The shaded blocks below indicate the areas of activity published within this Bulletin.

This Bulletin, along with previous issues, can be viewed at: www.kingfishercharts.org, or you can register for an email alert by contacting: kingfisher@seafish.co.uk

All co-ordinates listed in this Bulletin refer to WGS84 datum.
Firth of Forth Wind Farm – Meteorological Mast

Please be advised that Fred Olsen United, on behalf of Seagreen Wind Energy Ltd (Seagreen), will be commencing the installation of a Meteorological Mast in the Firth of Forth Round 3 Offshore Wind Zone. The Meteorological Mast will be installed at the location below.

Installation of the Meteorological Mast will be achieved using the jack up vessel Brave Tern operated by Fred Olsen Windcarrier. This vessel has 4 legs which will be lowered to the seabed for the installation operation. Once Brave Tern is secured in position the Meteorological Mast foundation will be installed, followed by the installation of the met mast topsides. Foundation installation is estimated to take up to 4 days and topsides installation and commissioning up to 2 weeks. The Brave Tern will be the only vessel required for the installation.

The Meteorological Mast will support a variety of meteorological data collection equipment, including a vertical array of anemometers for measurement of wind speed and direction, and will extend to a maximum height of 120m above lowest astronomical tide (LAT). The mast will be painted and otherwise marked according to the requirements of the Northern Lighthouse Board and Maritime and Coastguard Agency. Navigation lighting, a fog detection and signalling system and a radar reflector will be fitted. The Meteorological Mast topsides will be secured to a steel suction caisson foundation secured to the seabed. Following installation service visits will be undertaken at approximately 6 month intervals.

For further information, please contact: Rebecca Radford, Brown & May Marine Ltd, Tel: 01379 870181, Email: Rebecca@brownmay.com

NAREC Offshore Demonstrator Platform – Construction Activities

Installation vessel MPI Adventure is currently jacked up on the NAREC Offshore site, 3NM off Blyth. The foundation jacket has been positioned on the seabed. All 3 piles have been stabbed and drilling operations are currently in progress.

During this period, a 500m safety zone has been established and all vessels are requested to keep clear. Once the foundation is fully installed, MPI Adventure will lift on the platform and tower sections. During these activities, a 500m safety zone will be established and vessels are requested to keep clear. During construction activities, personnel transfer vessels Endurance and Celtic Challenger will be transiting between the Port of Blyth and the construction site.

Installation: NOAH
Position: 55° 08'.775'N 001°25'.252'W
Markings: NH
Height: 106.5m above chart datum
Colour: Yellow
Lights: All round white light flashing Morse 'U' 15s, 23m, 10M
Sounds: Morse 'U' 30s

For further information, please contact: Jonathan Nuttall, Tel: 07827 933 507, Email: noah.traffic@searoc.com
Hornsea Offshore Wind Farm – Survey Activities

Buoys
A directional wave rider (DWR) buoy is located at Schooner Field (location 7a) and will be serviced at 6 monthly intervals, and remain in place until further notice. The DWR buoy is painted to IALA standard and is equipped with a radar reflector and an amber navigation light set to flash 5 times at 1Hz every 20 seconds. The DWR buoy is moored to the seabed through a series of rubber compliant sections at the sea surface and a plaited rope riser line throughout the water column. The result of this mooring configuration is a large excursion of the buoy about its mooring; we ask that passing vessels give the buoy a wide berth of approximately 300m.

<table>
<thead>
<tr>
<th>Location</th>
<th>Name</th>
<th>Equipment</th>
<th>Latitude</th>
<th>Longitude</th>
</tr>
</thead>
<tbody>
<tr>
<td>7a</td>
<td>Schooner Field</td>
<td>DWR buoy</td>
<td>53° 53.367’N</td>
<td>01° 59.100’E</td>
</tr>
</tbody>
</table>

Met Mast
A meteorological mast is located at the position: 53°53.143’N 001°59.497’E

In Foggy conditions the fog detection and control system is diverting the primary navigation lights and fog horn to the emergency navigation lights and fog horn. Be extra vigilant when navigating in adverse foggy conditions in the met mast area.

Smart Wind can confirm that the aviation light is operational.

Smart Wind intend to undertake a geophysical survey in the area shown:

<table>
<thead>
<tr>
<th>Company, Vessel &amp; Call Sign</th>
<th>Area</th>
<th>Area</th>
<th>Start Timeframe &amp; Duration</th>
<th>Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smart Smart Neptune</td>
<td>1. 53°49.108’N 001°25.861’E</td>
<td>4. 53°44.786’N 001°27.338’E</td>
<td>25th April 2013</td>
<td>4 Weeks</td>
</tr>
<tr>
<td></td>
<td>2. 53°44.016’N 001°20.153’E</td>
<td>5. 53°46.408’N 001°38.607’E</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. 53°44.748’N 001°24.717’E</td>
<td>6. 53°49.261’N 001°39.286’E</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

For further information, please contact: Keith Harsham, SMart Wind Ltd, Tel: +44(0)20 7776 5515; Mob 07876454649 Email: keith.harsham@mainstreamrp.com
**Galloper Offshore Wind Farm – Survey**

Gardline intend to undertake a geophysical survey in the area shown:

<table>
<thead>
<tr>
<th>Company, Vessel &amp; Call Sign</th>
<th>Area</th>
<th>Area</th>
<th>Start Timeframe &amp; Duration</th>
<th>Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gardline MV Confidence ZQZ15</td>
<td>1. 51°11.017'N 002°19.937'E</td>
<td>3. 51°12.654'N 002°29.680'E</td>
<td>19th April 2013 For 14 Days</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. 51°11.297'N 002°29.140'E</td>
<td>4. 51°12.916'N 002°19.334'E</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

