

The Kingfisher Bulletin

Offshore News

RENEWABLE ENERGY

22 MARCH 2018 | ISSUE 06

Shaded blocks indicate activity.

What's inside?

New Hazards (-)

Area 1 (p.4-5)

1. Notice to Fishermen
2. Seabed Activity
3. Survey Activity

Area 2 (p.6-8)

1. Seabed Activity
2. Survey Activity

Area 3 (p.9-14)

1. Notice to Fishermen
2. Seabed Activity
3. Survey Activity
4. Deployment of Buoys

Area 4 (p.15)

1. Deployment of Buoys

Area 5 (p.16)

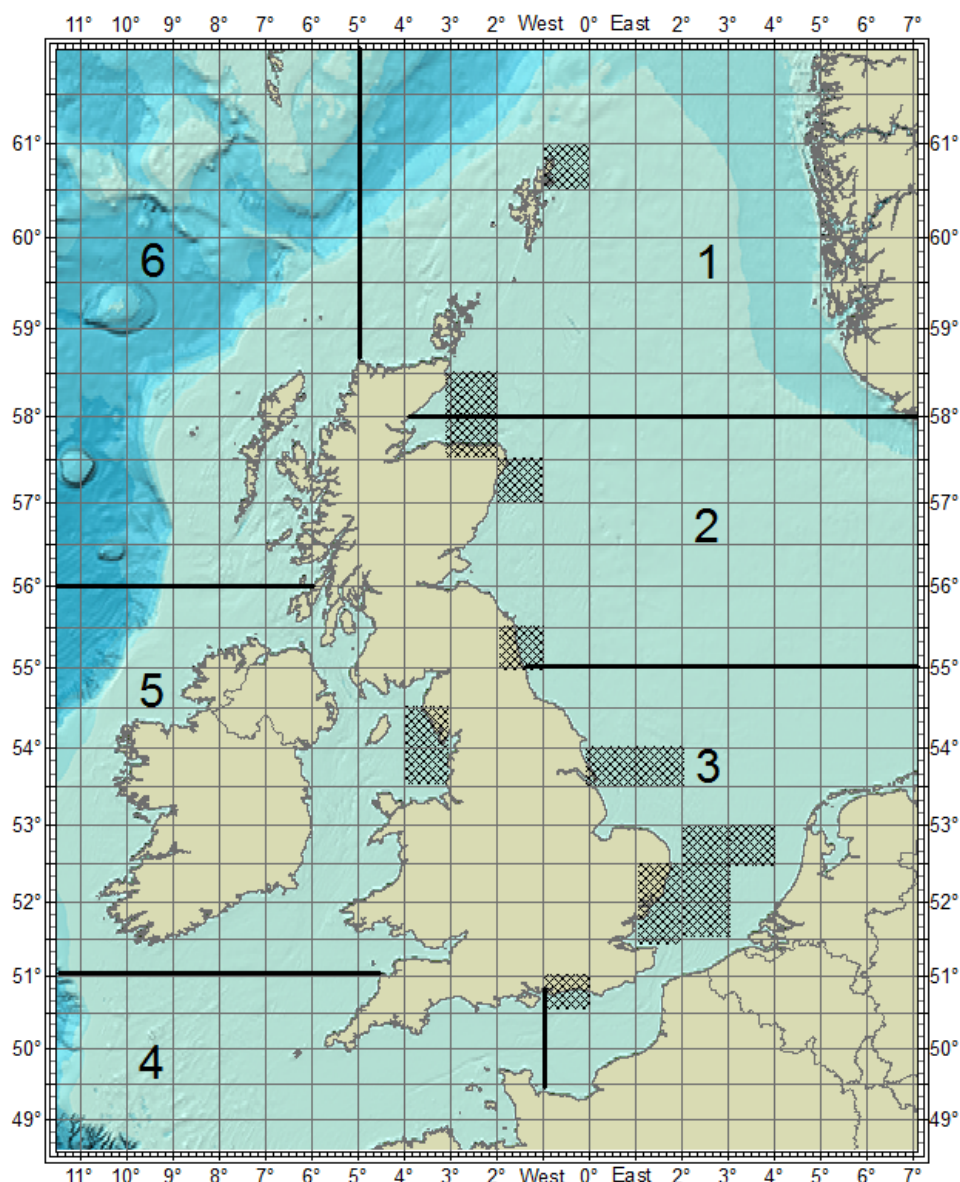
1. Seabed Activity

Area 6

1. N.A

Extra... (p.17)

1. Awareness Charts
2. Fishing Plotter Files



STAY UPTO DATE - ALWAYS ENSURE YOU HAVE THE LATEST KINGFISHER BULLETIN AND OFFSHORE FISHING PLOTTER DATA ON-BOARD.

