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
Scotrenewables Tidal Power Ltd — Deployment of Buoys (New Entry 20-01-2012)

Deployment of a ADCPs at 2 separate sites. The MV Orcadia will deploy the ADCPs. The ADCPs will be recovered 28 days later (weather dependent).

1. ADCP 59°13.235’N 002°42.653’W
2. ADCP 59°12.990’N 002°43.054’W

For further information, please contact: Gina Penwarden, Scotrenewables Tidal Power Ltd, Tel: +44(0)1856 851641 email: Gina@scotrenewables.com

Brough Head Wave Farm Site— Survey Activities (New Entry 20-12-2011)

Mariners are advised that hydrographic surveys are currently taking place at the Brough Head Wave Farm Site. Due to the current weather conditions survey operations will intermittently be taking place during the next two months.

<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>Centrica Energy, Remote Sensor, Call Sign: MQAM3</td>
<td>59° 06.515 N 003° 10.167 W</td>
<td>59° 09.729 N 003° 20.474 W</td>
<td>TBA</td>
</tr>
<tr>
<td>Marine Sensor, Call Sign: MLLR2</td>
<td>59° 08.197 N 003° 22.961 W</td>
<td>59° 07.708 N 003° 23.291 W</td>
<td></td>
</tr>
<tr>
<td></td>
<td>59° 06.604 N 003° 24.556 W</td>
<td>58° 58.953 N 003° 25.438 W</td>
<td></td>
</tr>
<tr>
<td></td>
<td>56° 58.939 N 003° 21.667 W</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

For further information, please contact: Andrew Stenson, RPS Energy, Tel: 01483 756 500. Email: stensona@rpsgroup.com
Tees Offshore Wind Farm — Activities (New 15-02-2012)
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. Construction has commenced and is planned be completed by November 2012.

Installation
The Jack-up vessel ‘Sea Jack’ is currently installing foundation monopoles. Other vessels including the ‘Lesley Jay’ & ‘Ailsa’ - Dive Support Vessels, ‘Sea Golf’ & ‘Sea Beaver’ – Tugs and the ‘Tarka 3’ - Guard Vessel, will be on site.

During the construction phase of the project, PD Teesport will implement a Safety Zone marked by four Cardinal Buoys around the construction zone. The cardinal buoys will mark the corners of an area designated by the Harbour Authority as a “Safety Zone” between the 1st February 2012 and November 2012.

For further information, please contact: Simon Prince / Richard Hart, RSS Marine, Tel: 01723 893930, Mob:07920 273866, Email: sprince@rssmarine.co.uk

Survey

<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>MCS Ailsa</td>
<td>54° 40.08 'N 001° 06.67 'W&lt;br&gt;54° 37.86 'N 001° 05.35 'W&lt;br&gt;54° 39.12 N 001° 07.99 'W</td>
<td>26th January 2012 – 26th February 2012</td>
<td></td>
</tr>
</tbody>
</table>

For further information, please contact: Mark Reeves, Van Oord Offshore Wind Projects bv, Tel: +44(0)1429 277659 email: RVS@vanoord.com

Narec Offshore Wind Farm Test Site — Deployment of Buoys (New 10-01-2012)
Partrac has deployed the following items in Narec’s wind farm test site area (Blyth):

3. A1 AWAC 55°08.948’N 001°28.562’W
4. A2 AWAC 55°08.713’N 001°24.679’W
5. A3 AWAC 55°11.220’N 001°23.608’W
6. A4 AWAC 55°08.588’N 001°17.220’W
7. W1 Waverider 55°08.890’N 001°17.596’W
8. W2 Waverider 55°14.330’N 001°05.535’W

Each AWAC has a ground weight adjacent to it, and the locations are as follows:

1. A1 AWAC ground weight 55°08.983’N 001°28.587’W
2. A2 AWAC ground weight 55°08.679’N 001°24.625’W
3. A3 AWAC ground weight 55°11.168’N 001°23.528’W
4. A4 AWAC ground weight 55°08.559’N 001°17.169’W

Four subsea frames are currently in place. Each frame is 1.8 m x 1.7 m [w x h], hexagonally shaped and moored with sufficient ballast to prevent any movement under wave or tidal forcing. The instrument is housed vertically within the frame, approximately 0.5 m above the seabed. There are no surface markers at these locations.

Each Waverider buoy is 0.9 m in diameter and bright yellow in colour. They transmit a light sequence as FI Y (5) 20s from a 2 m whip antenna and are moored using a single point compliant mooring with a scope of up to 200 m. All items will remain in place until the end of March 2012.

