

Investigative Foreshore Licence Application (Offshore Renewable Energy)

October 2013

Please indicate project category as appropriate:

Wave:

Tidal:

Wind:

Other:

Applicant Details:

Name: Codling Wind Park Limited
Address: Cooney Carey Consulting Limited, Unit15-15, The Courtyard, Carmanhall Road, Sandyford, Dublin 18.
Phone No: +353 (0)1 677 9000
E-mail address: gareth.swales@fredolsen.co.uk

Nominated Contact (Where different from above):

Name: Nichola McLaughlin
Address: Natural Power Consultants Limited, The Green House, Forrest Estate, Dalry, Castle Douglas, Dumfries and Galloway, DG7 3XS
Phone No: +44 1644 408 020
E-mail address: nicholam@codlingwindpark.ie

Applicant's Legal Advisor:

Name: To be confirmed
Address:

Phone No:

E-mail address:

Part 1: Proposal Details (Attach additional documents as required)

1.1	<p>Provide background information on the project including reason and objectives of the site investigations, the site selection process and any proposals for future works at the site.</p> <p>Background and Site Selection</p> <p>The Codling Bank Wind Park is located approximately 13km off the east coast of Ireland (off Co. Wicklow) between Greystones and Wicklow. Greystones is situated approximately 14.8km to the northwest and Wicklow is situated 17km to the southwest of the nearest turbines (see attached Figure). The turbines are located on the Codling sand bank in water depths ranging between 9 and 18m.</p> <p>The Codling Bank Wind Park consists of:</p> <p>Offshore Elements</p> <ul style="list-style-type: none">• Codling Wind Park (CWP)• Codling Wind Park Extension (CWPE) (under application)• Anemometer Mast(s)• Offshore substation platforms• Inter Array cables• Offshore Export Cable <p>Onshore Elements</p> <ul style="list-style-type: none">• Landfall point• Onshore Export Cable - Underground and overhead being considered• Substation(s) <p>In 1999 FORL initiated a search around the whole of the Irish Coast for potential offshore wind development sites, in consultation with the Department of Communications, Marine and Natural Resources. After careful consideration of the technical, physical and environmental criteria the Codling bank was considered to have a number of advantages when compared to other areas, chief of which was the shape and stability of the bank.</p> <p>Objectives of the site investigations</p> <p>The aims of the site investigation are to provide pre-construction information in line with the CWP Foreshore Lease Agreement (the Foreshore Lease commits CWP to undertake a series of environmental monitoring) and to provide additional baseline data for the assessments at CWPE in order to update the data provided in the ES.</p> <p><i>Please see the attached supporting information for the specific objectives of each investigation</i></p>
1.2	<p>Possible MW output of final development:</p> <p>Up to 1100 MW from Codling Wind Park and a further 1000MW from Codling Wind Park Extension, if consented.</p>

