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. Alternatively you can receive the Bulletin via email, by contacting: kingfisher@seafish.co.uk

* Unless otherwise stated, all co-ordinates listed in this Bulletin refer to WGS84 datum
Deployment of Buoy – Shetland (Update 18-08-2011)

Aegir Wave Power have now deployed a waverider buoy around 4km off the coast of St. Ninian’s Isle, southwest Shetland, at the following coordinates: 59°58.560’N 01°26.500’W.

The buoy is yellow, 0.7m in diameter and fitted with a yellow flashing light. The buoy is moored by a slack line with underwater floats which allows the buoy to move around a 200m watch circle. Mariners are asked to keep a distance from the buoy.

The buoy will remain onsite for between 1-3 years, although it will be removed periodically for maintenance.

For further information, please contact: Contact: R. Hart; Tel: +44(0)131 5612555, Email enquiries@aegirwave.com, A. Bourhill; Tel: +44(0)1595 772000, Email info@nafc.uhi.ac.uk
<table>
<thead>
<tr>
<th>Company, Vessel &amp; Call Sign</th>
<th>Towing Cable Length &amp; Submerged Depth</th>
<th>Area Covered</th>
<th>Start Timeframe &amp; Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>RV EGS Pioneer (Offshore)</td>
<td>N/A</td>
<td>1. 55°14.737'N 001°33.171'W</td>
<td>8th August 2011 – 20th September 2011</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. 55°16.347'N 001°23.692'W</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. 55°12.163’N 001°21.311’W</td>
<td></td>
</tr>
<tr>
<td></td>
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<td>4. 55°12.486’N 001°18.903’W</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>5. 55°06.342’N 001°13.834’W</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>6. 55°03.544’N 001°27.168’W</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>7. 55°05.767’N 001°29.343’W</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>8. 55°08.627’N 001°31.100’W</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>9. 55°09.642’N 001°31.549’W</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>10. 55°14.737’N 001°33.171’W</td>
<td></td>
</tr>
<tr>
<td></td>
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<td>11. 55°16.347’N 001°23.692’W</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>12. 55°12.163’N 001°21.311’W</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>13. 55°12.486’N 001°18.903’W</td>
<td></td>
</tr>
</tbody>
</table>

For further information, please contact: Steven Morgan, National Renewable Energy Centre, Tel: +44 (0) 1670 359 555
Lincolnshire Offshore Wind Farm – Construction Activity & Survey (Update 31-08-2011)

Cable Installation
Continuation of main export cable installation from offshore substation working towards KP8.0 via Discoverer, supported by Anchor Handling Tugs Valiant, Union Diamond and MP1. Guard Vessels will be on-site within the Lincs site and along the export cable route.

Continuation of nearshore cable installation works via Nessie III, Nessie V, Gerd Knoll Senior and UR101, supported by Anchor Handling Tugs Maggie M and Norne, and Ardenfast, Fen Tiger, LC Shifter and Porth Dafarch. Guard Vessel Huntress of Grimsby will also be deployed to site this week.

Construction Activity
Foundation installation continues at LS09, LS10 and LS11. Secondary foundation works via Valhalla of Whistable, Sound Prospector, Sound Provider and Forth Joust at selected installed foundations. Mariners are advised to maintain a 500m distance from all secondary works. Implementation of Marine Mammal Mitigation Protocol (MMMP) via Choice. Installation of offshore substation topside via the heavy lift vessel Rambiz.

Deployment of new Aids to Navigation to mark the boundary of new Anchorages in the Inner Wash via the Trinity House Buoy Laying Vessel, Patricia. These anchorages have been re-designated to maintain a minimum of 500m distance between anchorage areas and the Lincs export cable once installed. The buoys will be yellow special marks, with high visibility daymarks and a yellow St Andrews Cross topmark. Positions are listed below.

Mariners are advised to note that construction works within the Lincs site are fully underway, with the first 24 foundations and transition pieces installed (see locations and coordinates below). Secondary works at some of these locations will continue this week. 500m safety zones will re-apply around any structure where secondary works are underway, since diving operations are taking place. Mariners are advised to maintain a safe working distance from the Sound Prospector vessel.

Coordinates of Operations

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.

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.)

4 of 13
Hornsea Offshore Wind Farm – Survey Activities (Update 31-08-2011)

**Buoy**
Meteorological buoys and acoustic wave and current (AWAC) profilers are located as in the table below. Lighting and navigational aspects of the meteorological buoys are to Trinity House and IALA standards; they are equipped with a St. Andrew’s cross, radar reflector and an amber navigation light set to flash 5 times at 1Hz every 20 seconds. 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. It is requested that a clearance distance of 300m is maintained around all buoys for safe passage and away from the riser lines. The most recent servicing on the buoys has been completed.