For further information, please contact: Judy McKay, Partrac Ltd, Tel: +44(0)141 552 3903 , email: jmckay@partrac.com
### Firth of Forth Offshore Wind Round 3 – Survey Activities (Update 13-12-2011)

<table>
<thead>
<tr>
<th>Company</th>
<th>Towing Cable</th>
<th>Area Covered</th>
<th>Start Timeframe &amp; Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Partrac Ltd</td>
<td>Vessel: Princess Royal</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Call Sign:</td>
<td>1. 56°31.69’N 002°34.16’W</td>
<td>15th December 2011 – 19th May 2012</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. 56°58.33’N 002°21.31’W</td>
<td></td>
</tr>
</tbody>
</table>

For further information, please contact: Peter Wilson, Partrac Ltd, Tel:+44(0)141 552 3903  email:pwilson@partrac.com
Hornsea Offshore Wind Farm – Survey Activities (Update 15-02-2012)

**Boats**

Meteorological buoys are located at locations 1, 2, 3, and 6. A directional wave rider (DWR) buoy is located at location 7a. All locations are detailed in Table 1. 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. The DWR buoy is moored to the seabed through a series of rubber compliant sections at the sea surface and a stainless steel 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.

A scheduled maintenance visit is planned on 14th to 19th February on the vessel THV Alert (weather dependant), to the following buoys: Well Bank Flat (Location 1), Inner Well Bank Rough (Location 2), Schooner Field (Location 7). The buoys at Chiswick Field (L3) and Ravenspurn Field (Location 6) are scheduled to be removed and decommissioned during this period.

<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° 23.580’E</td>
</tr>
<tr>
<td>2</td>
<td>Inner Well Bank Rough</td>
<td>Met. buoy</td>
<td>53° 52.950’N</td>
<td>1° 59.190°E</td>
</tr>
<tr>
<td>3</td>
<td>Chiswick Field</td>
<td>Met. buoy</td>
<td>53° 54.250’N</td>
<td>2° 25.900°E</td>
</tr>
<tr>
<td>6</td>
<td>Ravenspurn Field</td>
<td>Met. buoy</td>
<td>54° 09.580’N</td>
<td>0° 49.350°E</td>
</tr>
<tr>
<td>7a</td>
<td>Schooner Field</td>
<td>DWR buoy</td>
<td>53° 53.367’N</td>
<td>1° 59.100°E</td>
</tr>
</tbody>
</table>

**Surveys**

The MV Southern Star (call sign C6DZ9), 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 be towing a hydrophone astern, on approximately 200 m of cable towed at ~7 m depth or less, during daylight hours only.

A meteorological mast is located at the coordinates below. Lighting and navigational aspects of the meteorological mast are to Trinity House and IALA standards. The mast is marked by 4 cardinal buoys located 1km north, south, east, and west from the coordinates. A separate Notice to Mariners and Aviators was issued on 20th January with details of the Met Mast installation.

**PLEASE NOTE:** It has been brought to our attention that the primary and emergency fog horns on the Hornsea Met Mast are not functioning. Be extra vigilant when navigating in adverse foggy conditions in the met mast area, the location of the mast is given below:

Met Mast Location: 53°53.149’N 001°59.497’E

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

Kingfisher Awareness Flyer: Hornsea Offshore Wind Farm

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

Lincs Offshore Wind Farm – Construction Activity & Survey (Update 13-02-2012)

**Cable Installation**

Mariners are advised to note that construction works within the Lincs Zone are fully underway, with 48 of 75 foundations and transition pieces installed and a further three locations with monopiles only installed (no Transition Piece). Locations and coordinates are provided below.

**Construction Activity**

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. This includes the offshore substation. Mariners are advised to maintain a safe working distance from the Sound Prospector vessel. In the absence of any installation activity, 50m Safety Zones will exist around completed foundation structures. Temporary navigation lights (FI Y 2.5s with 2nm range) are in place on all installed foundations.

Foundation installation at LS67, LS66 and LS21 will take place this week. 500m Safety Zones will exist around these foundation structures during installation, reverting to a 50m Safety Zone once the initial works are completed. It is intended to just install monopiles at these locations, with Transition Pieces to be installed at a later date.

Continued over page...
Mariners are advised to note that drilling works via the JB-114 have been completed at LS07. When not undertaking drilling, the JB-114 will hold position via a 5-point anchor spread in a pre-selected location within the wind farm – see attached drawing. Mariners are advised to maintain a 500m safe distance from the JB-114 and its anchors at all times.

Special mark and cardinal buoys remain in place along the northern, eastern and southern edge of the site to define the boundary of the Lincs OWF site.

50m Safety Zones

500m Safety Zones
Monopiles only installed (no Transition Pieces) LS07, LS36, LS37.