For further information, please contact: Kelly Allen, Gardline, Tel: +44(0)1493 845600  email: kelly.allen@gardline.co.uk

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**Westermost Rough Offshore Wind Farm – Survey**

Dong Energy intend to undertake a geophysical survey in the area shown:

<table>
<thead>
<tr>
<th>Company, Vessel &amp; Call Sign</th>
<th>Area</th>
<th>Area</th>
<th>Start Timeframe &amp; Duration</th>
<th>Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dong Energy Fairline MZPW8</td>
<td>1. 53°48.233'N 0°07.218'E</td>
<td>12. 53°44.149'N 0°12.567'E</td>
<td>26th April 2013 For 14 Days</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. 53°48.678'N 0°10.538'E</td>
<td>13. 53°45.915'N 0°10.616'E</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. 53°48.749'N 0°09.253'E</td>
<td>14. 53°45.956'N 0°05.889'E</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4. 53°49.498'N 0°07.752'E</td>
<td>15. 53°51.372'N 0°08.132'E</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>5. 53°48.651'N 0°05.745'E</td>
<td>16. 53°49.896'N 0°05.530'E</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>6. 53°46.824'N 0°08.618'E</td>
<td>17. 53°41.700'N 0°18.757'E</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>7. 53°48.800'N 0°11.303'E</td>
<td>18. 53°52.721'N 0°14.097'E</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>8. 53°47.989'N 0°12.526'E</td>
<td>19. 53°53.827'N 0°04.503W</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>9. 53°47.304'N 0°04.956'E</td>
<td>20. 53°57.523'N 0°01.154W</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>10. 53°47.005'N 0°02.837'E</td>
<td>21. 53°58.194'N 0°10.117'E</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>11. 53°46.629'N 0°01.924'E</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

For further information, please contact: Lasse Hartvig Hirsch, Dong Energy, Tel: +44(0)7879115163  email: lashi@dongenergy.co.uk
Lincs Offshore Wind Farm – Construction Activity & Survey

Ongoing wind turbine erection is being undertaken at selected locations by the “Resolution”. The THV Galatea (call sign MRDQ7) is an 84m vessel and will be assisting with commissioning works within the Lincs field. The MV Chartwell (call sign MHGV6) is a 26m mono-hull and will be undertaking 24hr operations. The surveys works will require both vessels to tow survey equipment up to 100m astern of the vessel so mariners are advised to maintain a safe working distance from both vessels.

Geophysical survey of inter-array cables within main site via MV Chartwell and 2 x export cables via MV Freja. The survey contractor is Osiris Projects and these works are expected to last 1-2 weeks, subject to weather conditions. It should be noted that the MV Chartwell will also undertake surveys around the Docking Shoal and Race Bank Met Mast locations.

The surveys will require both vessels to tow survey equipment up to 100m astern of the vessel so mariners are advised to maintain a safe working distance from both vessels.

Inter-Array Cables – Main Site
All inter-array cables are now installed, although some exposed cable ends exist near turbines. Mariners are reminded of the 50m Safety Zones in existence around all uncompleted structures.

Export Cables
The Huntress of Grimsby remains on site to provide guard vessel duties between KP8.0 and KP24.0.

Coordinates of Operations
The position and type of these buoys is shown below:

<table>
<thead>
<tr>
<th>Buoy</th>
<th>Latitude</th>
<th>Longitude</th>
</tr>
</thead>
<tbody>
<tr>
<td>East Cardinal (VQ (3) 5s)</td>
<td>53°07.540′N</td>
<td>00°29.790′E</td>
</tr>
<tr>
<td>East Cardinal (VQ (3) 5s)</td>
<td>53°09.070′N</td>
<td>00°31.490′E</td>
</tr>
<tr>
<td>Special Mark (Fl Y 2.5s)</td>
<td>53°10.970′N</td>
<td>00°31.460′E</td>
</tr>
<tr>
<td>North Cardinal (VQ)</td>
<td>53°12.440′N</td>
<td>00°31.460′E</td>
</tr>
<tr>
<td>West Cardinal (VQ (9) 10s)</td>
<td>53°09.450′N</td>
<td>00°28.050′E</td>
</tr>
</tbody>
</table>

For a copy of the Kingfisher Awareness Flyer for the Lincs Offshore Wind Farm, please contact the undersigned. Alternatively, click on the link below, or visit www.kingfishercharts.org

Kingfisher Awareness Flyer: Lincs Offshore Wind Farm

For further information, please contact: Email: Renewables@Centrica.com OR a Fisheries Liaison Officer (FLO) will be aboard the survey vessel for the duration of the proposed works – Mob: 07831705192

Area 3
Dudgeon Wind Farm – Wave Buoy

As part of the Dudgeon wind park development, Fugro GEOS will be deploying a wave buoy on behalf of Statoil for a period of 12 months. The buoy will measure waves, currents and water level and will transmit the data to shore via satellite telemetry.

The wave buoy is a Fugro Oceanor Seawatch Midi. It is approx. 2m in diameter and will be moored to the seabed using a combination of chain, flexible rubber cord and rope. Fl 5 20s.

The deployment is planned for 24th April 2013. Service visits are scheduled for August and December 2013, with demobilization expected April 2014. The MV Sheerkham will be used.

<table>
<thead>
<tr>
<th>Buoy</th>
<th>Latitude</th>
<th>Longitude</th>
</tr>
</thead>
<tbody>
<tr>
<td>Midi Buoy</td>
<td>53° 18.521'N</td>
<td>01° 23.673'E</td>
</tr>
</tbody>
</table>

For further information, please contact: Mark Jones, Fugro GEOS, Tel: +44(0)1491 820 500 email: m.jones@geos.com

London Array Wind Farm – Construction Works

The London Array Offshore Wind Farm is being constructed in the Outer Thames Estuary, it will be situated midway between the Kent and Essex coastlines, more than 20km (12 miles) from each shore. Phase one consist of 175 wind turbines, installed on two sandbanks; Long Sand and Kentish Knock and in the Knock Deep channel.