Support

The Kingfisher Bulletin is provided by the Kingfisher Information Service of Seafish, to promote the awareness of offshore hazards to fishing, new structures and zones and conflicting offshore operations. Support for the production of renewable industry information is received from The Crown Estate.



Information

Information contained within the Kingfisher Bulletin comes from a variety of sources, although is in the majority, supplied directly to Kingfisher from the offshore operating industry, or government licensing authorities.

Coordinates within the Kingfisher Bulletin are converted into World Geodetic System 1984 (WGS84) and displayed as degrees, minutes and decimal minutes, to three decimal places (ddd°mm.mmm'). Route or boundary coordinates may be simplified for ease of use.

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Notice to Fishermen

First Published: 08 March 2018 | Latest Update: 08 March 2018

Hazard to Fishermen – Dropped Clump Weight Beatrice OWF



Please be advised that a dropped clump weight from the West Cardinal Buoy at Beatrice Windfarm. The Buoy and 50 m chain have been recovered but the Clump Weight and remaining chain are still on the seabed

58°12.600'N 03°01.320'W

For further information: Derek Duckett, Seaway Heavy Lifting, Tel: +31 6 5766 0462 email: dduckett@shl.nl

Seabed Activity

First Published: 30 November 2017 | Latest Update: 30 November 2017

Bluemull Sound (Shetland) – Subsea Tidal Array

The purpose of the operation is to conduct work on a subsea tidal energy array in Bluemull Sound, Shetland.

A workboat vessel the Leask Marine MV C-Odyssey (pictured below, call sign 2ETW7) or similar will conduct offshore and subsea operations. Works will include loading and preparatory work at Cullivoe Pier. The work will be conducted from December 2017 to end March 2018 and operations could take place during the day or at night. Operations will be conducted within a 300m radius of the array location and up to 30m either side of the cable corridor route; cable waypoints are listed below.

Array location: 60°41.908'N 00°59.016'W

Cable Way Points:

| | | | | | |
|----|-------------------------|----|-------------------------|-----|-------------------------|
| 1. | 60°41.878'N 00°59.917'W | 5. | 60°41.818'N 00°59.400'W | 9. | 60°41.878'N 00°59.917'W |
| 2. | 60°41.813'N 00°59.862'W | 6. | 60°41.835'N 00°59.217'W | 10. | 60°41.813'N 00°59.862'W |
| 3. | 60°41.814'N 00°59.701'W | 7. | 60°41.869'N 00°59.101'W | | |
| 4. | 60°41.815'N 00°59.437'W | 8. | 60°41.900'N 00°59.030'W | | |

For further information: Tom Wills, Nova Innovation, Tel: 0131 241 2000/07825 914 257 email: info@novainnovation.com

Deployment of Buoys

First Published: 22 February 2018 | Latest Update: 22 February 2018

Beatrice Offshore Windfarm Ltd – Moray Firth & Cromarty Firth

Mariners are advised that, further to notice UoA/01/2018 and in conjunction with Beatrice Offshore Windfarm Limited (BOWL), the University of Aberdeen has removed scientific equipment moorings in the Moray Firth from the locations listed.

| Name | Coordinates (WGS84 datum) | | Characteristics |
|------|---------------------------|--------------|-----------------------------------|
| 41 | 57° 51.141' N | 3° 33.018' W | Subsurface with acoustic release. |
| 47 | 58° 00.817' N | 3° 08.549' W | Subsurface. |
| 48 | 58° 04.009' N | 3° 06.916' W | Subsurface. |
| 54 | 58° 13.520' N | 2° 41.961' W | Subsurface. |
| 56 | 58° 18.724' N | 2° 37.062' W | Subsurface. |
| 110 | 58° 07.668' N | 2° 45.374' W | Subsurface. |
| 159 | 58° 09.260' N | 2° 52.234' W | Subsurface. |
| 165 | 58° 12.478' N | 3° 01.251' W | Subsurface. |
| 183 | 58° 20.235' N | 2° 50.708' W | Subsurface. |
| 185 | 58° 11.356' N | 2° 59.450' W | Subsurface with transponder. |
| 190 | 58° 07.723' N | 3° 07.467' W | Subsurface. |

Mariners should note that the following existing moorings in the Moray Firth remain installed in their current locations