<table>
<thead>
<tr>
<th>Location</th>
<th>Suggested Name</th>
<th>Equipment</th>
<th>Latitude</th>
<th>Longitude</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Well Bank Flat</td>
<td>Met. buoy + AWAC</td>
<td>53° 58.200’N</td>
<td>1° 23.380’E</td>
</tr>
<tr>
<td>2</td>
<td>Inner Well Bank</td>
<td>Met. buoy + AWAC</td>
<td>53° 52.930’N</td>
<td>1° 59.190’E</td>
</tr>
<tr>
<td>3</td>
<td>Chiswick Field</td>
<td>Met. buoy + AWAC</td>
<td>53° 54.250’N</td>
<td>2° 25.900’E</td>
</tr>
<tr>
<td>4</td>
<td>Windermere Field</td>
<td>Met. buoy + AWAC</td>
<td>53° 54.277’N</td>
<td>2° 39.993’E</td>
</tr>
<tr>
<td>5</td>
<td>Off Ground</td>
<td>Met. buoy + AWAC</td>
<td>53° 52.539’N</td>
<td>0° 47.683’E</td>
</tr>
<tr>
<td>6</td>
<td>Ravenspurn Field</td>
<td>Met. buoy + AWAC</td>
<td>54° 09.584’N</td>
<td>0° 49.345’E</td>
</tr>
<tr>
<td>7</td>
<td>Outer Well Bank</td>
<td>DWR buoy</td>
<td>54° 16.710’N</td>
<td>1° 55.249’E</td>
</tr>
</tbody>
</table>

**Surveys**
The MV Southern Star (call sign CGDZ8), a 36 m survey vessel will be conducting a bird and marine mammal survey within the Hornsea Zone, running predetermined transect lines spaced 6 km (3.2 Nm) and 2 km (1.08 Nm) apart at a speed of 10 kts. These surveys will be undertaken monthly during daylight hours – dawn until dusk. The vessel will also be will be towing a hydrophone astern, on approximately 200 m of cable towed at ~7 m depth or less, during daylight hours only. The vessel will also undertake an acoustic survey for marine mammals – commencing between 5th – 7th September 2011.

Phase one surveys are now complete, phase two surveys will be undertaken in early September. The benthic ecology survey is to be undertaken within the cable corridor on a survey vessel which is to be confirmed. A benthic grab sampler, 2 meter beam trawl and video system will be deployed at selected sites. The grab sampler will be deployed directly to the seabed from the stern of the vessel. The 2m beam trawl will be deployed from the stern with trawling undertaken for a distance of up to 500m at selected sites.

A local commercial fishing vessel will be conducting a potting survey at three sites within the cable route corridor between 1st – 15th October 2011. The survey areas will be: west of Silver Pit; north-east of Sole Pit; and within the six nm limit off Horseshoe Point. The FV Emulator (call sign MBBN7), an 18m wooden hulled trawler, is conducting a subtidal fisheries ecology survey at 41 locations within the cable route corridor between 31st August and 30th September for 2 weeks.

A geophysical survey of Subzone 2 is currently progressing using hull mounted acoustic equipment and towed acoustic equipment, which will be towed no more than 300 m behind the MV Aquarius. The survey is expected to take 2 – 3 months and throughout survey operations, other vessels are to maintain a wide berth of at least 500m.

<table>
<thead>
<tr>
<th>Subzone 2 Boundaries:</th>
</tr>
</thead>
<tbody>
<tr>
<td>54° 01.315’N 001° 40.957’E</td>
</tr>
<tr>
<td>54° 01.675’N 001° 12.689’E</td>
</tr>
<tr>
<td>53° 49.007’N 001° 38.961’E</td>
</tr>
<tr>
<td>53° 49.069’N 001° 12.449’E</td>
</tr>
</tbody>
</table>

A geotechnical investigation of the site is currently in progress and the investigation is due to finish in October. The majority of the investigation is due to take place within Subzone 1. However, some investigation locations will be outside of Subzone 1. The proposed works includes Seabed CPTs, continuous sampling boreholes to 50m and continuous downhole CPT to 50m. Minimum depth of investigation anticipated to be in order of forty to fifty (40-50) m below the mudline level.

The MV Willendeavour which investigated the nearshore section of the cable route has demobilised as of 13th August. The offshore cable route investigation (from 20km to the project site and includes approximately 20 Seabed CPTs and 20 vibrocores to a depth of approximately 6m) is due to take place September 2011.

**Met Mast Installation**
Installation of a foundation and meteorological mast (53°53.15’N 001° 59.50’E) at the coordinates below is expected to be carried out between the months of August and October 2011. The jack-up barge will be the JB-114, with further vessels (Osprey Trader, SMIT Bronco & Union Sapphire) will assist operations.

*For further information, please contact: Chris Jenner, Tel: 07889410553, Email: Chris.Jenner@mainstreamrp.com, OR Hornsea Zone Onshore Fisheries Liaison Officer: Nick Garside, NFFO Services Ltd, Tel: 01904 635 432, Email: nick.garside@live.co.uk*

**London Array Offshore Wind Farm – Pre-Construction Works (Update 28-08-2011)**
The London Array Offshore Wind Farm will be 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 consists of 175 wind turbines, installed on...
...continued from previous page

two sandbanks; Long Sand and Kentish Knock and in the Knock Deep channel that lies between, in water depths ranging from 0 to 25 m. The project will be connected by subsea cables to a new onshore substation at Cleve Hill on the North Kent coast. From the substation, the electricity will be fed into the existing National Grid transmission network.