Current work activities include:

- Cable burial vessel Pontra Maris assisted by tugs, Amstelstroon and Claudia B will continue cable burial operations at shallow water locations. Whilst construction is taking place at these positions a 900m safety zone is established, and all vessels are to keep clear.
- Cable burial vessel Nico will commence cable burial operations at shallow water locations. Whilst construction is taking place at these positions a 500m safety zone is established, and all vessels are to keep clear.
- The Survey Vessel Sander 2 will carry out depth of cable surveys on the array cables.
- Construction site guard vessel duties will be covered by the Mary Ann 1.
- Crew boats Sea Rex, MPI Cardenio, Marian Array, Smeaton Array, Ellida Array, Conwy Bay, Towyn Bay, Cwind Alliance, Cwind Athena, Cwind Astute, Voyager, Transporter, Distributor, Provider, Cardinal P, Admiral P, Commander P, ECC Topaz, Sea Ferret & Sea Weasel will take offshore technicians to the installed foundations and construction vessels, and perform personnel transfer duties. Some of these vessels will undertake generator removal duties.
- The Hotel ship Wind Ambition situated in the Knock Deep anchorage NE of site, acting as accommodation for offshore technicians working on the WTG's, until Tues 23rd April when she will depart the construction site.
- The vessel Meriel D conducting site survey work, including the export cable route and array cables.

For a copy of the Kingfisher Awareness Flyer for the London Array Offshore Wind Farm, please contact the undersigned. Alternatively, click on the link below, or visit www.kingfishercharts.org

For further information, please contact: Email: londonarraytraffic@dongenergy.dk, Tel: +44(0)7909414690 or +45 31727585
East Anglia Offshore Wind – Geophysical Survey

Mariners are advised that Bethnic Survey work will commence at East Anglia Offshore Wind. The survey will involve collecting seabed grabs and carrying out short scientific beam trawls from a number of locations across the survey area. Survey operations will be carried out on a 24 hour basis.

<table>
<thead>
<tr>
<th>Company, Vessel &amp; Call Sign</th>
<th>Area Covered</th>
<th>Start Timeframe &amp; Duration</th>
<th>Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emu Limited, RV Discovery 2AEL8</td>
<td>1. 53° 14.737 'N 003° 04.168 'E</td>
<td>23rd April 2013</td>
<td>For 20 Days</td>
</tr>
<tr>
<td></td>
<td>2. 52° 51.721 'N 003° 10.693 'E</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. 51° 59.771 'N 002° 27.113 'E</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4. 52° 00.509 'N 002° 06.860 'E</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>5. 52° 17.373 'N 002° 08.422 'E</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>6. 52° 15.913 'N 001° 52.032 'E</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>7. 52° 24.077 'N 001° 55.861 'E</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>8. 52° 26.158 'N 002° 13.462 'E</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>9. 52° 35.985 'N 002° 14.408 'E</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>10. 52° 49.507 'N 002° 02.592 'E</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

For further information, please contact: Martin Whyte, East Anglia Offshore Wind Ltd, Tel: (0) 141 6140424, email: Martin.whyte@scottishpower.com

East Anglia Offshore Wind – Metocean Monitoring

Please be advised that the first of the (*)waveriders within the East Anglia Zone has been relocated as it has unfortunately been hit on a couple of occasions.

<table>
<thead>
<tr>
<th>Buoy Type</th>
<th>Latitude</th>
<th>Longitude</th>
</tr>
</thead>
<tbody>
<tr>
<td>Waverider</td>
<td>52° 52.415’N</td>
<td>02° 53.680’E</td>
</tr>
<tr>
<td>Waverider</td>
<td>52° 36.320’N</td>
<td>02° 46.490’E</td>
</tr>
<tr>
<td>Waverider</td>
<td>52° 18.620’N</td>
<td>02° 27.560’E</td>
</tr>
<tr>
<td>AWAC</td>
<td>52° 52.390’N</td>
<td>02° 53.730’E</td>
</tr>
<tr>
<td>AWAC</td>
<td>52° 33.350’N</td>
<td>02° 46.430’E</td>
</tr>
</tbody>
</table>

For further information, please contact: Jonathan Keer, Tel: +44(0)1379 870 181, email: jonathan@brownmay.com
**East Anglia Offshore Wind – Installation of Two Met Masts**

The East Anglia Zone is situated in UK territorial waters within the southern North Sea off the coast of North and Suffolk. As part of the development, the met masts are to be installed in the south east of the site and the north east.

<table>
<thead>
<tr>
<th>Met Mast</th>
<th>Latitude</th>
<th>Longitude</th>
</tr>
</thead>
<tbody>
<tr>
<td>Met Mast 2E</td>
<td>53° 10.641'N</td>
<td>02° 59.102'E</td>
</tr>
<tr>
<td>Met Mast 1B</td>
<td>52° 12.863'N</td>
<td>02° 30.141'E</td>
</tr>
</tbody>
</table>

**Work Schedule**

WOOD GROUP KENNY is due to commence Phase I operations (installation of foundations) between the 1st and the 14th May 2013 for a period of approximately seven days (weather dependent) utilising the HLV STANISLAV YUDIN with AHT Smit Angola and/or Bremen Fighter.

WOOD GROUP KENNY is due to commence Phase II operations (installation of transition pieces and lattice towers) between the 1st June 2013 and the 1st September 2013 for a period of approximately seven days (weather dependent) utilising the HLV OLEG STRASHNOV with AHT Union Princess.

Installation of additional equipment and instrumentation will follow Phase II operations directly for a period of two weeks (weather dependent) utilising a Crew Transfer Vessel (details TBC).

