice to the discretion of the Board of Irish Lights for the granting of Statutory Sanction under the Merchant Shipping Act for the establishment of Aids to navigation, that I would be prepared to recommend to my Board that no objection be lodged to the establishment of the Oriel Wind Farm provided that,

- an inshore traffic corridor is preserved on the northern and western periphery of the proposed development. That corridor should extend for a least width of 1 nautical mile seaward of the Dunany Buoy on the North South inshore route and similarly from the Imogene Buoy on the North East/ South West route.
- A South East/North West seaward fairway approach for Dundalk Bay of least width 2 nautical miles is preserved.

At a subsequent meeting with Sure Engineering, admiralty charts were offered indicating a Northern Zone 1 and Southern Zone 2 development proposal meeting these requirements to our satisfaction.

Should you have any further questions please refer to Captain McCabe who is due to return from leave on Thursday of this week.

Rgds
Captain Shay Hickey
Inspector of Lights and Seamarks

This email and any files transmitted with it are confidential and intended solely for the use of the individual or entity to whom they are addressed. If you have received this email in error please notify the system manager.

This footnote also confirms that this email message has been swept by MIMEsweeper for the presence of computer viruses.

www.clearswift.com

**********************************************************
14 December 2006

Oriel Windfarm Ltd.,
Unit 22 Regional Development Centre,
DKIT,
Dundalk,
Co. Louth.

F. A. O. Gareth Connell.

Re: Dundalk Bay Windfarm - Routing of On-Shore Cables.

Dear Sir

I refer to our meeting of the 16 November 2006 in relation to the route of the on-shore electricity cables from the proposed windfarm in Dundalk Bay between Castlebellingham and Tallanstown.

I confirm that the proposed route of the underground cables between Castlebellingham and Tallanstown was discussed and from the information available that there was no apparent insurmountable problems to the proposed route. When the route is better defined additional meetings should be held to clarify issues relating to the construction of the cable ducting and the placing of the cables.

I trust this is to your satisfaction.

Yours faithfully,

Padraic Fallon
Senior Engineer
Mr. Brian V. Britton  
Managing Director  
Oriel Windfarm Limited  
2 Marine Court  
Blackrock,  
Co. Louth  

28th February 2006

Re: Proposed offshore wind farm at Clogherhead, Co. Louth

Dear Mr. Britton,

Thank you for your letter dated the 14th February 2006 in respect of a proposed offshore wind farm at Clogherhead, Co. Louth. We note that you are advancing the development of your wind farm project and look forward to receiving a grid connection application from you in due course. Your application, once complete, would be processed in accordance with the Commission approved procedures pertaining at that time.

Please be advised that in accordance with Section 4.4 of the Commission for Energy Regulation’s (CER) direction “Group Processing Approach for Renewable Generator Connection Applications” dated 6th April 2005, CER/05/049, all renewable applications greater than 0.5 MW must be processed with under the Group Processing approach. The most suitable connection method, and associated charges and connection timelines, for the Oriel Wind Farm must therefore be determined using the Group Processing approach.

Under Group Processing applications are processed under a ‘Gate’ system. There are currently almost 3,000MW of wind farms with completed applications seeking inclusion in the next Gate (Gate 2). Both System Operators recently processed almost 400MW under Gate 1 and we expect to process at least a further 500MW in Gate 2. The criteria for inclusion in Gate 2 are currently under consideration by the CER. A consultation document was issued by CER on the 11th November 2005 which may be of interest to you. This can be found on the CER’s website www.cer.ie.

A copy of the standard wind farm application form can be found on our website1.

Should you have any further queries, please do not hesitate to contact either Shane Maher on 01-7027049 (shane.maher@eirgrid.com) or Ailis Martin on 01-7026920 (ailis.martin@eirgrid.com).

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Yours sincerely,

Andrew Cooke
Manager Grid Development and Commercial
ESB National Grid
Appendix 6

Correspondence with Landowners
7th February, 2007

Mr. Larry Goodman
14 Castle Street
Ardee
Co. Louth

Re: Landfall for Power Cable at Seabank, owned by IAD Limited

Dear Larry

Further to my telephone conversation with Larry Corrigan last week in which I briefly outlined to him the possibility of meeting with you to discuss the above matter, I decided to write to you knowing you are probably as ever extremely busy. Let me explain the nature of the request on behalf of Oriel Windfarm Limited (Oriel).

Oriel is close to the point of lodging an application for Lease Consent with the Department of Communications, Marine and Natural Resources for the construction and operation of a 55 turbine windfarm in the North West Irish Sea, about 17kms offshore from Seabank, Castlebellingham. If our application for Lease Consent is successful, construction should start in 2009, with the first turbines coming on stream in 2010. At that stage we will need to bring cables ashore to connect to the National Grid. We have identified a number of possible landfall locations. One that may be suitable is Seabank. A decision on the final location will be dependent on agreement from the National Grid Authorities and landowners like yourself.