<p>1.3</p>	<p>Type of surveys proposed (e.g. geophysical, geotechnical, archaeological or benthic).</p> <p>Acoustic monitoring for marine mammals Natural fish surveys Benthic monitoring Met Ocean and Coastal processes monitoring</p>												
<p>1.4</p>	<p>Survey methodologies and equipment to be used for each survey type proposed:</p> <table border="1" data-bbox="411 535 1433 1715"> <tr> <td data-bbox="411 535 694 741"> <p>Marine Mammals - Passive acoustic monitoring</p> </td> <td data-bbox="694 535 1433 741"> <p>Up to 15 C-PODs deployed in locations within the proposed Codling and Codling Extension sites and surrounding area, targeting recordings of vocalisations from harbour porpoise and other cetaceans using the area.</p> </td> </tr> <tr> <td data-bbox="411 741 694 875"> <p>Benthic - Drop-Down Video</p> </td> <td data-bbox="694 741 1433 875"> <p>Up to 40 stations within the wind farm boundary, 40 stations within one tidal excursion and 10 – 20 reference stations beyond one tidal excursion.</p> </td> </tr> <tr> <td data-bbox="411 875 694 1081"> <p>Benthic - Seabed sampling using a 0.1 m² Hamon grab</p> </td> <td data-bbox="694 875 1433 1081"> <p>The grab gear will be deployed following recovery of the drop-down video equipment where seabed conditions are suitable for grab sampling. All 90-100 drop down video stations will be sampled if possible.</p> </td> </tr> <tr> <td data-bbox="411 1081 694 1256"> <p>Epibenthic Beam Trawl</p> </td> <td data-bbox="694 1081 1433 1256"> <p>Up to 20 beam trawl stations will be surveyed within the wind farm sites, 4 stations within one tidal excursion and 2 reference sites beyond one tidal excursion.</p> </td> </tr> <tr> <td data-bbox="411 1256 694 1536"> <p>Commercial Otter Trawl Survey</p> </td> <td data-bbox="694 1256 1433 1536"> <p>Sampling of commercially important species will be conducted using commercial otter trawl gear. Up to 8 trawls will be conducted within the wind farm sites and 4 within one tidal excursion. Trawl durations will be approximately 30 minutes. The surveys will be repeated quarterly; once during each season.</p> </td> </tr> <tr> <td data-bbox="411 1536 694 1715"> <p>Metocean Characteristics</p> </td> <td data-bbox="694 1536 1433 1715"> <p>One year measurement campaign to determine the met-ocean characteristics. Data gathered to include: wave data, turbidity data, tidal range and speed, sediment collection to inform settling velocity.</p> </td> </tr> </table> <p>All of the above surveys, including final location of equipment would be agreed in advance with the relevant authorities, including the Department of Arts, Heritage & the Gaeltacht, Department of Agriculture, Food and the Marine and the Marine Institute.</p> <p>Please see the attached supporting information document</p>	<p>Marine Mammals - Passive acoustic monitoring</p>	<p>Up to 15 C-PODs deployed in locations within the proposed Codling and Codling Extension sites and surrounding area, targeting recordings of vocalisations from harbour porpoise and other cetaceans using the area.</p>	<p>Benthic - Drop-Down Video</p>	<p>Up to 40 stations within the wind farm boundary, 40 stations within one tidal excursion and 10 – 20 reference stations beyond one tidal excursion.</p>	<p>Benthic - Seabed sampling using a 0.1 m² Hamon grab</p>	<p>The grab gear will be deployed following recovery of the drop-down video equipment where seabed conditions are suitable for grab sampling. All 90-100 drop down video stations will be sampled if possible.</p>	<p>Epibenthic Beam Trawl</p>	<p>Up to 20 beam trawl stations will be surveyed within the wind farm sites, 4 stations within one tidal excursion and 2 reference sites beyond one tidal excursion.</p>	<p>Commercial Otter Trawl Survey</p>	<p>Sampling of commercially important species will be conducted using commercial otter trawl gear. Up to 8 trawls will be conducted within the wind farm sites and 4 within one tidal excursion. Trawl durations will be approximately 30 minutes. The surveys will be repeated quarterly; once during each season.</p>	<p>Metocean Characteristics</p>	<p>One year measurement campaign to determine the met-ocean characteristics. Data gathered to include: wave data, turbidity data, tidal range and speed, sediment collection to inform settling velocity.</p>
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1.5	<p>Describe the nature and scale of any structure to be erected on the foreshore for testing the suitability of the site. Is the structure proposed to be temporary or permanent?</p> <p><i>No structure required for this licence application.</i></p>
1.6	<p>Provide information on proposed mooring, marking and lighting arrangements for any proposed deployment of instrument arrays.</p> <p>The exact location for moorings and lighting will be agreed prior to the commencement of any work. All moorings and lightening will follow best practice guidelines and will adhere to specific requirements of the Department.</p>
1.7	<p>Has the applicant held or does the applicant hold any previous Foreshore Licences, Leases or applications over the area sought or over any other area? (Give details including Department's file reference number(s)).</p> <ol style="list-style-type: none"> 1. Codling Wind Park Limited Foreshore Lease (awarded September 2005) 2. Derogation Licence No: DER/Marine Mammal-2013-36
1.8	<p>Indicative timing of the investigation works: (i) Start date (ii) Duration (iii) Any other information relevant to timing.</p> <ol style="list-style-type: none"> (i) Proposed start date of surveys is Autumn 2013 (ii) Initial surveys will be for one year, however, it is anticipated that a number of the surveys will be repeated during pre-construction activities relating to the wind farm and also during the construction and operational phase of the wind farm, in order to meet the conditions of the wind farm Foreshore Lease. (iii) To ensure that the assessment covers season variations the acoustic monitoring will be carried out for one year. <p>The natural fish survey will be carried out quarterly to ensure seasonal variation in fish numbers and species are assessed.</p>