Please note that the dates specified above are based upon our current vessel planning and is therefore subject to change, if appropriate an updated NTM will be submitted with as much notice as possible.

**For further information, please contact:** James Beale, Wood Group Kenny, Tel: +44(0)1784 417263, email: james.beale@woodgroupkenny.com

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**Greater Gabbard Offshore Wind Farm – Survey**

Mariners are advised

<table>
<thead>
<tr>
<th>Company, Vessel &amp; Call Sign</th>
<th>Area Covered</th>
<th>Start Timeframe &amp; Duration</th>
<th>Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brown &amp; May MV Line OWJU2</td>
<td>1. 51° 43.980'N 001° 56.310'E 2. 51° 45.960'N 001° 54.984'E 3. 51° 47.760'N 001° 56.040'E 4. 51° 48.660'N 002° 00.000'E 5. 51° 45.240'N 002° 00.000'E 6. 51° 43.980'N 001° 56.310'E</td>
<td>1. 51° 58.715'N 001° 56.005'E 2. 51° 58.715'N 001° 59.992'E 3. 51° 53.228'N 001° 59.992'E 4. 51° 51.081'N 001° 52.181'E 5. 51° 57.332'N 001° 52.372'E 6. 51° 57.669'N 001° 53.274'E 7. 51° 57.685'N 001° 53.601'E 8. 51° 57.889'N 001° 53.820'E 9. 51° 58.715'N 001° 56.005'E</td>
<td>18th April 2013 until 15th May 2013</td>
</tr>
</tbody>
</table>

**For further information, please contact:** Jonathan Keer, Brown & May Marine Ltd, Tel: 01379 870181 email: jonathan@brownmay.com
Sheringham Shoal Offshore Wind Farm – Sub Sea Acoustic Buoy

Please be advised a Sub Sea Acoustic Monitoring Device has been deployed, a small pink buoy.

Latitude: 53° 08.610'N  
Longitude: 01° 05.970'E

For further information, please contact: Gary Lorimer, Scira Offshore Energy Ltd, Tel + 44 7557 743799  email: G.Lorimer@scira.co.uk

Dudgeon Offshore Wind – Geophysical Survey

Geophysical and UXO survey of proposed wind farm site and cable route.

<table>
<thead>
<tr>
<th>Company, Vessel &amp; Call Sign</th>
<th>Area Covered</th>
<th>Start Timeframe &amp; Duration</th>
<th>Area</th>
</tr>
</thead>
</table>
| Fugro Emu Ltd Clupea MZFS9  | 1. 53°01.552'N 1°14.441'E  
2. 52°56.942'N 1°06.777'E  
3. 52°57.112'N 1°07.600'E  
4. 53°02.009'N 1°13.485'E  
5. 53°14.322'N 1°20.879'E  
6. 53°13.595'N 1°22.445'E  
7. 53°16.271'N 1°27.541'E  
8. 53°11.198'N 1°27.201'E  
9. 53°15.509'N 1°17.903'E  
10. 53°20.168'N 1°19.069'E | 21st April 2013 - 01st Sept 2013 For 130 Days | |

For further information, please contact: Matt Howell, Fugro EMU Limited, Tel + 44 (0) 1489 860 064 email: matt.howell@fugroemu.com

Teesside Offshore Wind Farm – Safety Zone Cardinal Buoys Out of Service

Teesside Offshore Wind Farm is located within Tees Bay approximately 1.5km off the coast of Redcar in Cleveland. The site will consist of 27 Siemens 2.3 MW Turbines and is connected by two undersea export cables to an onshore sub-station based at Warrenby.

The following activities are continuing:
- Continue scour protection works to foundations.
- Continue assembling turbine components at Hartlepool.
- Continue turbine installations and commissioning offshore.

WARNING: The South Cardinal Buoy is currently unlit, the West Cardinal Buoy is currently off location.
25 April 2013 | Issue 09

### Lynn and Inner Dowsing Wind Farm – Notice to Mariners

**Planned Power outage at the Lynn and Inner Dowsing Wind Farms.**

**Update on Back-up Power:**

After the main power is switched off, the Aids to Navigation on the Lynn and Inner Dowsing wind turbines will be running on back-up power, which will last for 8 days.

**Guard Vessel:**

When the back-up power to the Inner Dowsing site runs out, a guard vessel, the “Rachel S”, will patrol the north, west and south boundary of the field, from 22nd April 2013.

The temporary buoys surrounding the Lynn wind farm site will continue to mark the Lynn site, and provide navigational aid.

**Dates and Duration of Outage:**

<table>
<thead>
<tr>
<th>Lynne Wind Farm Dates of Main Power Outage</th>
<th>Inner Dowsing Wind Farm Dates of Main Power Outage</th>
</tr>
</thead>
<tbody>
<tr>
<td>20th May to 31st May</td>
<td>15th April to 03rd May</td>
</tr>
<tr>
<td>Dates when permanent Aids to Navigation will be running on back-up power</td>
<td>20th May to 27th May</td>
</tr>
<tr>
<td>Dates when no permanent Aids to Navigation will be operating</td>
<td>28th May to 31st May</td>
</tr>
</tbody>
</table>

Mariners are advised to exert caution in the vicinity of the wind farms during this time and to communicate with the Centrica Marine Coordinator when in the vicinity of the wind farms.

For further information, please contact: Centrica Marine Coordinator, Radio Channel: 157.450 MHZ, Tel: 07789 573792; email: CRELMarine.Coordinator@centrica.com; Simon Prince, Tel: 07920 273866; Email: sprince@rssmarine.co.uk; Richard Hart, Tel: 07584 514942; Email: rhart@rssmarine.co.uk

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### Humber Gateway Offshore Wind Farm – Unexploded Ordnance

E.ON Climate and Renewables (E.ON) are currently undertaking an Unidentified Magnetic & Sonar Anomaly investigation within the project area of the planned Humber Gateway Offshore Wind Farm. The purpose of the investigation is to identify items that have the potential to be Unexploded Ordnance (UXO) or Archaeology prior to the main installation phase of the project. Any positively identified UXO or items of Archaeological significance can then be dealt with in a controlled manner.