If the chosen route is Seabank let me explain what this would entail:

Cable from the wind turbines will be buried to a depth of 2 metres under the sea floor. As it comes ashore it remains buried to a point where we could build a junction box. The junction box would be below ground level with a manhole access. This junction box would be on your land. The space required would measure 10 metres by 15 metres and would be closed off by a security fence. Permanent access would be required to the junction box. The cable would then run underground from your property to the substation at Tallanstown where it would be connected to the National Grid. This would require further permission from you to bury that cable across your land also at a depth of 2 metres.
While we have to wait for a final decision from the National Grid Authorities on the preferred location, in the meantime we would like to meet with you on behalf of Oriel to see if you would be interested in negotiating an option to cover the above works. We would also like to negotiate a purchase price for the area required for the junction box and right of access fee where the cable would be buried under your land if the project goes ahead with landfall at Seabank. Obviously, all of this is dependent on the final decision from the National Grid Authorities on their preferred location.

I look forward to hearing from you and hopefully have the opportunity of explaining our project in more detail to see if the above proposal is of interest to you.

Kind personal regards.

Yours sincerely
ORIEL WINDFARM LIMITED

__________________________
BRIAN BRITTON
Managing Director
14th February 2007

Mr. Brian Britton,
Managing Director,
Oriel Windfarm Limited,
2 Marine Court,
Blackrock,
Co. Louth.

Re: Landfall for Power Cable at Seabank, owned by I.A.D.

Dear Brian,

I acknowledge our discussions regarding the possible landing of the power cable for Oriel Windfarm on I.A.D.'s lands at Seabank and its onward routing to the National Grid. I confirm that I am happy to discuss this with you further as the project develops. I would obviously need to take professional advice on the matter at that time.

I await hearing from you.

Yours sincerely,

Laurence J. Goodman,
Director
30th January, 2007

Capt. Martin Donnelly
Drogheda Port Company
Maritime House
The Mell
Drogheda
Co. Louth

Re: Landfall for Power Cable at Bremore Port

Dear Martin

Thank you for meeting with us yesterday and as promised I write to formally explain the nature of the request on behalf of Oriel Windfarm Limited (Oriel).

Oriel is close to the point of lodging an application for Lease Consent with the Department of Communications, Marine and Natural Resources for the construction and operation of a 55 turbine project in the North West Irish Sea, about 27kms from Bremore Port. Details of the proposed development can be seen in our Public Office at Dundalk Institute of Technology.

If our application for Lease Consent is successful, construction should start at the latter end of 2008, with the first turbines coming on stream in late 2009, early 2010. At that stage we will need to bring cables ashore to connect to the national grid. We have identified a number of landfall locations. One that may be suitable is Bremore Port. A decision on the final location will be dependent on agreement from the National Grid Authorities and landowners like you. If the chosen route is Bremore Port let me explain what this would entail:

A cable from the wind turbines will be buried to a depth of 2 metres under the sea floor. As it comes ashore it remains buried to a point where we could build a junction box. The junction box would be below ground level with a manhole access. This junction box would be on your land. The space required would measure 10 metres by 15 metres and would be closed off by a security fence. Permanent access would be required to the junction box. The cable would then run underground from your property to the planned substation at Stephenstown where it would be connected to the national grid. This would require further permission from you to bury that cable across your land also at a depth of 2 metres.

2 Marine Court, Blackrock, Co. Louth
Tel : 042 9322952 Fax : 042 9322995 Email : info@orielwind.com
Registered in Ireland Reg. No. 318186 V.A.T. No. IE6331860F Registered Office as above
Directors B.V. Britton (Managing), C. Hannevig, T.D. Hannevig, M. McBennett
While we have to wait for a final decision from the National Grid Authorities on the preferred location, in the meantime we would like to negotiate an option with you to cover the above works. Engineering detail would be included in the option agreement necessary for inclusion in a planning permission application. We would also like to negotiate a purchase price and right of access fee if the project goes ahead. We very much support your plans to create an Eco Port at Bremore and, as discussed at our meeting, there is also the possibility of the creation of a peaking plant on port lands should the opportunity arise.

I would appreciate if you could respond to this letter indicating a positive expression of interest in facilitating Oriel with landfall at Bremore Port and confirming that you are amenable to working with us in the implementation of our plans in the future. I look forward to hearing from you.

Kind regards.

Yours sincerely

ORIEL WINDFARM LIMITED

__________________________
BRIAN BRITTON
Managing Director