Coordinates of Operations
The position and type of these buoys is shown below:
1. East Cardinal (VQ (3) 5s) - 53°07.540’N 00°29.790’E
2. East Cardinal (VQ (3) 5s) - 53°09.070’N 00°31.490’E
3. Special Mark (Fl Y 2.5s) - 53°10.970’N 00°31.500’E
4. East Cardinal (VQ (3) 5s) - 53°12.440’N 00°31.460’E
5. Special Mark (Fl Y 2.5s) - 53°13.800’N 00°30.940’E
7. West Cardinal (VQ (9) 10s) - 53°14.670’N 00°27.020’E
8. West Cardinal (VQ (9) 10s) - 53°18.820’N 00°28.050’E

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.

London Array Offshore Wind Farm – Construction Works (Update 12-02-2012)
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 consist of 175 wind turbines, installed on 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.

- A 500m radius around each wind farm structure within the construction zones while construction work is ongoing;
- A 50m radius around each wind farm structure, complete or incomplete (until commissioned as part of the Wind Farm);
- A 500m radius around all major maintenance works of wind farm structures.

Work Schedule
Foundation installation vessel MPI Adventure will complete installation of foundations M 16 and D12 then return to Harwich to load a further three foundations. Whilst construction is taking place at these positions a 500m safety zone is established, and vessels are to keep clear. The Wind Turbine installation barge Sea Worker and assist tugs Sea Alfa and Sea Echo will install C17, D15 and C15 during week 5 through to 6, depending on weather. The WTG installation sequence to be: C17, D15, C15, D14 and C14. Export cable installation vessel Stemat Spirit will transit to the Swale to commence second cable installation.

The cable installation is expected to start around January 30th. Vessels assisting the Stemat Spirit will be the tug Coastal Vanguard and the multicat Yvonne W. Other vessels involved in the Swale cable pull in operations be the multicat Wiltango, and the barges Wicarre 300, & Wicarre 342. To guide non project vessels past the anchor pattern of the Stemat Spirit, there will be a total of four RIB’s, and the 9m Cheetah catamaran Wetwheels.

All vessels involved with this operation will be contactable on VHF channel 16. The Array cable installation vessel Stemat 82 and Assist tugs Lydia D and Claudia B are expected to commence installing array cables during week 5. The two cable crossings between the London Array export cable and the Kentish Flats export cable and the Britnet cable, are guarded by the guard vessel “Our Pride”. The vessel Coastal Worker assisted by Sara Maatje VI and the Ocean Dragon assisted by Nova K will be carrying on cable burial and diving operation close to the offshore Substation 1, & D19 respectively.

Continued over page...
During these operations a 500m safety zone is established, and vessels are to keep clear. Siemens to perform mechanical/electrical completion of the turbines installed. The vessel 'Neptune' will be undertaking Marine Mammal Observation duties, prior to and during piling operations. Construction site guard vessel duties will be covered by the Mary Ann 1. Crew boats Marian Array, Conwy Bay, Svend T, Towyn Bay, Smeaton Array, MPI Rucio, C Wind Alliance, MCS Maestro, Transportor, Distributor, Voyager, Bayard 1, Cathrin, Gardian 7 and Windcat 4 will take offshore technicians to the installed foundations and construction vessels, and perform personnel transfer duties. Meriel D and Nab Cat 2 to perform survey work on site.

The two Cable crossings between the London Array export cable and the Kentish Flats export cable and the Britnet cable, where the cable has been surface laid, will have rock berms installed.

Export Cable
Please be advised that the second Export Cable pull in operations within the inter-tidal area of the Swale Channel, off the onshore Cleve Hill substation. Mobilisation of vessels to the Cleve Hill Substation site in the Swale Channel will commence 20th January 2012, with the arrival of the Stemat Spirit. Awaiting her arrival the assisting spread will be parked (waiting) on the intertidal zone from this weekend. The operations will be continued for a duration of approximately 10 weeks.

Installations
91 Foundation monopiles and transition pieces and two substations have been installed (Please view the Kingfisher Flyer for installation coordinates).

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) approx 50m to the North and South of each wave rider buoy.

Knock Deep (North) - 51º36.960'N 01º30.310'E (Fl (5) Y 20s 2nm) | Knock Deep (South) - 51º35.000'N 01º29.930'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: London Array Offshore Wind Farm

For further information, please contact: Anker Lauritsen, Email: londonarraytraffic@dongenergy.dk, Tel: +44(0)7909414690 or +45 31727585

Humber Gateway Offshore Wind Farm – Geotechnical Survey (Update 10-02-2012)
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.