E.ON have engaged a professional diving and ROV contractor (Red7Marine) who along with their UXO Contractor (BACTEC International) have significant UXO investigation experience.

Please be advised that E.ON have investigated one target that is likely to be UXO, have marked it with a buoy and are currently...
implementing an investigation and possible disposal strategy.

Immediate Action

Enhanced Safety Procedures Given that the item is likely to be UXO, it potentially is a hazardous item; however it could only be initiated if there is a significant physical interaction with it. Therefore a vessel and marine activity exclusion zone of 200m radius has been recommended by E.ON’s UXO risk consultant. At this stage, the item does not pose any direct hazard to shipping or the local environment. For the purposes of absolute safety, the suspect item is to be avoided, pending further actions by E.ON.

Target Location and Markings

The suspect target is located approximately 8.5km offshore, North-East of Kilnsea, and is located in approximately 15m (LAT) water depth. The target is located within the offshore wind farm project area and has the following coordinates:

UXO Coordinates  53°39.539’N 000°15.124’E
UXO Marker Buoy  53°39.507’N 000°15.139’E

The target has been temporarily marked with a buoy with the following characteristics: Location: 65m South of the target (Bearing 170 Degrees) Size: approx. 750mm diameter Colour: Orange

Buoy - Prior to Installation E.ON are currently sourcing a lighted buoy to replace this temporary buoy. Details will be forwarded accordingly.

Suspect Unexploded Ordnance (UXO)

The suspect targets are located approximately 8.5km offshore, North-East of Kilnsea, and is located in approximately 21m water depth. The target is located within the offshore wind farm project boundary. A 400 metre radius exclusion zone has been set around the suspect UXO no 3 & 4 locations. The target will be marked ASAP with a buoy complete with NAV aids: (An update will be issued once the buoy has been deployed) Location: 65m south of the target (Bearing 180 Degrees) Once the UXO has been retrieved or disposed of an updated NTM be distributed.

UXO Coordinates Location 3  53°39.383’N 000°16.867’E
UXO Coordinates Location 4  53°38.383’N 000°17.850’E

For further information, please contact: Nigel Proctor, Fisheries Liaison Officer, Tel: 07702730891, Email: n.proctor@precisionmarine.co.uk
Gordon Bain, Humber Gateway, E.ON. UK  Tel +447787241442  email: gordon_bain@yahoo.com

Digger Bank Wind Farm – Geophysical Survey

Mariners are advised that the M/V Vigilant and M/V Sea Surveyor shall begin geophysical survey of the Digger Bank Wind Farm Tranche C area and proposed in-zone cable corridors in the week beginning 01st of April 2013

<table>
<thead>
<tr>
<th>Company, Vessel &amp; Call Sign</th>
<th>Area Covered</th>
<th>Start Timeframe &amp; Duration</th>
<th>Area</th>
</tr>
</thead>
</table>
| Forewind                     | 1. 55°11.812’N 001°31.577’E  
2. 55°13.838’N 001°35.128’E  
3. 55°24.715’N 001°54.834’E  
4. 55°31.031’N 002°25.321’E | 01st April 2013 To July 2013 | Area |
| MV Vigilant PBNX             | 5. 55°34.255’N 002°41.976’E  
6. 55°09.987’N 002°42.199’E  
7. 55°06.135’N 001°51.893’E  
8. 55°05.905’N 001°30.558’E | | |
| MV Sea Surveyor             | | | |

For further information, please contact: Callum Duffy, Forewind Ltd, Tel: +44(0)118 9556188  email: callum.duffy@forewind.co.uk

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**Greater Gabbard Offshore Wind Farm – Unexploded Ordinance (UXO)**

Greater Gabbard Offshore Winds Limited (GGOWL) has been made aware by their Unexploded Ordinance (UXO) contractor, Ramora UK Limited, of one seabed target which is likely to be a UXO.

The potential UXO is located within 15 metres of the following coordinates: 51° 50.890’N, 001°55.334’E in 30 metres of water.

GGOWL and their contractor are currently implementing an investigation and possible disposal strategy. The aim is to remove this object as soon as possible, probably using the MSC Annika.

The possible UXO is not currently marked.

GGOWL are proposing to carry out protection of export cables by placing concrete mattresses at one remaining site along the export cable.

GGOWL has applied to the Marine Management Organisation under the Marine and Coastal Access Act 2009, Part 4, for a marine licence to carry out this work at the following location between:

001°42.176’E 52°09.350’N and 001°42.219’E 52°09.287’N

Copies of the application and associated information may be viewed online in the public register at www.marinemanagement.org.uk/publicregister.