- During Construction, a 500m radius around each wind turbines, their foundation structures and the offshore sub-station platforms within the construction zones while construction work is ongoing;
- 50m radius around each of the wind turbines, offshore sub-station platforms and associated foundation structures installed, complete or incomplete (until commissioned as part of the London Array Offshore Wind Farm);
- During Major Maintenance – 500m radius around all major maintenance works being undertaken around the wind turbines, offshore sub-stations and foundations.

**Work Schedule**

The foundation installation Jack-up barge Sea Worker accompanied by tugs Sea Alfa and Sea Echo will continue the foundation installation. The sequence of installation will be E18, L18, B15. The sequence is governed to an extent by tidal conditions so is liable to change. Whilst construction is taking place at these positions a 500m safety zone is established, and vessels are to keep clear.

Foundation installation vessel MPI Adventure will continue foundation installations. The installation sequence is D07 and B13. Whilst construction is taking place at these positions a 500m safety zone is established, and vessels are to keep clear.

The crane vessel Svanen, supported by the tugs Viking and Fiona F on site and will install foundations E14 and K20. The sequence beyond that is to be decided. The tug Marineco Toomai will tow monopoles from Vlissingen to the construction site, and the tug Statum will tow a transport barge loaded with TPVs from Vlissingen to the construction site. Whilst construction is taking place at these positions a 500m safety zone is established, and vessels are to keep clear.

The array cable installation vessel ‘Jan Steen’ will install inter-array cables between C18 - B17, D20 - C19 and C19-C18. Whilst construction is taking place at these positions a 500m safety zone is established, and vessels are to keep clear. The Jan Steen may at times be supported by the vessel MCS Ailsa. Post installation work will continue on both the offshore substations and construction site platforms within the construction zones while construction work is ongoing; vessels are to keep clear.

**Installations**

Foundation monopole and transition piece installed at the locations as listed below:

<table>
<thead>
<tr>
<th>Area 3</th>
<th>Area 3</th>
<th>Area 3</th>
<th>Area 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>SS1</td>
<td>51° 37.864N</td>
<td>001° 26.259E</td>
<td>SS2</td>
</tr>
<tr>
<td>C18</td>
<td>51°37.369N</td>
<td>001°25.191E</td>
<td>B16</td>
</tr>
<tr>
<td>F19</td>
<td>51°38.202N</td>
<td>001°26.475E</td>
<td>K17</td>
</tr>
<tr>
<td>H19</td>
<td>51°39.635N</td>
<td>001°27.615E</td>
<td>G20</td>
</tr>
<tr>
<td>L19</td>
<td>51°41.265N</td>
<td>001°29.899E</td>
<td>E15</td>
</tr>
<tr>
<td>F20</td>
<td>51°39.405N</td>
<td>001°26.048E</td>
<td>C14</td>
</tr>
<tr>
<td>D20</td>
<td>51°38.024N</td>
<td>001°24.612E</td>
<td>D19</td>
</tr>
<tr>
<td>K19</td>
<td>51°40.858N</td>
<td>001°29.326E</td>
<td>B17</td>
</tr>
<tr>
<td>M19</td>
<td>51°41.672N</td>
<td>001°30.468E</td>
<td>C19</td>
</tr>
<tr>
<td>I19</td>
<td>51°40.042N</td>
<td>001°28.180E</td>
<td>I17</td>
</tr>
<tr>
<td>I20</td>
<td>51°40.272N</td>
<td>001°27.760E</td>
<td>L20</td>
</tr>
<tr>
<td>G16</td>
<td>51°38.537N</td>
<td>001°28.326E</td>
<td>M20</td>
</tr>
<tr>
<td>F17</td>
<td>51°38.360N</td>
<td>001°27.327E</td>
<td>I18</td>
</tr>
<tr>
<td>G15</td>
<td>51°39.450N</td>
<td>001°27.471E</td>
<td>H18</td>
</tr>
<tr>
<td>E17</td>
<td>51°37.953N</td>
<td>001°27.183E</td>
<td>H17</td>
</tr>
<tr>
<td>E16</td>
<td>51°37.723N</td>
<td>001°27.183E</td>
<td>G14</td>
</tr>
<tr>
<td>G15</td>
<td>51°38.307N</td>
<td>001°28.749E</td>
<td>H16</td>
</tr>
<tr>
<td>H17</td>
<td>51°37.139N</td>
<td>001°25.617E</td>
<td>F18</td>
</tr>
<tr>
<td>G19</td>
<td>51°39.228N</td>
<td>001°27.045E</td>
<td>F16</td>
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<tr>
<td>H15</td>
<td>51°38.714N</td>
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<td>L17</td>
</tr>
<tr>
<td>A13</td>
<td>51°35.404N</td>
<td>001°27.189E</td>
<td>H20</td>
</tr>
<tr>
<td>M18</td>
<td>51°41.442N</td>
<td>001°30.894E</td>
<td>D14</td>
</tr>
<tr>
<td>A13</td>
<td>51°35.404N</td>
<td>001°27.189E</td>
<td></td>
</tr>
</tbody>
</table>

All Foundations are installed with Lights : Fl(Y) 2.5sec 2Nm. Two wave rider buoys installed as listed below. The wave rider buoys are protected by 2 guard buoys (Lt. Fl (5) Y 20sec 2nm) approximately 50 metres to the North and South of each wave rider buoy.