| Name | Coordinates (WGS84 datum) | | Characteristics |
|------|---------------------------|--------------|--|
| 1 | 57° 41.413' N | 3° 58.953' W | Subsurface |
| 2 | 57° 35.133' N | 4° 05.891' W | Surface marked (NB50 buoy, red) |
| 3 | 57° 44.073' N | 3° 19.776' W | Surface marked (dhan, 12' aluminium & RADAR reflector) |
| 4 | 57° 41.357' N | 3° 05.547' W | Surface marked (NB50 buoy, red) |
| 17 | 57° 57.759' N | 3° 31.260' W | Subsurface with acoustic release. |
| 42 | 57° 52.337' N | 3° 29.058' W | Subsurface with acoustic release. |
| 45 | 57° 57.261' N | 3° 16.084' W | Subsurface with acoustic release. |
| 89 | 57° 56.056' N | 3° 38.252' W | Subsurface with acoustic release. |
| 108 | 58° 18.993' N | 2° 59.223' W | Subsurface. |
| 160 | 58° 17.648' N | 2° 49.931' W | Subsurface with transponder. |
| 161 | 58° 12.933' N | 2° 55.954' W | Subsurface with transponder. |
| 162 | 58° 18.176' N | 2° 54.124' W | Subsurface with transponder. |
| 164 | 58° 12.830' N | 2° 51.669' W | Subsurface with transponder. |

Mariners should also note that the following moorings were not found, and are considered lost:

| Name | Coordinates (WGS84 datum) | | Characteristics |
|------|---------------------------|--------------|-----------------------------------|
| 40 | 57° 48.988' N | 3° 36.379' W | Subsurface with acoustic release. |
| 49 | 58° 04.450' N | 3° 00.999' W | Subsurface. |

The moorings support sound recording equipment, and acoustic loggers that record echolocation clicks of dolphins and porpoises.

For further information: Tim Candido Barton, University of Aberdeen [Tel:+44\(0\)1381 600548](tel:+44(0)1381600548) email: t.r.barton@addn.ac.uk

Beatrice Offshore Windfarm Limited – Foundation Piling Operations

In preparation for the installation of wind turbine foundations in the Beatrice Offshore Windfarm construction site, piles have been installed in the seabed on each of the foundation locations outlined below.

Jacket Installation

The Heavy Lift Vessel (HLV) Oleg Strashnov has returned to site and will re-mobilise to continue the jacket foundation installation campaign. The HLV Stanislav Yudin will remain on standby in Invergordon.