Existing offshore site investigation works to acquire geotechnical information for the design of the wind turbine foundations are in the process of being carried out by GeoSea on their self-elevating platform 'Vagant' which is supported by an anchor handling tug 'Dutch Pearl'. Details of these work-scopes were detailed in previous Kingfisher Bulletins (Issues from 16/2011 to date).

Additional geotechnical survey works will be carried out by Canyon Offshore to acquire supplementary geotechnical information. The works will be carried out by the DP2 vessel Stril Explorer using the seabed drilling and sampling system ROVDrill Mk.2.

<table>
<thead>
<tr>
<th>Company, Vessel &amp; Call Sign</th>
<th>Coordinates</th>
<th>Start Timeframe &amp; Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>E.On MV Lia MERDI</td>
<td>1. 53º40.107’N 000º14.809’E</td>
<td>4. 53º36.830’N 000º16.893’E</td>
</tr>
<tr>
<td></td>
<td>2. 53º41.035’N 000º19.978’E</td>
<td>5. 53º35.280’N 000º16.197’E</td>
</tr>
<tr>
<td></td>
<td>3. 53º38.021’N 000º19.882’E</td>
<td>6. 53º36.784’N 000º16.277’E</td>
</tr>
</tbody>
</table>

The base-case field works will comprise 3 No. sampling boreholes to 40m below seabed.

In addition to the base case work scope there may be a requirement to carry out additional cone penetration tests and sampling boreholes to depths up to 40m below seabed level.

For further information, please contact: Michael Cowie, Canyon Offshore Tel: +44 1224 351978.
Westermost Rough Offshore Wind Farm – Deployments (Update 07-02-2012)

Please be advised of the proposed works in the Westermost Rough Offshore Wind farm zone to deploy 2 Triaxys Wave Buoys and 4 Guard Buoys. Works are likely to take place towards the end of January into February 2012.

A Geotechnical investigation for planned wind turbine and substation location is to take place. Further a cable route survey for array cables interconnecting the turbines and along the export cable are to be performed. Mariners are advised that the Excalibur with its support tug MTS Valiant continue to operate on the Westermost Rough offshore wind farm site. These works, which commenced on the 16th November 2011 are expected to take 120 days to complete (weather dependent).

MTS Valiant is being used to both move Excalibur and as a material and crew transfer vessel entering in and out of Grimsby. Operations take place 24 hours per day. Coastal Enterprise will arrive on site around 28th January 2012 and will operate from Grimsby. Operations on this vessel will be for 12 hours per day only, although the start and end times of work will vary with the tides. Fugro Commander will arrive on site around the 10th February and will operate from Great Yarmouth. Operations on this vessel will take 24 hours per day.

The buoys will be deployed in 2/3 days visits between the 20th January 2012 and 29th February 2012.

1. Wave buoy WMR1 53°50.261’N 000°09.656’E
2. WMR1 marker buoy 1 53°50.261’N 000°09.577’E
3. WMR1 marker buoy 2 53°50.261’N 000°09.735’E
4. Wave buoy WMR2 53°48.292’N 000°07.364’E
5. WMR2 marker buoy 1 53°48.292’N 000°07.279’E
6. WMR2 marker buoy 2 53°48.292’N 000°07.445’E

For further information, please contact: Matt Linham, EMU Limited, Tel: 02392 205510, Email: matthew.linham@emulimited.com

Greater Gabbard Offshore Wind Farm – Installation Activities (Update 06-01-2012)

Export Cable

The installation of the third and final export cable is due to commence shortly (weather depending). The cable will be laid using the cable lay barge ASV Pioneer and will be attended by the support tugs Thorax, EMS, Zwerver 3. The cable lay barge will be using a minimum 3 point anchor mooring arrangement which will extend up to 500m from the barge. The barge will commence laying operations at the first available weather opportunity from the beach at Leiston.

Site Update (Inner Gabbard Field and Galloper Field)

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. The vessel, Deep Cygnus will be joining the project and will be trenching in inter-array cables.
- 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.
- The Sia, Topaz Commander & Deep Cygnus will be engaged in trenching inter-array cables within the Gabbard and Galloper fields. The OSV Relume will be working close to turbines in both fields performing diving operations.
- Construction vessel traffic for the array cabling programme and turbine installation for both fields is considerable and involves many support vessels including the primary vessels: Polar Prince, Topaz Commander, Deep Cygnus, Sia, OSV Relume and Sea Jacks Leviathan.

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

A UXO (Unexploded Ordnance) has been positively identified in the position 51°50.856’N 001°55.357’E – please exercise caution in this area. Please also be advised there is a 500m safety zone in place around the Galloper Sub Station.