- Knock Deep (North) - 51°36.960’N 01°30.310’E (Fl (5) Y 20s 2nm)
- Knock Deep (South) - 51°35.000’N 01°29.930’E (Fl (5) Y 20s 2nm)

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 for the London Array Offshore Wind Farm](http://www.kingfishercharts.org)

For further information, please contact: Anker Lauritsen, Email: londonarraytraffic@dongenergy.dk, Tel: +44(0)7909414690 or +45 31727585
**Race Bank Offshore Wind Farm – Survey (New Entry 26-08-2011)**

Fishermen are advised of the planned offshore survey within the boundary of the proposed Race Bank offshore wind farm.

<table>
<thead>
<tr>
<th>Survey Company, Vessel &amp; Call Sign</th>
<th>Towing Cable Length &amp; Submerged Depth</th>
<th>Area Covered</th>
<th>Start Timeframe &amp; Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Centrica Mariner Sea</td>
<td>53°20.092’N 000°44.820’E</td>
<td></td>
<td>29th August 2011 – 30th September 2011</td>
</tr>
<tr>
<td></td>
<td>53°18.131’N 000°44.721’E</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>53°17.555’N 000°46.558’E</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>53°15.280’N 000°47.369’E</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>53°13.226’N 000°53.760’E</td>
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<td></td>
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<tr>
<td></td>
<td>53°15.720’N 000°55.991’E</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>53°17.547’N 000°50.338’E</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>53°20.176’N 000°49.206’E</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

For further information, please contact: Kit Hawkins, Centrica Renewable Energy Ltd, Tel: +44(0)1753 494466, Mobile:+44 (0)7769 545816

**East Anglia Offshore Windfarm – Survey Activity & Buoys (Update 26-08-2011)**

**Deployment of Buoys**

Recording oceanographic equipment is moored at the following locations from 1st January 2011 to 31st June 2012:

- **Waverider buoys:**
  1. 52°44.340’N 002°23.680’E
  2. 52°45.810’N 002°58.080’E
  3. 52°18.620’N 002°27.490’E

- **AWAC on sea-bed Landers:**
  1. 52°18.620’N 002°27.490’E
  2. 52°08.550’N 002°30.240’E

At each site there will be a yellow toroidal shaped guard buoy fitted with a radar reflector and a yellow light exhibiting the sequence FY (5) 20s. The Waveriders also have a yellow light exhibiting the same sequence.

The Laboratory will be grateful if all shipping keeps at least 4 cables clear of the instruments.

For further information, please contact: Cefas, Pakefield Road, Lowestoft, NR33 0HT, Tel: +44 (0) 1502 562244

**Survey**

<table>
<thead>
<tr>
<th>Survey Company, Vessel &amp; Call Sign</th>
<th>Towing Cable Length &amp; Submerged Depth</th>
<th>Area Covered</th>
<th>Start Timeframe &amp; Duration</th>
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<tr>
<td>TBA</td>
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<td></td>
<td>12th September 2011</td>
</tr>
<tr>
<td></td>
<td>1. 51°58.608’N 001°23.026’E</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. 52°03.843’N 001°32.508’E</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. 52°09.381’N 001°51.502’E</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>4. 52°14.130’N 002°23.014’E</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>5. 52°09.119’N 002°25.703’E</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>6. 52°03.510’N 001°56.887’E</td>
<td></td>
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<tr>
<td></td>
<td>7. 52°04.653’N 001°45.243’E</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>8. 52°02.635’N 001°36.804’E</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>9. 51°58.316’N 001°32.674’E</td>
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<tr>
<td></td>
<td>10. 51°57.189’N 001°29.584’E</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>11. 51°57.513’N 001°24.179’E</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

For further information, please contact: Patrick McGovern, Email: pjm@brownmay.com, Mobile: +44 (0)77027 10176.

**Inner Dowsing Offshore Wind Farm – Maintenance (Update 26-08-2011)**

Mariners are advised that maintenance work is scheduled to take place within the Inner Dowsing Offshore Wind Farm site. The activities will be undertaken by the vessel ‘MS Wind’ from the 3rd September to the 31st December 2011.