| Location ID | Lat WGS84 | Long WGS84 | Location ID | Lat WGS84 | Long WGS84 |
|-------------|---------------|----------------|-------------|---------------|----------------|
| BE-A5 | 58° 12.471' N | 002° 59.996' W | BE-G4 | 58° 13.142' N | 002° 53.464' W |
| BE-B5 | 58° 12.687' N | 002° 58.873' W | BE-G5 | 58° 13.762' N | 002° 53.254' W |
| BE-B6 | 58° 13.308' N | 002° 58.664' W | BE-G6 | 58° 14.384' N | 002° 53.044' W |
| BE-B7 | 58° 13.929' N | 002° 58.456' W | BE-G7 (OTM) | 58° 15.004' N | 002° 52.834' W |
| BE-C4 | 58° 12.307' N | 002° 57.948' W | BE-G8 | 58° 15.625' N | 002° 52.625' W |
| BE-C5 | 58° 12.902' N | 002° 57.749' W | BE-G9 | 58° 16.247' N | 002° 52.415' W |
| BE-C6 | 58° 13.524' N | 002° 57.541' W | BE-G10 | 58° 16.867' N | 002° 52.204' W |
| BE-C7 | 58° 14.144' N | 002° 57.332' W | BE-G11 | 58° 17.488' N | 002° 51.994' W |
| BE-C8 | 58° 14.766' N | 002° 57.124' W | BE-G12 | 58° 18.109' N | 002° 51.784' W |
| BE-C9 | 58° 15.386' N | 002° 56.915' W | BE-G13 | 58° 18.730' N | 002° 51.574' W |
| BE-D3 | 58° 11.995' N | 002° 57.002' W | BE-G14 | 58° 19.351' N | 002° 51.362' W |
| BE-D4 | 58° 12.497' N | 002° 56.834' W | BE-H4 | 58° 13.356' N | 002° 52.339' W |
| BE-D5 | 58° 13.117' N | 002° 56.626' W | BE-H5 | 58° 13.977' N | 002° 52.130' W |
| BE-D6 | 58° 13.739' N | 002° 56.417' W | BE-H6 | 58° 14.598' N | 002° 51.920' W |
| BE-D7 | 58° 14.359' N | 002° 56.209' W | BE-H7 | 58° 15.219' N | 002° 51.709' W |
| BE-D8 | 58° 14.981' N | 002° 55.999' W | BE-H8 | 58° 15.840' N | 002° 51.499' W |
| BE-D9 | 58° 15.602' N | 002° 55.790' W | BE-H9 | 58° 16.461' N | 002° 51.289' W |
| BE-D10 | 58° 16.223' N | 002° 55.582' W | BE-H10 | 58° 17.082' N | 002° 51.079' W |
| BE-D11 | 58° 16.844' N | 002° 55.373' W | BE-H11 | 58° 17.703' N | 002° 50.867' W |
| BE-E1 | 58° 10.900' N | 002° 56.256' W | BE-H12 | 58° 18.324' N | 002° 50.657' W |
| BE-E2 | 58° 11.470' N | 002° 56.128' W | BE-H13 | 58° 18.944' N | 002° 50.446' W |
| BE-E3 | 58° 12.090' N | 002° 55.920' W | BE-J5 | 58° 14.192' N | 002° 51.005' W |
| BE-E4 | 58° 12.712' N | 002° 55.710' W | BE-J6 | 58° 14.812' N | 002° 50.795' W |
| BE-E5 | 58° 13.333' N | 002° 55.502' W | BE-J7 | 58° 15.433' N | 002° 50.585' W |
| BE-E6 | 58° 13.954' N | 002° 55.293' W | BE-J8 | 58° 16.055' N | 002° 50.373' W |
| BE-E7 | 58° 14.575' N | 002° 55.084' W | BE-J9 | 58° 16.675' N | 002° 50.163' W |
| BE-E8 | 58° 15.196' N | 002° 54.875' W | BE-J10 | 58° 17.296' N | 002° 49.952' W |
| BE-E9 | 58° 15.817' N | 002° 54.665' W | BE-J11 | 58° 17.917' N | 002° 49.741' W |
| BE-E10 | 58° 16.438' N | 002° 54.456' W | BE-J12 | 58° 18.538' N | 002° 49.530' W |
| BE-E11 | 58° 17.059' N | 002° 54.247' W | BE-J13 | 58° 19.159' N | 002° 49.319' W |
| BE-E12 | 58° 17.680' N | 002° 54.037' W | BE-K6 | 58° 15.027' N | 002° 49.669' W |
| BE-F2 | 58° 11.685' N | 002° 55.005' W | BE-K7 | 58° 15.648' N | 002° 49.459' W |
| BE-F3 | 58° 12.306' N | 002° 54.796' W | BE-K8 | 58° 16.269' N | 002° 49.247' W |
| BE-F4 | 58° 12.927' N | 002° 54.588' W | BE-K9 | 58° 16.890' N | 002° 49.036' W |
| BE-F5 | 58° 13.548' N | 002° 54.378' W | BE-K10 | 58° 17.510' N | 002° 48.825' W |
| BE-F6 | 58° 14.168' N | 002° 54.169' W | BE-K11 | 58° 18.131' N | 002° 48.614' W |
| BE-F8 (OTM) | 58° 15.411' N | 002° 53.750' W | BE-K12 | 58° 18.752' N | 002° 48.403' W |
| BE-F9 | 58° 16.031' N | 002° 53.540' W | BE-L7 | 58° 15.862' N | 002° 48.333' W |
| BE-F10 | 58° 16.653' N | 002° 53.330' W | BE-L8 | 58° 16.482' N | 002° 48.122' W |
| BE-F11 | 58° 17.274' N | 002° 53.120' W | BE-L9 | 58° 17.104' N | 002° 47.910' W |
| BE-F12 | 58° 17.894' N | 002° 52.911' W | BE-L10 | 58° 17.724' N | 002° 47.698' W |
| BE-F13 | 58° 18.516' N | 002° 52.701' W | BE-M9 | 58° 17.317' N | 002° 46.784' W |
| BE-G3 | 58° 12.544' N | 002° 53.726' W | BE-M10 | 58° 17.938' N | 002° 46.571' W |

For further information: John Bray – BOWL Lead Marine Coordinator, Tel: 0330 2020329, mc.bowl@sse.com

Survey Activity

First Published: 08 March 2018 | Latest Update: 08 March 2018

Moray Offshore Wind Farm – Survey

Please be advised that Moray Offshore Windfarm (East) Limited (known as Moray East) will have survey vessels working in the nearshore area of the Moray East export cable corridor site. The earliest date the survey is anticipated to commence is 15 March 2018.

| Company, Vessel & Call Sign | Survey Area | Survey Area | Start Timeframe & Duration |
|-----------------------------|--|--|--|
| Aran 120A J8B4362 | 57°40.585'N 002°33.777'W 57°40.900'N 002°33.221'W | 57°40.845'N 002°33.110'W 57°40.529'N 002°33.668'W | 15 th March 2018 For 10 Days |

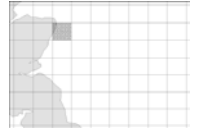
For further information: Catarina Rei, Moray East Offshore Windfarm, Tel: +44(0)131 556 7601 email: Catarina.Rei@edpr.com

Survey Activity

First Published: 08 March 2018 | Latest Update: 20 March 2018

Moray Offshore Wind Farm – Survey

Please be advised that Moray Offshore Windfarm (East) Limited (Moray East) will have survey vessels working in the Moray East wind farm and export cable route site for approximately three and a half months (80 survey days)



| Company, Vessel & Call Sign | Survey Area | Survey Area | Start Timeframe & Duration |
|-----------------------------|--|--|---|
| MV Ocean Observer GHXX | 58°19.608'N 002°34.815'W 57°41.141'N 002°31.588'W | 57°40.614'N 002°52.625'W 57°19.072'N 002°56.229'W | 21 st March 2018 For 3.5 Months |