For further information, please contact: Jonathan Keer, Brown & May Marine Limited; 01379 870181 email: jonathan@brownmay.com

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**Dudgeon Offshore Wind – Geophysical Survey**

Mariners are advised that MV Ocean Seeker will be undertaking geophysical surveys at one site, which is located approximately 33km to 40km offshore from the north Norfolk coastal town of Cromer between the Inner Cromer Knoll and Cromer Knoll

<table>
<thead>
<tr>
<th>Company, Vessel &amp; Call Sign</th>
<th>Area Covered</th>
<th>Start Timeframe &amp; Duration</th>
<th>Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guardline Geosurvey Ltd</td>
<td>11. 53° 15.738’N 01° 19.272’E</td>
<td>2nd April 2013 - 30th April 2013: For 20 Days</td>
<td></td>
</tr>
<tr>
<td>MV Ocean Seeker ZNZK5</td>
<td>12. 53° 18.300’N 01° 19.482’E</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>13. 53° 15.348’N 01° 25.848’E</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>14. 53° 12.780’N 01° 25.650’E</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

For further information, please contact: Ian Ashman, Gardline Geosurvey Limited, Tel: +44(0)1493 845600 email: ian.ashman@gardline.com
Dogger Bank Creyke Beck – Section 48, Planning Act 2008

Forewind Limited Dogger Bank Creyke Beck

Section 48, Planning Act 2008 Regulation 4, The Infrastructure Planning

Forewind has now published notice of the proposed application for a development consent order to construct and operate the offshore wind development Dogger Bank Creyke Beck, including the onshore infrastructure near Cottingham, East Riding of Yorkshire. Dogger Bank Creyke Beck is the first stage of development of the Dogger Bank Zone in the North Sea. It comprises two offshore wind farm arrays (Dogger Bank Creyke Beck A and Dogger Bank Creyke Beck B), each with a generating capacity of up to 1.2 gigawatts, and associated infrastructure. Forewind’s proposed application to the Secretary of State seeks development consent for the construction and operation of both.

The full notice can be viewed at:


For further information, please contact: Andrew Acum, Mercury, Tel: 01482 782287 andrew.acum@mercury-marketing.co.uk

Dogger Bank Wind Farm – Installation of Meteorological Masts

Mariners are advised that the jack up vessel Brave Tern shall begin installation of two meteorological masts within the Dogger Bank Round 3 wind farm zone.

Once installed, the top height of the masts shall be 113.8m above MSL. The foundation and platform for Met Mast 1 were installed in February (the structure is equipped with fully functional navigational aids). The next two phases of the installation are planned as follows:

Phase 2 – Installation of the lattice tower for Met Mast 1: planned for 20 March – 3 April.

Phase 3 – Installation of the foundation, platform and lattice tower for Met Mast 2: dates to be advised.

Please note the above schedule is subject to weather delays. Any major changes to the completion date will be followed up with further communication.

The vessel and crew will be working on the installation activities 24 hours per day.

Whilst installation of the meteorological masts is in progress, the vessel shall be stationary and unable to manoeuvre. Vessels are advised to keep a distance of at least 1nm away from the vessel.

For further information, please contact: Simon Franey, Forwind Ltd, Tel: 07818598066 email: simon.franey@forewind.co.uk
Race Bank Offshore Wind Farm – Docking Shoal Meteorological Masts

Centrica Renewable Energy Limited (“Centrica”) has taken the decision to decommission the meteorological masts (“met masts”) for the Race Bank Offshore Wind Farm (“Race Bank”) and Docking Shoal Offshore Wind Farm (“Docking Shoal”) for safety reasons as soon as is practicable. A risk assessment undertaken by Centrica has identified that the methodology used to design the mast structures (prior to installation in 2005) may make them susceptible to early fatigue failure. It is anticipated that the removal of the lattice towers will occur in March / April this year following the granting of consent from the Marine Management Organisation (“MMO”) for this operation.

As per the previous Centrica Notice to Mariners (“NTM”), dated 7th December 2012, Mariners are strongly advised against accessing the Race Bank and Docking Shoal met masts and are strongly recommended to give them a wide berth of at least 250m.

Further, Mariners are advised that Aid to Navigation (“AtoN”) reference N15113 (lighted beacon) on the Race Bank meteorological mast is extinguished and therefore additional caution should be exercised when in the vicinity of this mast.

Coordinates of Race Bank met mast:

<table>
<thead>
<tr>
<th>Latitude</th>
<th>Longitude</th>
</tr>
</thead>
<tbody>
<tr>
<td>53° 18.820’N</td>
<td>00° 44.850’E</td>
</tr>
</tbody>
</table>

Coordinates of Docking Shoal met mast:

<table>
<thead>
<tr>
<th>Latitude</th>
<th>Longitude</th>
</tr>
</thead>
<tbody>
<tr>
<td>53° 09.470’N</td>
<td>00° 38.870’E</td>
</tr>
</tbody>
</table>

For further information, please contact: Simon Prince, RSS Marine, Email: sprince@rssmarine.co.uk or aprince@dsml.co.uk

London Array Wind Farm – HV1/HV4 Subsea Rock Installation

There are a total of four 150kV power cables to be installed from a landfall in The Swale, north of Cleve Hill, Graveney out to the London array wind farm approximately 12 miles from the Kent and Essex coasts.

SRI work consists of post-lay rock installation on the HV1 and HV4 export cables at crossings with Kentish Flats wind farm export cables and a crossing with the BritNed interconnector cable. SRI operations for the London Array windfarm area will be conducted within the area defined by the coordinates below:

<table>
<thead>
<tr>
<th>Location</th>
<th>Position</th>
<th>Location</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shivering Sand anchorage Bulk Carrier 1</td>
<td>51°30.80’N 001°08.50’E</td>
<td>BritNed HVDC interconnector crossing</td>
<td>51°28.50’N 001°17.50’E</td>
</tr>
<tr>
<td>Shivering Sand anchorage Bulk Carrier 2</td>
<td>51°30.80’N 001°07.00’E</td>
<td>Kentish Flats export cables crossings</td>
<td>51°25.25’N 001°06.00’E</td>
</tr>
</tbody>
</table>

For a copy of the Kingfisher Awareness Flyer for the London Array Offshore Wind Farm, please contact the undersigned. Alternatively, click on the link below, or visit www.kingfishercharts.org

Kingfisher Awareness Flyer: London Array Offshore Wind Farm

For further information, please contact: Email: londonarraytraffic@dongenergy.dk, Tel: +44(0)7909414690 or +45 31727585
West of Duddon Sands Offshore Wind Farm – Construction Works

The West of Duddon Sands offshore windfarm is a joint venture between DONG Energy West of Duddon Sands (UK) Limited and ScottishPower Renewables (WoDS) Limited. The West of Duddon Sands project is located, at its closest point, 14km west of Walney Island, Cumbria in the Irish Sea. The windfarm project covers an area of 66km² and will achieve a total combined capacity of up to 500MW.