For further information, please contact: Alexandra Bowers, RPS Energy, Tel:+44 (0) 1483 746 500, Email:bowersa@rpsgroup.com.
**Sheringham Shoal – Installation, Survey, Deployment of Buoys (Update 26-08-2011)**

**Cable Installation**

Please be advised that Jet Trenching Operations will be starting in the area designated as part of the Sheringham Shoal windfarm, Export and Infield using vessel Toisa Warrior and Survey vessel Discovery Rose. These are expected to commence from the 5th September 2011 to end of March 2012.

**Installation**

The monohull heavy lift vessel Oleg Strashnov will be working in the Sheringham Shoal Wind Farm Construction Zone. In the zone she will install Mono Piles and Transition pieces during a number of consecutive trips.

Boundaries of this zone are identified by 4 cardinal buoys in the below listed positions:

- **North Cardinal** – 53°09.913’N 001°07.686’E – (VQ)
- **South Cardinal** – 53°06.361’N 001°10.000’E – (VQ(6) + LFl 10 sec)
- **East Cardinal** – 53°07.318’N 001°12.287’E – (VQ(3) 5 sec)
- **West Cardinal** – 53°08.956’N 001°05.413’E – (VQ(9) 10 sec)

*During the present trip (17) she will install the following:*

- Mono Pile + Transition piece on location J6 – 53°06.90’N 001°11.69’E
- Mono Pile + Transition piece on location K4 – 53°07.63’N 001°11.73’E
- Mono Pile + Transition piece on location K5 – 53°07.17’N 001°12.01’E
- Mono Pile + Transition piece on location K6 – 53°06.76’N 001°12.29’E

The Oleg Strashnov will, during the installation activities, be kept stationary by means of 8 anchors radiating from the vessel’s location. Laying the anchor spread 2 anchor handling tugs will be used. The anchor locations are marked by orange buoys. The diameter of the anchor spread will be 1.0 to 2.0 nautical miles.

*For further information, please contact: HLV Oleg Strashnov, Tel +870 7650550118, Email: OS-Bridge@SHL.com.cy*

**Greater Gabbard Offshore Wind Farm – Installation Activities (Update 08-08-2011)**

The third and final export cable is now due to be installed commencing the 16th August 2011 (subject to any weather delays). The cable will be laid using the cable lay barge ASV Pioneer and will be attended by 3 support tugs. The cable barge will be using a minimum 3 point anchor mooring arrangement which will extend up to 500m from the barge.

Between 1st June 2011 and 1st October 2011 there will be a significant increase in construction vessel activity within both the Inner Gabbard and Galloper Fields as inter array cable installation is undertaken. All inter array cables are planned during this period. These site areas are considered to be active construction zones with significant sub-sea cable installation operations and vessel movements and all non-construction traffic (fishing and recreational) are requested to remain outside the consented boundaries of the site due to:

- Free Laid Exposed Cables on the seabed exist within both arrays (Inner Gabbard Array and Galloper Array) in locations between turbine locations.
- Exposed cable ends exist on all Turbine locations/Transition pieces where array cabling has been installed. These exposed ends are located between the Turbine Locations and up to 150 metres from them. Many of these cables are now live.
- Construction vessel traffic for the inter array cabling programme for both fields is considerable and involves many support vessels including the primary cable installation vessels: Polar Prince, Topaz Commander, Deep Cygnus, M.V Sia.

Please be advised of the cable crossing points below:

1. **Concerto North Cable Crossing Point** 52°11.723’N 001°40.876’E
2. **Concerto South Cable Crossing Point** 52°10.607’N 001°41.405’E
3. **Farland Cable Crossing Point** 52°05.084’N 001°46.746’E

All fishing operations are requested to observe an advisory safety zone of 500m around the cable crossing points above and fishing vessels should exercise caution when engaged in fishing operations near these locations and the cable route.

*For further information, please contact: Danbrit Ship Management Ltd, Onshore mobile Simon Prince 07920 273866, Simon Calden 07825 382896.*
Dogger Bank Offshore Wind Farm – Survey Activities (Update 21-07-2011)

<table>
<thead>
<tr>
<th>Company, Vessel &amp; Call Sign</th>
<th>Towing Cable Length &amp; Submerged Depth</th>
<th>Area Covered</th>
<th>Start Timeframe &amp; Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gardline Geosurvey Ltd</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tridens 1 and L’Espoir</td>
<td>N/A</td>
<td></td>
<td>21st July 2011 – 30th September 2011</td>
</tr>
<tr>
<td>Call sign: PIAO &amp; PFPY</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>1. 54°40.404’N 001°03.116’W</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. 55°19.153’N 001°27.811’E</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. 54°51.977’N 001°19.172’E</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. 54°51.188’N 001°38.022’E</td>
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</tr>
<tr>
<td>5. 54°38.361’N 000°48.728’E</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. 54°35.493’N 000°50.836’W</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

For further information, please contact: Simon Franey, Forewind Ltd, Email: simon.franey@forewind.co.uk, Tel: +44 (0)7795695755

Humber Gateway Offshore Wind Farm – Geotechnical Survey (Update 10-06-2011)

Located 8km off the Holderness coast of East Yorkshire, near the Humber Estuary, the Humber Gateway Offshore Wind Farm will comprise of up to 77 wind turbines of 3MW, for a total capacity up to 230MW. The works will be carried out in water depths ranging from 11m – 17m.