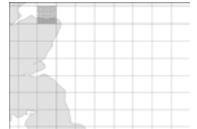
For further information: Catarina Rei, Moray East Offshore Windfarm, Tel: +44(0)131 556 7601 email: Catarina.Rei@edpr.com

Survey Activity

First Published: 11 January 2018 | Latest Update: 01 March 2018

Moray Offshore Wind Farm (East) – Site Investigations

Please be advised that Moray Offshore Windfarm (East) Limited (known as Moray East) is undertaking site investigations in the Moray East Wind Farm Site.



Moray East will have survey vessels working on site for approximately 145 survey days (including weather downtime). It was originally anticipated that the number of survey days when vessels would be on site was 80 days (including weather downtime). Up to 4 survey vessels will be undertaking geotechnical boreholes; the vessels may mobilise at different times.

The Horizon Geobay commenced site investigations on 26 February 2018. The Fugro Scout commenced site investigations on 4 January 2018. The Gargano demobilized on 27 February 2018.

- | | |
|-----------------------------|-----------------------------|
| 1. 58°19.380'N 002°44.280'W | 4. 58°03.960'N 002°54.780'W |
| 2. 58°13.140'N 002°34.260'W | 5. 58°12.600'N 002°52.440'W |
| 3. 58°08.100'N 002°34.200'W | |

For further information: John Yorston, Email: john.yorston@edpr.com, Tel: 0131 556 7602 / 07557 018980

Seabed Activity

First Published: 22 February 2018 | Latest Update: 22 February 2018

Aberdeen OWF – Lost Clump Weight



Please be advised of the following Lost Clump Weight from South Cardinal Buoy.

Position: 57°12.266'N 02°00.149'W

In order to be able to redeploy the south cardinal buoy as soon as possible, and due to current vessel availability, the lost clump weight is proposed to be left in situ, while the cardinal buoy with the new clump weight is redeployed. However, it should be noted that all five clump weights used for construction buoyage will be removed following final commissioning of the construction marking for the Wind Farm.



For further information: Esther Villoria, Vattenfall, Tel: 44 77817018575 email: esthervilloria.domibguez@vattenfall.com

Seabed Activity

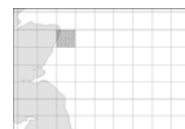
First Published: 11 January 2018 | Latest Update: 22 February 2018

Aberdeen OWF – Cable Shore Landing now with 4 tonne rock bags

Please be advised of the following activities proposed to be undertaken at the Aberdeen Offshore Wind Farm Site. Export cable shore landing operations.

Please note - All mariners are requested to maintain a minimum 1000m safety zone around each Vessels location. Operation start date week commencing 8th January 2018 (weather permitting)

Vessels: Guard Vessel Isla-B Call sign MNVM2, Dutch Power Call sign PBTZ, Ndurance Call sign 5BVH3, Sea Bronco Call sign PHFS , RHIB CRC Tempest Call sign MYUY7, CRC Neptune Call sign MJDU7 , MTSL Bittern Call sign 2DMP7 (CTV)



| Positions | Coordinates |
|--------------------------------|--------------------------|
| Beach Landing / Transition Pit | 57°12.993'N 002°03.484'W |
| Export Cables | 57°12.399'N 002°02.666'W |
| | 57°12.390'N 002°01.474'W |
| | 57°12.473'N 002°00.641'W |
| Ndurance Anchor Positions | 57°12.687'N 002°03.406'W |
| Ndurance Anchor Positions | 57°12.497'N 002°03.392'W |
| Ndurance Anchor Positions | 57°12.324'N 002°03.257'W |
| Ndurance Anchor Positions | 57°12.166'N 002°02.834'W |
| Ndurance Anchor Positions | 57°12.136'N 002°01.884'W |
| Ndurance Anchor Positions | 57°12.583'N 002°01.798'W |
| Ndurance Anchor Positions | 57°12.550'N 002°02.117'W |
| Ndurance Anchor Positions | 57°12.888'N 002°03.051'W |

Cable shore landing

The cable laying vessel Ndurance will setup on anchors in the nearshore area and commence the shore landing works. Isla-B will be acting as guard vessel and the works will be assisted by support vessels Dutch Power, Sea Bronco, RHIB CRC Tempest, CRC Neptune & MTSL Bittern (CTV). During the works, there will be periods when the cable will be surface laid on the seabed from the nearshore area out to the windfarm site. There will be two independent shore landings occurring during this construction window.