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.
**Sheringham Shoal – Installation, Survey, Deployment of Buoys (Update 20-12-2011)**

During the night between 19 and 20 December SEA JACK lost one midline Buoy. The buoy is round and yellow approximately 2 meters wide and 1.5 meter high. The buoy should still be floating, and no wires are attached to the buoy.

SEA JACK was jacked up at location J2 in the Sheringham Shoals Windfarm (53°08.648’N 001°10.555’E)

**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 8th September 2011 to end of March 2012.

**Installation**

The Jack up Installation Barge (J.I.B.) SEA JACK will be working in the Sheringham Shoal Wind Farm Construction Zone. In the zone she will install the two Tower modules, followed by Nacelle and three separate rotor blades.

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) + LF1 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)

The SEA JACK will be positioned using four anchors, placed by Anchor Handling tugs. The anchors will be marked by yellow buoys. The installation will then take place using the vessels crane, when the vessel is fully jacked out of the water.

The operation will start from 1st September 2001 and it will last until mid-January 2012. In this period the vessel will be in transit between Great Yarmouth and the construction zone. During these passages the vessel will be towed and the tow will exceed 200m.

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

---

**Lynn Offshore Wind Farm – Maintenance Operations (New 20-01-2012)**

Mariners are advised that the wind turbine maintenance works at the Lynn Wind Farm site will be continuing until 31 August 2012. The activities will be undertaken by the vessel ‘MV Nico’

For further information, please contact: Simon Prince, Tel: 07920 273866, email:sprince@dsml.co.uk

**Inner Dowsing Offshore Wind Farm – Maintenance (Update 08-02-2012)**

Mariners are advised that maintenance work is continuing within the Inner Dowsing Offshore Wind Farm site. This Notice to Mariners details the location of the new Exclusion Zones, and also details which of the Exclusion Zones previously notified in relation to these works have been removed and where works have been completed. This notification replaces the equivalent maintenance notification issued in December 2011 for the period from 17th December 2011.

Activity: Wind Turbine Maintenance Works: Planned start date: 18 February 2012 Approx. end date: 30 April 2012
Vessel Name: MS Wind

For further information, please contact: Alexandra Bowers, RPS Energy, Tel:+44 (0) 1483 746 500, Email:bowersa@rpsgroup.com.

**Dogger Bank Creyke Beck Wind Farm— Consultation / Survey (New 21-11-2011)**

**Consultation**

Forewind would like to invite those with an interest in the Dogger Bank Creyke Beck offshore wind farm development to attend community consultation events and provide their feedback on the proposals and site selection process to date. Members of the Forewind team will be available at the events to discuss the proposals.

The first round of public exhibitions on Dogger Bank Creyke Beck has been completed. For further information and to view consultation documents please visit www.forewind.co.uk or visit your local library. Comments must be received by Forewind by Friday 20th January 2012 to ensure that they are considered.

For further information, please contact: Nikki Smith , Forewind Ltd, Tel: +44(0)7818 597850, email: nikki.smith@forewind.co.uk
### Navitus Bay Offshore Wind Farm – Survey Activity *(New 06-01-2012)*

<table>
<thead>
<tr>
<th>Survey Company, Vessel &amp; Call Sign</th>
<th>Area Covered</th>
<th>Start Timeframe &amp; Duration</th>
</tr>
</thead>
</table>
| **Fugro Survey B.V.** MV Coral Wind 2EMX8 | 1. 50°40.446’N 001°41.883’W  
2. 50°40.718’N 001°42.782’W  
3. 50°41.399’N 001°41.058’W  
4. 50°42.540’N 001°41.361’W  
5. 50°42.583’N 001°40.764’W  
6. 50°41.681’N 001°40.358’W  
7. 50°41.611’N 001°40.032’W  
8. 50°42.389’N 001°39.518’W  
9. 50°42.270’N 001°38.952’W | 10. 50°41.677’N 001°39.407’W  
11. 50°42.138’N 001°38.319’W  
12. 50°42.016’N 001°37.756’W  
13. 50°41.159’N 001°39.104’W  
14. 50°39.562’N 001°38.170’W  
15. 50°39.686’N 001°39.148’W  
16. 50°40.736’N 001°39.762’W  
17. 50°40.823’N 001°40.908’W | 1st November 2011  
1st November 2012 |

For further information, please contact: The Project Manager, Fugro Survey BV, Tel: 0031 703111800
Barrow Offshore Wind Farm – Operations (Update 13-02-2011)

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 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.