Prior to the start of the installation works, an extensive Geotechnical Survey will be carried out by GeoSea to provide the information needed in the design of the wind turbine foundations. The soil investigation works will be carried out by the self elevating platform "Vagent". The geotechnical surveys will be undertaken within the following boundary:

1. 53°40.107’N 000°14.809’E
2. 53°41.035’N 000°19.978’E
3. 53°38.021’N 000°19.882’E
4. 53°35.830’N 000°16.893’E
5. 53°35.280’N 000°16.197’E
6. 53°36.784’N 000°16.277’E

At 65 locations, seabed cone penetration tests to a depth of 50m below seabed level will be undertaken. At 20 locations, drilling and sampling to a depth of 50m below seabed level will be undertaken, with various ‘down the hole’ tests carried out. The anchor handling tug “Dutch Pearl” will be supporting the "Vagent" in completing these tests.

At 11 locations seabed penetration tests and vibrocoring to a depth of 5m below seabed level will be undertaken. The survey vessel “Flatholm” will undertake these tests. These tests will commence 16th June 2011 until the end of November.

For further information, please contact: Regis Guillaume, Tel: +32 470 89 13 70. The vessels involved can be reached on Immingham or Grimsby port channels VHF 19, 68 or 74, or safety channel 16 when working.

Cable Lay

From the 1st June 2011 the vessel “Team Oman” (Call Sign: J8B2641) will be carrying out cable lay operations on previously cleared routes between the Windfarm foundations.

For further information, please contact: Phil Cowlishaw, VSMC Ltd, Tel: +44 (0) 7917557870, Email: p.cowlishaw@vsmc.nl
Ormonde Offshore Wind Farm – Construction Activities (Update 30-08-2011)

All mariners should note that this is a construction site and unless you have specific business or circumstances relating to your safety it is necessary to transit the site you are advised to keep well clear and keep outside of the buoyed area until the Wind Farm is fully constructed and commissioned and you have been notified.

Construction

All 30 Turbines have now been installed. Small vessels are continuing with a variety of tasks inside the Wind Farm including the transfer of technicians to work on energizing the Turbines, the installation of the cable into the J-Tubes and cable burial. There will be a constant movement of traffic between the Wind Farm and Barrow / Belfast from now until it is fully commissioned.

Each erected Turbine, as well as the Sub-Station, is fitted with a solar powered temporary light FY 2.5s (visibility approx. 2ml.) and these will remain in position until the Wind Farm is fully commissioned.

Export Cable Installation

Guard Vessel ‘Glen Ravel’ is guarding the section of exposed cables where the Ormonde Export Cable crosses the Walney Export Cable in the Heysham Lake area as well as any exposed stretch of cable that has been surface laid and not yet buried from the landfall position out to KP 5.0. ‘Glen Ravel’ can be contacted on VHF Channels 16 and 12 and will also monitor Heysham Traffic on VHF Channel 14.

Inter Array Cables

It should be noted that there will be Exposed Cable on the seabed between the Turbine positions within the Wind Farm perimeter until you have been informed that all the cables have been safely connected and buried.

All vessels working at this Wind Farm site can be contacted on VHF Channels 16 & 12 for information relating to vessel movements only.

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

Kingfisher Awareness Flyer: Ormonde Offshore Wind Farm

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

Walney 1 & 2 Offshore Wind Farms – Construction Activity (Update 26-08-2011)

Walney Extension - consultation

In advance of the proposed Walney Extension offshore wind farm, DONG Energy will commence consultation for the project in September 2011 with the identified commercial fisheries potentially impacted by the project. The first meeting will take place at 18:00 on 8th September at the Abbey House Hotel in Barrow-in-Furness with the second meeting taking place at 20:00 on 12th September at the North Euston Hotel in Fleetwood. Please attend the introductory meeting at the venue most convenient for you.

Walney 1

Energising and commissioning at Walney 1 is now complete and all 51 Turbines are producing energy to the National Grid. Two Dive Support Vessels ‘HBC Performer’ and ‘HBC Supporter’ are on site and carrying out Diving and other operations at installed positions as required and when weather permits.

Walney 2

All mariners should note that Walney 2 is now a construction site and unless you have specific business or circumstances relating to your safety it is necessary to transit the site you are advised to keep well clear and keep outside of the buoyed area until the Wind Farm is fully constructed and commissioned and you have been notified.

Site Boundary for Walney 2:

1. 54° 04.92’ N 3° 32.15’ W
2. 54° 02.23’ N 3° 34.12’ W
3. 54° 03.67’ N 3° 39.71’ W
4. 54° 06.23’ N 3° 39.74’ W
5. 54° 07.89’ N 3° 37.85’ W

Construction

The Sub-Station and all Monopiles and Transition Pieces have been installed and fitted. Tower sections, Nacelles and Blades (WTGs) for the remaining WTGs are being fitted by the self propelled DP Jack-up vessel Seajacks Kraken.