<p>1.9</p>	<p>Describe any likely interactions with activities of the public or other foreshore users during the investigative works (e.g. fishing, aquaculture, sailing, and surfing). Describe any measures proposed to minimise inconvenience to other users.</p> <p>During the investigative works there will be limited interactions with members of the public as the site area is not within an area that is heavily utilised by members of the public, fishermen or shipping. The impacts will therefore predominantly be with interactions when gaining access to and from the vessel.</p> <p>In order to ensure all foreshore users and other public are kept up-to-date with activities, and to minimise inconvenience to them, the following measures will or have been adopted to date:</p> <ul style="list-style-type: none"> • Appointment of a dedicated Fisheries Liaison Officer (FLO). A suitably experienced FLO will be appointed by CWP to liaise with foreshore users, in particular the local fishing men. CWP are also working to provide a local contact. The FLO will ensure that users are kept well informed of activities both in a timely and constructive manner. Having presence from the local harbour will ensure that most users will be aware of this point of contact. • Prior to any activity occurring, a Mariners Notice will be issued to the Department of Transport, Tourism and Sport. This will be displayed on their website up to two weeks in advance of the proposed activity. This Mariners Notice will also be displayed on the CWP website (http://codlingwindpark.ie/) and distributed to relevant stakeholders. • CWP website will host all past, current and imminently proposed activities, which will allow foreshore users with internet access an easy and convenient means to access the information. • Where possible all vessels and personnel will be local to the area, and therefore have greater insight into local activities that other foreshore users may be partaking in. This will allow all activities proposed to be mindful and considerate of other foreshore users in the local vicinity. This will be further helped through the FLO who will ensure both activities proposed by CWP and activities being carried out by other foreshore users are well planned. • Where possible, proposed activities will be carried out only after consultations, through the FLO, with other foreshore users to ensure that the timing and locality will cause minimum disturbance to anyone else. • Where equipment has been left in situ, appropriate lighting and navigational aids (as per best practice) will be utilised to ensure other users are aware. • The location of equipment that has been left in situ will be recorded and relayed back to the FLO, and where necessary this information will be provided to other users.
<p>1.10</p>	<p>Describe any consultations undertaken to date with other foreshore users.</p> <p>Initial discussions have commenced with the local Fishermen in Arklow and Wicklow, who may be affected by survey works proposed at the site.</p>