All mariners are requested to give cable laying vessel Ndurance 1000 meters clearance due to restricted manoeuvrability whilst carrying out all cable pulling operations on site, also requested is 500 meter clearance for all other vessels involved in cable operations. Cable laying vessel Ndurance will be using 6/7 point mooring arrangement (anchor positions in above table) All operations are highly weather dependant.

Duration of each shore Landing is approx. 72hrs however this is weather dependant estimated time

For further information: aowf.marinecoordination@vattenfall.com

Seabed Activity

First Published: 04 May 2017 | Latest Update: 09 January 2018

Blyth Offshore Demonstrator Project – Seabed Preparation Works

Please be advised that the construction phase at Array 2 of the Blyth Offshore Demonstrator (BOD) Project has been completed.



Please note - All mariners are requested to maintain a safe distance of 50m around each turbine

For a temporary period this includes all fishing activities around the turbine locations to allow for further investigation into reports received regarding the effectiveness of the lighting arrangements around the turbine structures when viewed at close distance.

Turbine Placement Location:

| Turbine | Coordinates | Turbine | Coordinates |
|-----------|-------------------------|------------|-------------------------|
| Turbine 6 | 55°08.870'N 01°24.791'W | Turbine 9 | 55°07.341'N 01°23.771'W |
| Turbine 7 | 55°08.379'N 01°24.378'W | Turbine 10 | 55°06.797'N 01°23.607'W |
| Turbine 8 | 55°07.880'N 01°24.034'W | | |

For further information: Simon Prince Specialist Marine Consultant Ltd, Tel: +44 1723 892861 email: simonp@smchse.com

Seabed Activity

First Published: 08 March 2018 | Latest Update: 08 March 2018

Aberdeen OWF – Wind Turbine Installation

Please be advised of the following activities proposed to be undertaken at the Aberdeen Offshore Wind Farm Site. Export cable shore landing operations



Please note - All mariners are requested to maintain a minimum 1000m safety zone around each Vessels location.

Operation start date week Ending 16th March January 2018

| WTG ID | Latitude | Longitude |
|----------------|---------------|---------------|
| AWF 01 | 57° 13.420' N | 02° 00.758' W |
| AWF 02 | 57° 13.703' N | 02° 00.132' W |
| AWF 03 | 57° 14.010' N | 01° 59.371' W |
| AWF 04 | 57° 14.405' N | 01° 58.551' W |
| AWF 05 | 57° 12.948' N | 02° 00.671' W |
| AWF 06 | 57° 13.203' N | 02° 00.013' W |
| AWF 07 | 57° 13.465' N | 01° 59.274' W |
| AWF 08 | 57° 13.809' N | 01° 58.450' W |
| AWF 09 | 57° 12.476' N | 02° 00.627' W |
| AWF 10 | 57° 12.704' N | 01° 59.921' W |
| AWF 11 | 57° 12.960' N | 01° 59.151' W |
| Transition Pit | 57° 12.993' N | 02° 03.484' W |
| Export Cable | 57° 12.399' N | 02° 02.666' W |
| | 57° 12.390' N | 02° 01.474' W |
| | 57° 12.473' N | 02° 00.641' W |

Wind Turbine Installations

Estimated time. Operation to be carried out over 24 hours, length of operation approximately 8 weeks from the 16/03/2018

The vessel Pacific Orca has been selected to carry out this task along with 2 x CTV vessels the MV Doer & MV Dispatcher. The Isla B shall be acting guard vessel, all mariners are asked to give the Pacific Orca 500 meters space.

The sequence for the Installation of the Wind Turbine Generators can change due to operational variables throughout this process

Vessels: Guard Vessel Isla-B Call sign MNVM2, Pacific Orca Call Sign 5BRE3, MV Doer Call Sign OXEH2, Blue Norther Call Sign 2GDD5, MV Dispatcher Call Sign OWAS2

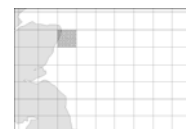
For further information: aowf.marinecoordination@vattenfall.com

Survey Activity

First Published: 08 March 2018 | Latest Update: 08 March 2018

Aberdeen OWF – Survey

Please be advised of the following geotechnical surveys shall be carried out in the month of march date & time shall be based on the weather conditions. This shall be conducted between the beach and a large sandbank 600m below low water line. The operation shall consist of approximately 40 cone penetration tests on the seabed no deeper than 3m into the seabed. Sediment/samples shall amount to no more that 1 cubic meter per sample. Vessel undertaking these surveys shall be the dutch power.



| Company, Vessel & Call Sign | Survey Area | Survey Area | Start Timeframe & Duration |
|--|--|--|--|
| Vattenfall Isla B – MNVM2 Dutch Power - PBTZ | 57°12.900'N 002°03.300'E 57°12.720'N 002°03.300'E | 57°12.660'N 002°03.060'E 57°12.840'N 002°03.300'E | 12 th March 2018 For 30 Days |