Exposed Cable

The DP Cable burial vessel ‘Edda Fjord’ is scheduled to sail on this afternoons tide from Barrow to start cable burial and remedial work on several short sections of the Walney 1 and Walney 2 Export Cables. This will involve the vessel ‘Edda Fjord’ using a jetting/trenching system to bury and also adjust the cable burial depth.

Continued over page...
As ‘Edda Fjord’ will be towing trenching gear, and at any particular time divers could be deployed, all mariners, particularly fishermen, are advised to take note of the positions and keep a wide berth of at least 500 yards/meters clear of ‘Edda Fjord’ at all times.

Work will start at Position No. 1 on the Walney 1 Export Cable and these operations will continue throughout the month at the following three positions:

1) Walney 1 Export Cable: 53°57.40’N 003°17.00’W to 54°00.30’N 003°16.50’W
2) Walney 1 Export Cable: 54°01.20’N 003°22.20’W to 54°01.50’N 003°22.20’W
3) Walney 2 Export Cable: 53°58.30’N 003°18.60’W to 54°01.10’N 003°24.50’W

The two Guard boats ‘Isadale’ and Headway’ will remain on station until the cables are buried.

**Export Cable Burial**

‘Swiber Else-Marie’ will continue with trenching operations on the export cable from the Sub-Station end as soon as weather and conditions are favourable.

If any fishermen have any gear down on or close to the export cable route as indicated on the flyer you are advised to move it now – please contact me if you are in any doubt.

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](http://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

**Robin Rigg Offshore Wind Farm – Plotter Files & Operations (Update 24-08-2011)**

In the interests of safety, mariners are requested not to anchor within at least 500 meters of the wind farm perimeter 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 advisory safety zone of at least 50 meters around each turbine and the need to exercise extreme caution when operating in the vicinity of any of the wind farm turbines. All mariners should be aware that there is mandatory anchor exclusion zone that extends for 200 meters either side of the laid export power cable and this includes anchors that are attached to static fishing gear.

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

Once the disk is ready it will be distributed to all the fishermen for whom I have contact addresses. If anybody else feels that they would like a copy or if they know of anybody who would require a copy please contact me. The data will also be available for download from the Kingfisher Website with a link provided within this notice.

For a copy of the Kingfisher Awareness Flyer for the Robin Rigg Offshore Wind Farm, please contact the undersigned. Alternatively, click on the link below, or visit [www.kingfishercharts.org](http://www.kingfishercharts.org)

**Kingfisher Awareness Flyer: Robin Rigg Offshore Wind Farm**

For further information, please contact: Tom Watson, Tel: 01253 875565, Mobile: 07903 173624

**Barrow Offshore Wind Farm – Operations (Update 23-08-2011)**

All of the Turbines Barrow Offshore Wind Farm are operational and switched to automatic. The only vessels engaged on any work inside the Wind Farm at this time are small service vessels operating as and when required, depending on weather. Any vessel engaged on any kind of work at this Wind Farm can be contacted on VHF Channels 16 & 12 for information relating to vessel movements only.

If any fishermen have pots set, or are considering setting any pots, within the Wind Farm Perimeter they are advised to make

**Continued over page...**
sure that their gear is properly marked and weighted and is clear of any of the Turbines. They are advised to lay their gear up and down the lanes rather than across the Inter-Array or Infield Cables and are advised to use weights rather than anchors.

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

Gwynt y Môr Offshore Wind Farm – Construction Activities (Update 19-08-2011)

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.

The Gwynt y Môr Offshore Wind Farm Project comprises an array of W TGs, supported on foundations, and connected to offshore substations platforms by subsea array cables. The offshore substation platforms are connected via a 20km offshore export cable route to landfall and a 12km onshore export cable route to an onshore substation at St Asaph in North Wales where the Project will be connected to the National Grid at 400kV.

The site will be made up of 160 WTGs, each with a rated capacity of 3.6MW and a rotor diameter of 107m. The turbine hub height will be 84.4m LAT and the tip height 137.9m LAT. The first stage of WTG foundations will be steel monopiles up to 6m diameter. The first stage WTG foundations will cover 92 locations with a maximum water depth of 21m LAT. The second stage of WTG foundations will cover 68 locations with a maximum water depth of 28m LAT. The concept for the second stage WTG foundations has not yet been fixed, however, the base case assumes steel monopiles. Transition pieces (TPs) will be used to connect the WTG tower to the foundation by means of a grouted joint or a flanged connection.

Please be advised that the demarcation of the Gwynt y Mor Offshore Wind Farm has been completed. There are 9 navigation buoys installed by the Trinity House Vessel “Galatea”. All coordinates are below. At the same time, Galatea removed the “North Hoyle” North Cardinal Buoy from position 53°26.70’N 003°30.60’W.