‘STEMAT SPIRIT’ accompanied by the support vessels ‘COASTAL VANGUARD’ and the work boat ‘ODIN’ are now preparing for the shore pull of the second Export Cable from the Landfall at Middleton Sands.

The Guard Vessel HEADWAY is on station to guard at the crossing area of the Barrow cable as well as the lay down area for the export cables ends.

The Rock Dump Vessel ‘ROCKPIPER’ is continuing with Filter Stone Laying at Turbine positions

ALL FISHERMEN SHOULD NOTE THAT FILTER STONES HAVE BEEN LAIRED AT TURBINE POSITIONS WITHIN THE WIND FARM BOUNDARY

The start of construction with the installation of the first Turbine Foundations is scheduled to start during the first week in May and notices concerning this schedule will be issued at a later date.

Please consult the Kingfisher Flyer for the CARDINAL Buoy positions at this Wind Farm as well as the Key Programme Dates.

The existing South Cardinal in position 54°00.67’N 003°31.09’W which forms part of the permanent marking of the Walney Offshore Wind Farm has been permanently discontinued.

Below are the boundary positions of the WEST of DUDDON SANDS WIND FARM SITE and all mariners, and in particular fishermen, are advised to note these positions and enter them on their Chart/ Plotters.

Boundary of Location Activities:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Anticipated Dates</th>
<th>Vessel</th>
<th>Call Sign</th>
</tr>
</thead>
<tbody>
<tr>
<td>Filter Layer Placement</td>
<td>15th February 2013 to 30 May 2013</td>
<td>Sandpiper</td>
<td>3ERG6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Rock Piper</td>
<td></td>
</tr>
<tr>
<td>Offshore Substation Installations</td>
<td>May 2013</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Export Cable Installation</td>
<td>March – October 2013</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foundation Installations</td>
<td>May – November 2013</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Array Cable Installations</td>
<td>June 2013 – March 2014</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Installation of Turbines</td>
<td>August 2013 – June 2014</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Turbine Commissioning</td>
<td>August 2013 – October 2014</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Dates are anticipated and are subject to change

In case of emergency, please contact: Dan Torben Christensen, Dong Energy, Tel: +44(0)7528921388  email: danch@dongenergy.dk
For further information, please contact: Lee Cornwell, RWE npower renewables, Mob: +44 (0) 7557 319473, Email: lee.cornwell@rwe.com

Gwynt y Môr Offshore Wind Farm – Construction Activities

The Gwynt y Môr Offshore Wind Farm Project is located between 15km to 20km off the coast of North Wales in the Liverpool Bay area of the Irish Sea. It is adjacent to RWE Innogy’s North Hoyle and Rhyl Flats offshore wind farms. The consented site covers an area of 124km2. The water depth ranges from 12m to 28m LAT with a tidal range of 8.5m.

Activities due to commence:

• The Jack up vessel, JB-114, will continue with TP installation in the windfarm area.
• Cable Enterprise and support vessels will continue laying export cable 2.
• Stemat 89 and support vessels will continue with export cable joint repair.
• Tideway Rollingstone will continue the armour layer stone placement campaign.
• Sea Jack turbine installation vessel is expected to arrive at the Port of Mostyn
• Terramare 1 will continue diving operations at the wind farm.
• Tremadoc Bay, Colwyn Bay, Kinnmel Bay, Pennyn Bay, Penhros Bay, Caernarfon Bay, Gardner, Gallion, Chinook and Scirocco will be utilised as
• Activities due to commence from the 22nd April 2013. The JB-114 will be supported by the tugs Union Fighter and Union Diamond. The JB-114 will initially be placed at a location on
• Reommencement of Export Cable Works: Export Cable works are expected to commence on the 1st April 2013. These works will last until further notice.

Reommencement of Export Cable Works: Export Cable works are expected to commence on the 1st April 2013. These works will last until further notice. There will be 4 export cables in total. 2 cables from the beach at Pensarn Leading to the Offshore Sub Station West Platform and 2 cables from Pensarn to the Sub Station East Platform. Cable installation barge ‘Cable Enterprise’ will be installing cables supported by ‘Norne’, MCS Alsat and Forth Jouster. The Cable Enterprise will deploy Anchors, Cables and Buoys. All vessels are requested to keep at least 1200m clear of the Cable Installation Barge at all times when on location. As well as Cable laying operations there will be other operations involved including a PLGR (Pre Lay Grapnel Route Survey) carried out by The Support vessels. All vessels are to give 500m clearance from these vessels at all times. All vessels will be contactable on VHF 16.

For a copy of the Kingfisher Awareness Flyer for the Gwynt y Môr Offshore Wind Farm, please contact the undersigned. Alternatively, click on the link below, or visit www.kingfishercharts.org
Walney 1, 2 & Extension Offshore Wind Farm – Construction Activity / Consultation

DONG Energy wishes to make you aware that, as a result of recent technical investigations and consultations, an additional cable route option is now being proposed for the Walney Extension Project.

The DIVER supported operations to repair a section of the Infield power cable at the WALNEY 1 WIND FARM, can be expected to resume as weather and conditions improve.

DIVERS operating from ‘HBC SUPPORTER’ are working on the Infield Cable between Wind Turbine position E03 and along to the Sub-Station ‘HBC SUPPORTER’ will be accompanied by two support vessels ‘CTRUK ADVANCE’ and ‘VANISHING POINT 2’, all three vessels will berth at Barrow during periods of unsettled weather.