Any gear found to be inside the 50 meter Advisory Safety Zone will be moved to the shore by the service craft in order to stop it fouling on the J-Tubes or on the underwater fittings of the Turbine. Please contact me with the position of the gear so that I can pass this on to the service craft and they can monitor it and also keep clear of it when carrying out their maintenance routines.

Please note these positions of exposed export cable and mark them on your charts

<table>
<thead>
<tr>
<th>Latitude</th>
<th>Longitude</th>
<th>Latitude</th>
<th>Longitude</th>
</tr>
</thead>
<tbody>
<tr>
<td>54° 00.567 'N</td>
<td>002° 57.333 W</td>
<td>53° 58.333 'N</td>
<td>003° 02.483 W</td>
</tr>
<tr>
<td>54° 00.500 'N</td>
<td>002° 57.467 W</td>
<td>53° 58.333 'N</td>
<td>003° 02.533 W</td>
</tr>
<tr>
<td>54° 00.417 'N</td>
<td>002° 57.627 W</td>
<td>53° 57.833 'N</td>
<td>003° 05.050 W</td>
</tr>
<tr>
<td>54° 00.383 'N</td>
<td>002° 57.683 W</td>
<td>53° 57.667 'N</td>
<td>003° 05.783 W</td>
</tr>
<tr>
<td>53° 58.783 'N</td>
<td>003° 00.533 W</td>
<td>53° 57.683 'N</td>
<td>003° 06.067 W</td>
</tr>
<tr>
<td>53° 58.663 'N</td>
<td>003° 00.783 W</td>
<td>53° 57.700 'N</td>
<td>003° 06.500 W</td>
</tr>
<tr>
<td>53° 58.617 'N</td>
<td>003° 00.950 W</td>
<td>53° 57.700 'N</td>
<td>003° 06.617 W</td>
</tr>
<tr>
<td>53° 58.483 'N</td>
<td>003° 01.300 W</td>
<td>53° 57.700 'N</td>
<td>003° 06.717 W</td>
</tr>
<tr>
<td>53° 58.450 'N</td>
<td>003° 01.483 W</td>
<td>53° 57.767 'N</td>
<td>003° 07.200 W</td>
</tr>
<tr>
<td>53° 58.383 'N</td>
<td>003° 01.817 W</td>
<td>53° 57.933 'N</td>
<td>003° 07.983 W</td>
</tr>
</tbody>
</table>

PLEASE NOTE THESE POSITIONS OF EXPOSED EXPORT CABLE AND MARK THEM ON YOUR CHARTS

HEYSHAM LAKE / LUNE DEEP AREA

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

Walney 1 & 2 Offshore Wind Farms – Construction Activity (Update 13-02-2012)

Walney Extension

The small survey vessel ‘AQUADYNAMICS’ is expected on site today to continue with the Benthic Sampling Survey at the proposed Walney Wind Farm Extension. ‘AQUADYNAMICS’ will now carry out the Beam Trawl survey and this hopefully will be completed over the coming weekend as long as weather and conditions remain favorable.

Walney

All 51 turbines in the Walney phase 1 have been erected, all cables buried and most scour protection around turbines has been completed. 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

The Sub-Station as well as all 51 Wind Turbine Generators (WTGs) are installed with many of the Turbines operational and providing electricity to the National Grid, as other strings are energized they will be brought on line and also start providing electricity to the National Grid.

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

Continued over page...
Rock Dumping Activities
The Rock Dump vessel ‘ROLLING STONE’ is now undertaking operations at the Gwynt-y-Mor Wind Farm. Once this work is finished, expected end January / early February, ‘ROLLING STONE’ will then carry out rock dumping at all of Walney 2 Turbine positions as well as finishing off at Walney 1.

Export Cable Survey
The survey vessel ‘COASTAL ENTERPRISE’ is expected to complete the Geotechnical Survey along the proposed Export Cable Routes for the West Of Duddon Sands Wind Farm today and de-mob from the project.

Infield Or Inter-Array Cables
SWIBER ELSE-MARIE has completed the burial of the INFIELD or INTER-ARRAY CABLES as well as surveying the Mattress Lay at the BT Telephone Cable crossings and will berth in Barrow on the evening tide to de-mobilise from this project before joining the Ormonde Wind Farm to complete any cable burials there.

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

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

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 – Hazard / Plotter Files / Operations (Update 10-02-2012)
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 will be charted during the Bath Survey for the exact position but fishermen are requested to note the above position, mark it on their charts / plotters and keep clear.

Bathymetric Survey
The continuing poor weather has caused this survey to be further delayed. The small survey vessel ‘FREJA’ will now remain in Workington over the Christmas and New Year period and start the survey at the first available opportunity in January.