<p>1.11</p>	<p>Describe any consultations undertaken to date with other consent authorities e.g. planning authority, Commission for Energy Regulation etc.</p> <p>CWP recognise the importance of engaging stakeholders in the project and its responsibility in ensuring effective engagement with organisations or individuals whose interests are potentially affected by Codling Wind Park. CWP Development Team (CWP DT) will manage stakeholder identification and interaction with the project, engaging all parties with constructive dialogue so that all concerned can influence decisions as the project progresses.</p> <p>In line with this, policy meetings have taken place with the Department of Arts, Heritage and the Gaeltacht and BirdWatch Ireland regarding the scope and methodologies proposed for the preconstruction ecology surveys. A summary of these meetings is outlined below:</p> <p>A meeting took place with David Tierney, David Lyons and Linda Patton of the DAHG on 24th April 2013 at Ely Place, Dublin. Methodologies were presented for the ornithology, marine mammal, fish ecology and benthic surveys. In general, DAHG are happy with the survey proposals, some clarifications have been requested and DAHG have confirmed that a two year survey period will be necessary. The survey methodologies are currently being updated to reflect those discussions.</p> <p>A meeting took place with Olivia Crowe and Stephen Newton of Bird Watch Ireland (BWI) to discuss the methodologies for the ornithology surveys. In general, BWI had no comments on the methodologies and have agreed to review data they hold that may be of use to the survey team.</p> <p>Minutes from the above meetings can be provided, if required.</p>
<p>1.12</p>	<p>Describe briefly any consultations undertaken with relevant authorities (e.g. county council, port/harbour authority etc) or State Agencies e.g. National Parks & Wildlife Service (NPWS), National Monuments Service (NMS) of Department of Arts, Heritage and the Gaeltacht:</p> <p>As detailed above a consultation meeting took place with Department of Arts, Heritage and Gaeltacht on 24/04/2103: Consultation covering the Ecological Methodologies at Codling Wind Park. Methodologies discussed would satisfy the Foreshore Lease Conditions and provide sufficient baseline data for the up-date to the Environment Statement for Codling Wind Park Extension. David Tierny, David Lyons, Linda Patton present from DAHG. Nichola McLaughlin, Jane Lancaster present from Natural Power, Andy Blyth and Chris Pendlebury (Natural Power) phoned in.</p> <p>A meeting has taken place with the Wicklow Harbour Master on 11/09/2013 to update on the Geophysical surveys and to provide an overview of survey works proposed over the coming months.</p>
<p>1.13</p>	<p>Describe briefly any support received or under application with the Sustainable Energy Authority of Ireland (SEAI) or other State Agency:</p> <p>None</p>

Part 2: Proposed Site. (Attach additional documents as required)

<p>2.1</p>	<p>Delineate the proposed site in red on a latest edition map at a scale of 1:10 000 or larger scale if more appropriate and available, indicating:</p> <ul style="list-style-type: none"> (i) the entire area; (ii) the hectarage involved below the line of high water of medium tides clearly marked in RED and (iv) the area of foreshore involved in metric measurements (i.e. hectares, metres squared or square kilometres etc). <p>Please see enclosed map.</p> <p>CWP and CWPE are cited exclusively within the foreshore area (area between the high water and 12 nautical mile boundary). The site can be seen on the enclosed figure. The hectarage involved for CWP is 5,852 ha and CWPE 6,632 ha, it total this is 12,484 ha. The map that has been provided is at a scale of 1:100 000 due to the extent of the development. If required a more detailed map(s) can be produced.</p> <p>The area that will be involved in this application, as per the figure will be:</p> <p>Area of foreshore: 190, 101 ha Area beyond the foreshore: 277,425ha</p> <p><i>It should be noted that this area will be used for temporary survey works only and establishing control sites for monitoring environmental conditions. Only very localised areas within this boundary will be involved.</i></p>										
<p>2.2</p>	<p>Geographic co-ordinates of the area under application, where the area can also be identified on the Ordnance Survey map, specify Ordnance Survey co-ordinates also.</p> <table border="1" data-bbox="667 1317 1094 1520"> <thead> <tr> <th>Latitude (N)</th> <th>Longitude (W)</th> </tr> </thead> <tbody> <tr> <td>53° 30' 40.0"</td> <td>6° 2' 28.1"</td> </tr> <tr> <td>53° 29' 38.4"</td> <td>5° 10' 58.4"</td> </tr> <tr> <td>52° 45' 56.9"</td> <td>6° 4' 29.2"</td> </tr> <tr> <td>52° 44' 56.8"</td> <td>5° 13' 52.4"</td> </tr> </tbody> </table>	Latitude (N)	Longitude (W)	53° 30' 40.0"	6° 2' 28.1"	53° 29' 38.4"	5° 10' 58.4"	52° 45' 56.9"	6° 4' 29.2"	52° 44' 56.8"	5° 13' 52.4"
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<p>2.3</p>	<p>Delineate proposed site on relevant Admiralty Chart.</p> <p>Please see enclosed map.</p>										
<p>2.4</p>	<p>Relevant Local Authority:</p> <p>Wicklow County Council</p>										