For further information: aowf.marinecoordination@vattenfall.com

Survey Activity

First Published: 08 March 2018 | Latest Update: 08 March 2018

Blyth Offshore Wind Farm – Trawl Survey

Natural Power will be conducting Otter Trawl surveys. The surveys are proposed to commence on the 8thth March 2018 and will be completed by the 23rd March 2018. The survey time may vary due to weather conditions. The vessel undertaking these surveys will be the 'Princess Royal' Call Sign: 2EYM2



| | |
|-----------------------------|-----------------------------|
| 1. 55°16.070'N 001°34.070'W | 4. 55°02.510'N 001°28.930'W |
| 2. 55°11.650'N 001°14.220'W | 5. 55°16.070'N 001°34.070'W |
| 3. 55°02.970'N 001°20.130'W | |

For further information: Graham Howarth EDF EN Services UK Tel: +44 (0)7875 113418 email: graham.howarth@edf-er.com

Notice to Fishermen

First Published: 08 March 2017 | **Latest Update: 08 March 2017**

Race Bank Offshore Wind Farm – Exposed Export Cable Sections



Sections of the Race Bank Wind Farm export cable have been found to be exposed, or only shallowly buried. These pose a snagging risk to fishermen and caution should be exercised. Remedial burial works are ongoing to achieve full burial at these locations.



As the previously agreed 'Fishing Clearance Zones' have now been deactivated as of 00:01 on 1st March 2018, Orsted are working with fishermen on an agreement to remain clear of these locations whilst work continues.

The Twitter Link' chart link shows these exposed sections, which are also pasted below:

| Section | Centre Position |
|--|--------------------------|
| KP 11: Length 895m x Width 100m | 52°54.281'N 000°16.413'E |
| KP 25: Length 525m x Width 100m | 53°00.266'N 000°24.230'E |
| KP 27: Length 365m x Width 100m - 170m | 53°01.044'N 000°25.029'E |
| KP 28: Length 1002m x Width 100m | 53°01.499'N 000°25.595'E |
| KP 35: Length 3230m x Width 100-220m | 53°04.766'N 000°29.252'E |
| North of KP 62: Length 235m x Width 100m | 53°15.159'N 000°43.036'E |
| KP 65: Length 435m x Width 100m | 53°16.363'N 000°44.391'E |
| KP 70.925: Length 170m x Width 100m | 53°17.736'N 000°48.500'E |

In the interests of the safety of mariners, and in order to avoid damaging the export cables, the Race Bank project is duty-bound to highlight the significant risks that would be associated with fishing activity within the 'Cable Exposure Zones'. In line with standard industry practice, fishermen are advised to temporarily refrain from fishing within the 'Cable Exposure Zones' (inc. pot fishing and/or trawling) while remedial burial works remain ongoing. Any static gear anchors, or towed fishing equipment, deployed within these areas presents a significant risk to gear, to vessels, to crews, and to the export cables.

For further information: Hywel Roberts, DONG Energy, Tel: +44(0)20 7811 5486 email: hywro@dongenergy.co.uk
Website: <http://www.dongenergy.com/en/Search?&k=race%20bank>

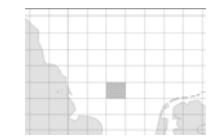
Notice to Fishermen

First Published: 11 January 2018 | **Latest Update: 22 March 2018**

Hornsea Offshore Wind Farm – Export Cable Open Trenches



HOW01 wish to inform mobile gear fishermen that trenching works are ongoing within the HOW01 export cable corridor.



The trenches range in depth to circa 2m, further information can be obtained via Nick Garside the Project's Fishing Industry Representative Works are ongoing for the next few months and this information will be promulgated through weekly notice of operations.

Open Trench areas:

| Area 1 Coordinates | Area 2 Coordinates | Area 3 Coordinates | Area 4 Coordinates |
|--------------------------|--------------------------|--------------------------|--------------------------|
| 53° 31.201'N 0° 34.736'E | 53° 37.502'N 0° 50.291'E | 53° 37.471'N 0° 56.757'E | 53° 44.381'N 1° 24.819'E |
| 53° 30.845'N 0° 34.862'E | 53° 37.041'N 0° 50.270'E | 53° 37.990'N 0° 56.551'E | 53° 44.867'N 1° 24.500'E |
| 53° 31.578'N 0° 39.614'E | 53° 36.853'N 0° 52.049'E | 53° 38.023'N 0° 57.631'E | 53° 44.816'N 1° 29.497'E |
| 53° 35.867'N 0° 44.724'E | 53° 37.398'N 0° 55.881'E | 53° 39.297'N 1° 4.352'E | 53° 45.340'N 1° 29.373'E |
| 53° 36.351'N 0° 43.759'E | 53° 37.795'N 0° 55.860'E | 53° 42.785'N 1° 14.597'E | 53° 45.882'N 1° 37.332'E |
| 53° 32.269'N 0° 39.237'E | 53° 37.419'N 0° 51.589'E | 53° 44.551'N 1° 23.470'E | 53° 46.452'N 1° 37.253'E |
| 53° 31.201'N 0° 34.736'E | 53° 37.502'N 0° 50.291'E | 53° 44.142'N 1° 23.786'E | 53° 46.972'N 1° 43.079'E |
| | | 53° 42.481'N 1° 16.200'E | 53° 47.439'N 1° 42.583'E |
| | | 53° 38.563'N 1° 3.812'E | 53° 48.923'N 1° 46.350'E |
| | | 53° 37.767'N 0° 57.686'E | 53° 49.309'N 1° 45.676'E |
| | | 53° 38.023'N 0° 57.631'E | 53° 51.142'N 1° 47.835'E |
| | | | 53° 50.133'N 1° 48.200'E |
| | | | 53° 51.570'N 1° 50.958'E |
| | | | 53° 52.364'N 1° 52.696'E |
| | | | 53° 51.971'N 1° 53.196'E |