All mariners should note that unless on specific business, or that there are circumstances relating to their own safety or the safety of others that make it necessary to transit the site, the advice is to keep well clear and keep outside of the Wind Farm perimeter during this work.

Any mariners who do decide to navigate the Wind Farm during this period of maintenance work do so at their own risk and they should keep well clear, at least 1,000 meters, from ‘HBC SUPPORTER’ and make contact with and communicate with the support vessels on VHF Channel 16 or 12.

There is now only one Wave Rider Buoy within the perimeter of the Wind Farm

54°01.297'N        |        003°29.402'W

This buoy carries a flashing Yellow Light Fl(5)Y.20s and is visible up to 3 miles

Marker Buoys for Wet Storage Area

The 4 Buoys marking what was the wet storage area inside of Walney 2 are still in place although there are no anchors or obstructions on the seabed.

Position of Wet Storage Buoys

54°04.380'N        |        003°37.480'W

These Buoys are equipped with solar powered quick flash lights and will be removed at some future date. Until notice has been given that these buoys have been removed all mariners, and especially fishermen, wishing to navigate within the Wind Farm for whatever reason are advised to note these positions and enter them on their charts / plotters and keep clear.

For further information, please contact: Tel: 02078 115439 or email walneyextension@dongenergy.co.uk


For a copy of the Kingfisher Awareness Flyers for the Walney Offshore Wind Farms, please contact the undersigned. Alternatively, click on the link below, or visit www.kingfishercharts.org

Kingfisher Awareness Flyer: Walney 2 Offshore Wind Farm

Kingfisher Awareness Flyer: Walney 1 Offshore Wind Farm

For further information, please contact: Tom Watson, Tel: 01253 875565, Mobile: 07903 173624
Barrow Offshore Wind Farm – Operations

Please note, there are exposed sections of cable (or Cable Buried to less than 0.2M). Please refer to KFB 14/2012 for these locations.

Repairs to the fault on the Infield or Inter-Array Power Cable on the B - ROW at the BARROW OFFSHORE WIND FARM are continuing.

DIVERS from the Dive Support Vessel ‘HBC SUPPORTER’ are working at Turbine position WTG 23 - B01 where the A 500 meter safety exclusion zone is requested around ‘Odin’ and the support vessels at all times when on site. Any vessel engaged on any kind of work at this Wind Farm can be contacted on VHF Channels 16 & 12.

In the interests of safety mariners are requested not to anchor within at least 500 meters of the wind farm perimeter and, because there is a danger of exposed power cable on the seabed close to some of the turbine structures, fishermen are requested to observe the agreed extended safety zone of 100 meters around each turbine and the need to exercise extreme caution when operating in the vicinity of any of the wind farm turbines.

For further information, please contact: Tom Watson, Tel: 01253 875565, Mob: 07903 173 624

Shell Flats Bank – Malfunction to Navigation and Aviation Lighting

The two special marker buoys are still in situ at the 80m mast on the Shell Flats Bank and will remain in position until the Aviation lights on this mast have been repaired. The buoys are deployed approx. 75m either side of the mast on a North and South orientation.

Positions of the two buoys:

<table>
<thead>
<tr>
<th>Latitude</th>
<th>Longitude</th>
<th>Buoy</th>
</tr>
</thead>
<tbody>
<tr>
<td>53°52.477’N</td>
<td>003°12.133’W</td>
<td>North Mast Special Mark</td>
</tr>
<tr>
<td>53°52.369’N</td>
<td>003°12.133’W</td>
<td>South Mast Special Mark</td>
</tr>
</tbody>
</table>

The Navigation Lights at the 80m mast have now been repaired, the aviation lights at this mast are still not working.

It has been reported that the navigation light on 50m mast are not working.

Characteristics of the Special Marker Buoys - Flashing sequence: 0.5s ON & 2s OFF. Flash colour: Yellow. The two Metrological Masts are situated at the following positions:

<table>
<thead>
<tr>
<th>Latitude</th>
<th>Longitude</th>
<th>Mast</th>
</tr>
</thead>
<tbody>
<tr>
<td>53°52.423’N</td>
<td>003°12.133’W</td>
<td>80m</td>
</tr>
<tr>
<td>53°51.600’N</td>
<td>003°17.663’W</td>
<td>50m</td>
</tr>
</tbody>
</table>

For further information, please contact: Tom Watson, Tel: 01253 875565, Mob: 07903 173 624
An anchor has been lost within the Wind Farm at position: 54°44.52'N 003°42.84'W. Several unsuccessful attempts have been made to retrieve this anchor and therefore it is likely that it will remain at this position for some time.

It has been reported that the Aviation Light on Turbine RRB05 is not working.

Turbine position: 54°45.75'N 003°41.03'W

This fault has been reported to the Northern Lighthouse Board and will be rectified as soon as weather and conditions permit proper inspection and repair. Once the light has been repaired / rectified a further notice will be issued.

A CD of the Robin Rigg layout including Inter-Array or Infield Cables as well as the Export Cable Route is now available. The disk contains fishing plotter files and is compatible with the following plotters: Litton Fish master, Sodena Turbo, Maxsea, TRAX, Transas Navi-Fish, SIS Microplot, Quodfish, TM Planner and Penta plotters.

For a copy of the Kingfisher Awareness Flyer for the Robin Rigg Offshore Wind Farm or Fishing Plotter CD, please contact the undersigned. Alternatively, click on the link below, or visit www.kingfishercharts.org

Kingfisher Awareness Flyer: Robin Rigg Offshore Wind Farm
Kingfisher Fishing Plotter CD: Robin Rigg Offshore Wind Farm

For further information, please contact: Tom Watson, Tel: 01253 875565, Mob: 07903 173 624