2.5	<p>Location name and nearest townland name:</p> <p>Codling Bank, Codling Wind Park.</p> <p>Greystones, County Wicklow</p>
2.6	<p>Distance from nearest other developments, including any offshore renewable energy developments on the foreshore:</p> <p>CWP and CWPE extension is approximately 10.5 km north of the constructed Arklow Bank Wind farm and 3 km south of the proposed Dublin Array Wind farm.</p>
2.7	<p>Distance from shore:</p> <p>CWP is approximately 13km off the coast of County Wicklow.</p>
2.8	<p>Distance from nearest aquaculture operation:</p> <p>According to the Department of Agriculture, Food and the Marine (email 26 September 2013) there are currently no aquaculture operations licensed of the coast of County Wicklow. The Department has received an application which they are seeking clarifications on, this site would be south of Arklow, a distance that will be greater than 20 km away (without further details of the proposal). There are no aquaculture operations</p>
2.9	<p>Distance from any other sensitive location e.g. fish spawning ground, designated Shellfish Growing Waters,</p> <p>Fish spawning data is limited in the immediate area around Codling Bank possibly reflecting the low importance of the area as a fishing ground. Please see supporting information for further details.</p>
2.10	<p>Any other site details considered relevant:</p>

Part 3: Nature Conservation Considerations (Attach additional documents as required)

3.1	<p>Distance from nearest Natura 2000 sites (i.e. Special Protection Area (SPA) or Special Area of Conservation (SAC):</p> <p>The nearest SPA is 'The Murrough' at 13.5 km from the site. It is designated for its assemblage of birds, including: Red-throated Diver, Greylag Goose, Light-bellied Brent Goose, Wigeon, Teal, Black-headed Gull, Herring Gull and Little Tern.</p> <p>The nearest SAC is the proposed 'Rockabill to Dalkey Island Reefs' at 20 km. 'Lambay Island' is 45 km from site. The sites are designated for their reefs and harbour porpoise; and vegetated sea cliffs of the Atlantic and Baltic coasts and grey seals respectively.</p> <p>Figure 3 and 4 in the supporting information shows the location of CWP to Natura 2000 sites in the area.</p>
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3.2 Name and location of Natura 2000 sites in or around the project area:			
SPA	Distance from site	Designated species (population sizes per SPA citations)	
The Murrough	13.5 km	Herring gull (506 pr) Little tern (30 pr average 1999-2002, 100 pr in 2005)	
Wicklow Head	19 km	Kittiwake (956 pr)	
Lambay Island	44 km	Fulmar (635 pr) (2009 – 530 prs) Cormorant (675 pr) (2009 - 363 pr) Shag (1122 pr) (2009 - 1129 pr) Kittiwake (4091 pr) (2009 – 4182 pr) Lesser black-backed gull (309 pr) (476pr) Herring gull (1806 pr) (766pr) Great black-backed gull (193 pr) (236 pr) Guillemot (59824 ind.) (67300 ind.) Razorbill (4337 ind.) (6400 ind.)	
Rockabill	56 km	Roseate tern (611 pr) Common tern (610 pr) Arctic tern (89 pr)	
Dalkey Islands	21 km	Important autumn staging area for common, Arctic and roseate terns. (small numbers also breed: common tern 62 pr, Arctic tern 24 pr, roseate tern 11pr)	
Howth Head Coast	27.5 km	Kittiwake (2269 pr)	
Skerries Islands	50 km	Cormorant (558 pr) Herring gull (150 pr) Great black-backed gull (25 pr)	
Special Area of Conservation (SAC)	Location	Relevant Notified Features	Distance from Site (km)
Rockabill to Dalkey Island Reefs (Proposed)	Irish Sea (East coast of Ireland from Rockabill to Dalkey Island)	Harbour porpoise (<i>Phocoena phocoena</i>)	20.44
Lambay Island	Irish Sea (Ireland)	Grey seal (<i>Halichoerus grypus</i>)	45.86
Llyn Peninsula and the Sarnau/ Pen Llyn a'r Sarnau	Irish Sea (Wales)	Bottlenose dolphin (<i>Tursiops truncatus</i>), grey seal (<i>Halichoerus grypus</i>)	69.99
Cardigan Bay/Bae Ceredigion	Irish Sea (Wales)	Bottlenose dolphin (<i>Tursiops truncatus</i>), grey seal (<i>Halichoerus grypus</i>)	111.98
Murlough	Irish Sea (Northern Ireland)	Harbour seal (<i>Phoca vitulina</i>)	113.15
Saltee Islands	Close proximity to the Irish Sea (Ireland)	Grey seal (<i>Halichoerus grypus</i>)	121.05
Pembrokeshire Marine	Close proximity to the Irish Sea (Wales)	Grey seal (<i>Halichoerus grypus</i>)	130.84
Strangford Lough	Irish Sea (Northern Ireland)	Harbour seal (<i>Phoca vitulina</i>)	134.93