1) GYM S  Red Can  Fl R 2.5s  53°24.900’N 003°37.080W
2) GYM SW  Special Mark Fl Y 2.5s  53°25.870’N 003°39.600W
3) GYM W  West Cardinal VQ(9) 10s  53°26.832’N 003°42.129W
4) GYM NW  West Cardinal Q(9) 15s  53°28.303’N 003°40.772W
5) GYM N NW  North Cardinal Q  53°29.670’N 003°36.857W
6) GYM N  North Cardinal VQ  53°29.735’N 003°31.710W
7) GYM NE  Special Mark Fl Y 2.5s  53°28.390’N 003°29.340W
8) GYM E  East Cardinal VQ(3) 5s  53°27.130’N 003°27.078W
9) GYM SE  Special Mark Fl Y 2.5s  53°26.015’N 003°32.080W

For further information, please contact: Lee Cornwell, RWE npower renewables, Mob: +44 (0) 7557 319473, Email: lee.cornwell@rwe.com

Burbo Bank Offshore Wind Farm – Maintenance / Survey Activity (Update 15-08-2011)

All of the Turbines at the Burbo Bank Wind Farm are operational and switched over to automatic. Small service vessels will be engaged on routine maintenance within the Wind Farm as and when required.

If anybody requires a copy of the Kingfisher ‘Flyer’ which shows the Wind Farm position, Turbine locations, Export and Infield or Inter-Array cable routes and Cardinal Buoy positions please contact me.

A minimum 50 meter Advisory Safety Exclusion Zone is requested around each Turbine at all times, but all mariners are requested to keep well clear of the Wind Farm Site during any period when they can see that maintenance work is being carried out.

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 advisory safety zone of 50 meters around each turbine and the need to exercise extreme caution when operating in the vicinity of any of the wind farm turbines.

If any fishermen are considering setting any pots within the Wind Farm Perimeter they are advised to make sure that their gear is properly marked and weighted and is clear of any of the Turbines. They are advised to lay their gear up and down the lanes rather than across the Inter-Array or Infield Cables and are advised to use weights rather than anchors.

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

Atlantic Array Offshore Wind Farm – Debris Recovery (New Entry 15-08-2011)

Please be advised that GEO will be conducting Debris Recovery Operations at two locations within the area of the proposed site of the Atlantic Array Wind Farm, in the outer Bristol Channel. The recovery operations are anticipated to start around the 17th August 2011, and last for 2 to 3 days.

1. 51° 14.845’ N 4° 29.196’ W
2. 51° 20.879’ N 4° 42.531’ W

GEO will use the Survey Vessel, Highland Spirit, to conduct the work. Highland Spirit is a DP2 vessel and will maintain station with no need to deploy moorings.

For further information, please contact: Carsten Lejbølle, Tel: +45 4520 4107, or Carsten Bonde, Tel: +45 4520 4135, or David Gallacher at Calegeo Ltd, Tel: +44 (0)1508 448190.

West of Duddon Sands Offshore Wind Farm – Survey Activity (Update 12-08-2011)

The small survey vessel ‘Titan Explorer’ is expected back on-site as soon as weather and conditions improve to complete the near shore and shallow components (<5m water depth) of the Geophysical Survey covering the West of Duddon Sands Wind Farm – Export Cable Route.

For further information, please contact: Tom Watson, Tel: 01253 875565, Mobile: 07903 173624

Irish Sea Offshore Wind Farm – Deployment of Buoys (Update 02-08-2011)

Metoceanequipment will be deployed / removed at the following locations in the Irish Sea Zone. All equipment is marked with surface marker buoys with compliant flashing lights. Two wave rider buoys are currently deployed at locations 1 and 12 (please see table below). The buoys each have a guard buoy moored in close proximity. Both wave buoys and guard buoys will exhibit FI Y (50) 20s lights with a nominal range of 3 nautical miles. The two wave rider buoys will remain at locations 1 & 12 until October 2011.

Acoustic Doppler Profilers (ADP’s) will be deployed at locations 8 and 13 (please see table below). Both ADPs will have marker buoys exhibiting FI Y (50) 20s lights with a nominal range of 3 nautical miles. In the event that either of these locations are impeded for unforeseen circumstances locations 7 and/or 9 will be used (please see table below).

1. 53°39.563’N 004°52.974’W  8. 53°38.758’N 004°11.390’W
2. 53°46.034’N 004°49.911’W  9. 53°44.796’N 004°13.527’W
3. 53°49.788’N 004°39.234’W 10. 53°56.054’N 004°16.490’W
4. 53°45.092’N 004°27.230’W 11. 53°55.491’N 004°09.300’W
5. 53°38.829’N 004°27.361’W 12. 53°49.709’N 004°08.061’W
6. 53°41.705’N 004°20.744’W 13. 53°53.186’N 004°04.780’W
7. 53°36.791’N 004°03.158’W 14. 54°01.387’N 004°05.157’W

For further information, please contact: Simon Calden: 07825 382896 or Simon Prince: 07920 273866