This survey is expected to last for a period of approx. 10 days (depending on weather) and is not expected to interfere with any other vessel but as highly sensitive sonar and multi beam echo sounder devices will be in operation all mariners are requested to give a wide berth to ‘FREJA’ when on site and if possible reduce speed when passing.

Diver Assisted Survey
The survey / maintenance programme that was being carried out by the DIVE SUPPORT vessel ‘TERRAMARE 1’ has now completed and ‘TERRAMARE’ has de-mobilised from this project. All of the Turbines are operational and switched to automatic.

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.

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 is also available for download from the Kingfisher Website with a link below.

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, Mobile: 07903 173624
Ormonde Offshore Wind Farm – Construction Activities (Update 09-02-2012)

All mariners should note that although the continuing poor weather is causing delays and disruption to all work and sailing schedules this is still a construction site and unless you have specific business or that circumstances relating to your safety make it 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 including Tower Sections, Nacelles and Blades have now been installed, most of these Turbines have now been energised and are producing electricity to the National Grid. Each erected Turbine, as well as the Sub-Station, is fitted with a solar powered temporary light F I Y 2.5s (visibility approx. 2ml.) and these lights will remain in position until the Wind Farm is fully commissioned. Small crew and workboat vessels will engaged in a variety of tasks inside the Wind Farm including the transfer of technicians to work on energizing the remaining Turbines, installation of the cable into the J-Tubes and cable burial. These operations will continue whenever the weather and conditions permit and will at times involve DIVERS, and there will continue to be a constant movement of traffic between the Wind Farm and Barrow until all the Turbines have been energized and all the cables have been buried and the Wind Farm is fully commissioned.

Export Cable Installation

All of the INTER-ARRAY / INFIELD CABLES are now buried

All of the EXPORT CABLE is buried although a programme of remedial ROCK DUMPING at selected positions along the cable route is scheduled to start in early to mid. February. These positions of ROCK DUMPING are to be carried out on sections of the buried cable where it was found, after survey, that the cable was not sufficiently buried, a separate notice is issued in relation to this work and the vessel involved.

Export Cable – Advisory Anchor Exclusion Zone

All mariners should note that there is an advisory anchor exclusion zone that extends for 200 meters either side of the laid export power cable and you are requested to avoid anchoring in this area, this also includes anchors that are attached to static fishing gear

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

Moray Firth – Frame Deployments (New 07-02-2012)

Partrac deployed Waverider buoys and guard buoys at the locations below.

<table>
<thead>
<tr>
<th>Site</th>
<th>Latitude</th>
<th>Longitude</th>
<th>Site</th>
<th>Latitude</th>
<th>Longitude</th>
</tr>
</thead>
<tbody>
<tr>
<td>Position 1</td>
<td>55° 45.725 N</td>
<td>006° 43.194 W</td>
<td>Guard Buoy GB1</td>
<td>55° 45.847 N</td>
<td>006° 43.352 W</td>
</tr>
<tr>
<td>Position 2</td>
<td>55° 50.657 N</td>
<td>006° 41.371 W</td>
<td>Guard Buoy GB2</td>
<td>55° 50.787 N</td>
<td>006° 41.528 W</td>
</tr>
<tr>
<td>Position 3</td>
<td>55° 46.573 N</td>
<td>006° 51.379 W</td>
<td>Guard Buoy GB3</td>
<td>55° 46.706 N</td>
<td>006° 51.529 W</td>
</tr>
</tbody>
</table>

The vessel NLV POLE Star will be used.

For further information, please contact: Judy McKay, Partrac, Tel: 0141 552 3903, email: jmckay@partrac.com

West of Duddon Sands Offshore Wind Farm – Survey Activity (Update 16-01-2012)

The survey vessel 'COASTAL ENTERPRISE' has now completed the Geotechnical Site Investigation of the Export Cable Routes for the proposed West Of Duddon Sands Wind Farm (WoDS).

Continued over page...
The remaining sampling work at positions along the proposed Export Cable Routes will require the vessel to remain stationary for periods of 1-2 hours and it is requested that all passing vessels, or other vessels working in the area, keep a wide berth and if possible reduce speed when passing.

‘COASTAL ENTERPRISE’ will keep a listening watch on VHF Channels 16 & 12 as well as monitoring VHF Channel 14 and can be contacted for information relating to vessel movements only.

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

Water Quality Survey – Deployment of Instruments (New 10-01-2012)

Partrac will deploy one AWAC instrument in a seabed frame at the location below on Tuesday 17th January. This work is being undertaken on behalf of Scottish Water as part of a Water Quality Survey.