3.3	<p>Describe potential impacts of the site investigations on Natura 2000 sites.</p> <p>Due to the activities proposed and the distance between the survey area and any Natura 2000 sites, there is expected to be no impact on any site from the proposed survey works. The works will also not impact the favourable conservation status of any qualifying species at these sites.</p>
3.4	<p>Describe any measures proposed to mitigate possible impacts on Natura 2000 sites and other key marine receptors.</p> <p>Please see supporting information details.</p>
3.5	<p>Describe any other projects or plans for the area, anticipated or developed, that in combination with this proposal, may have a significant effect on a Natura 2000 site:</p> <p>There are no known proposals that will have cumulative impacts during the proposed survey time table.</p>

Part 4: Navigational Safety Considerations.

4.1	<p>Distance from shipping lanes at nearest point. Illustrate on the appropriate marine charts accompanying the application.</p> <p>No designated shipping lanes in the vicinity of the development, the closest shipping traffic areas are located 6km to the west and east of the Codling Bank Wind Park.</p>
4.2	<p>If a safety zone for passage of shipping (including fishing and leisure boats) is sought, supply details and give reasons.</p>
4.3	<p>If an temporal /spatial restrictions are sought on the use of any type of fishing gear or leisure activity within the area, provide details and justification for such restrictions and indicate location(s) on appropriate marine charts.</p>

Declaration and Consent:

The details provided here are correct to the best of my knowledge.

I understand that no works will be commenced, by me or my agents on the proposed site, without the prior written consent of the Minister.

I agree that on completion of the investigative works, all environmental data that is not commercially-sensitive shall be provided within a reasonable timeframe to the Marine Institute; the format and timeframe to be agreed with the Marine Institute. I understand that the Marine Institute may make this information available to individuals and organisations in line with its data access policy.

The granting or refusal of any foreshore investigation licence will not give rise on the part of the applicant to any expectation whatsoever for, right or entitlement to a grant of any future foreshore permission in respect of all or any part of any area of foreshore.

I give consent to the Minister and his servants to copy this application and to make it available for inspection and copying by the public. This consent relates to this application and to any further information, submission, objection provided by me or on my behalf.

Signed for and on behalf of the applicant:



Name of Signatory (block letters):

NICHOLA McLAUGHLIN

Position Held:

COASTSHORE CONSENTS & STAKEHOLDER MANAGER

Date 19/11/2013

Return completed applications to:

Mr. Robert Hickey
Marine Planning and Foreshore
Department of the Environment, Community and Local Government
Newtown Road
Wexford

Enquiries to: Mr. Robert Hickey at (053) 9117365
Email a copy of application documents: Foreshore@environ.ie