The location of the site is: 55°55.50007’N 004°53.29212’W. Avoidance to a range of 500 m is requested. The vessel Eilidh Anne will be used – call sign 2BKK2

The seabed frames are constructed of stainless steel and moored with sufficient ballast to prevent any movement under wave or tidal forcing. The ADCP instrument will be housed vertically within the frame, approximately 0.5m above the seabed. The equipment will be deployed at the four locations above and there will be no surface markers. They will remain in place for 30 days.

For further information, please contact: Judy McKay, Partrac Ltd, Tel: +44(0)141 552 3903, email: jmckay@partrac.com

Irish Sea Offshore Wind Farm – Deployment of Buoys (Update 07-02-2012)

Metocean equipment is currently deployed at locations 1, 12, 7 & 9 in the Irish Sea Zone. All equipment is marked with surface marker buoys with compliant flashing lights.

The following activities will be occurring (Subject to weather):

- Deploy ADPs at location 7 & 9.
- Due to weather, Centrica has been unable to redeploy equipment to date.

1. 53°39.596’N 004°52.976’W
2. 53°37.040’N 004°03.040’W
3. 53°44.600’N 004°08.600’W
4. 53°49.735’N 004°08.081’W

Bird and marine mammal surveys are due to take place between the 15th and 21st of January 2012. The Prince Madog vessel will be used for this survey work.

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

Gwynt y Môr Offshore Wind Farm – Construction / Safety Zone (Update 03-01-2012)

Construction

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 26m LAT with a tidal range of 8.5m.

The Gwynt y Môr Offshore Wind Farm Project comprises an array of 160 WTGs, supported on foundations, and connected to offshore substation 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 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.

Scour Protection Works

Please be advised that Scour Protection Works is now expected to commence on or around the 15th January 2012. The works are expected to take approx 10 days. Due to uncertainty in the actual commencement date, this notice will remain in force until 31st January 2012. A further update will be given then or upon completion.

Continued over page...
The works will be carried out by the “DP Fall Pipe Vessel – Tideway Rollingstone”. The vessel will be operating at 11 locations within the Gwynt y Mor Offshore Wind Farm placing filter layer stones in the respective locations. The vessel will be operated under Dynamic Positioning and all other traffic is advised to keep at least 500m clear of Tideway Rollingstone. VHF 16 will be monitored at all times.

**Wind Farm Perimeter**

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 Buoys 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 NNW** 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

**Safety Zones**

An application for safety zone scheme during construction, major maintenance, decommissioning periods has been sought for the Gwynt Y Mor Offshore Wind Farm.

Consent from the Secretary of State for Energy and Climate Change as set out in the Energy Act 2004 and the Electricity Regulations 2007 for a Safety Zone scheme to be placed around structures during the construction, major maintenance, decommissioning periods of the previously consented offshore renewable energy installation known as Gwynt Y Mor.

A copy of the Safety Zone scheme explaining the company’s proposal in more details available upon request using the following methods: Tel: 01793 474288, Email: gemma.couzens@rwe.com, Postal Address: Auckland House, Lydiard Fields, Great Western Way, Swindon, SN5 8ZT.

Any person wishing to make representation to the Secretary of State about the application should do so in writing to the Secretary of State, Department for Energy and Climate Change, c/o the offshore renewables main box: offshore.renewables@decc.gov.uk or to the ORCU, Area A, 3rd Floor, 2 Whitehall Place, London SW1A 2HD stating the name of the proposal and nature of their representation not later than 31st January 2012.

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

**Kingfisher Awareness Flyer: Gwynt Y Mor Offshore Wind Farm**

For further information, please contact: Lee Cornwell, RWE npower renewables, Mob: +44 (0) 7557 319473, Email: lee.cornwell@rwe.com
Kyle Rhea Tidal Stream Array — Deployment of Instruments (New 10-01-2012)
Partrac will deploy ADCP instruments in seabed frames at the locations below between 16th January 2012 and 16th March 2012. This work is being undertaken on behalf of SeaGeneration (Kyle Rhea) Ltd for the proposed Kyle Rhea Tidal Stream Array project.

1. KR_2012_1  57°13.78205’N 005°39.72775’W
2. KR_2012_2  57°13.80590’N 005°39.68702’W

Avoidance to a range of 200 m is requested. The vessel Margaret Sinclair will be used – call sign MPLU2.

The seabed frames are constructed of stainless steel and moored with sufficient ballast to prevent any movement under wave or tidal forcing. The ADCP instrument will be housed vertically within the frame, approximately 0.5m above the seabed. The equipment will be deployed at the four locations above and there will be no surface markers. They will remain in place for two months.

For further information, please contact: Judy McKay, Partrac Ltd, Tel: +44(0)141 552 3903, email: jmckay@partrac.com