Open Trench areas:

Expected Open Trench area:

| Area 5 Coordinates | Area 6 Coordinates | Area 1 Coordinates |
|--------------------------|----------------------------|----------------------------|
| 53° 52.410'N 1° 53.720'E | 53° 52.419' N 1° 53.643' E | 53° 30.670' N 0° 35.039' E |
| 53° 53.008'N 1° 53.872'E | 53° 52.992' N 1° 53.869' E | 53° 31.190' N 0° 34.800' E |
| 53° 52.845'N 1° 50.939'E | 53° 52.082' N 1° 58.873' E | 53° 31.372' N 0° 39.262' E |
| 53° 53.378'N 1° 50.893'E | 53° 52.616' N 1° 58.814' E | 53° 31.896' N 0° 39.048' E |
| 53° 52.454'N 1° 48.853'E | 53° 52.619' N 2° 1.244' E | 53° 32.079' N 0° 40.397' E |
| 53° 52.978'N 1° 48.823'E | 53° 53.162' N 2° 1.156' E | 53° 32.275' N 0° 39.656' E |
| 53° 53.034'N 1° 44.582'E | 53° 52.717' N 2° 3.554' E | |
| 53° 53.647'N 1° 44.380'E | 53° 53.253' N 2° 3.618' E | |
| 53° 53.178'N 1° 42.788'E | 53° 53.352' N 2° 5.977' E | |
| 53° 53.741'N 1° 42.969'E | 53° 52.925' N 2° 6.176' E | |
| 53° 53.454'N 1° 42.427'E | | |

For further information: Nick Garside, Tel: +44(0)7538 827013 email: nick.garside@live.co.uk

Notice to FishermenFirst Published: 14 November 2017 | **Latest Update: 14 November 2017****Fishing Hazard – Cable Spans Along Greater Gabbard WF Export Cable**

Recent results from the export cable surveys at Greater Gabbard show that there are 8 free-spans which are listed below.

Whilst the results continue to be processed, Balfour Beatty have asked that in the interest of safety and the integrity of the cable, extreme caution be used when Fishing near the export cables and that Fishermen refrain from using towed gear across the export cables wherever possible.



| Cable | Position (from) | Position (to) | Span Length(m) | Span height(cm) |
|-------|------------------------|------------------------|----------------|-----------------|
| L1 | 52°12.284N 001°39.364E | 52°12.283N 001°39.369E | 6 | 0 |
| L1 | 52°12.271N 001°39.434E | 52°12.270N 001°39.441E | 8 | 13 |
| L1 | 52°12.064N 001°40.559E | 52°12.061N 001°40.565E | 8 | 20 |
| L2 | 52°12.128N 001°40.524E | 52°12.124N 001°40.535E | 15 | 5 |
| L2 | 52°12.119N 001°40.560E | 52°12.118N 001°40.567E | 8 | 76 |
| L3 | 52°12.169N 001°40.502E | 52°12.169N 001°40.504E | 3 | 11 |
| L3 | 52°12.148N 001°40.594E | 52°12.146N 001°40.604E | 13 | 34 |
| L3 | 51°59.194N 001°57.431E | 51°59.187N 001°57.442E | 17 | 10 |

For further information: Merlin Jackson email: merlinjackson@btinternet.com Tel: 07989520484

Notice to FishermenFirst Published: 02 November 2017 | **Latest Update: 02 November 2017****Fishing Hazard – Gunfleet Sands WF Export Cable (Exposure Update)**

Recent surveys at Gunfleet Sands offshore wind farm have illustrated that some array/in-field cables are lying exposed on the seabed and are no longer buried and there is one freespan.

These are the following cables located in the eastern part of Gunfleet Sands 1 and the north eastern part of Gunfleet Sands 2.

| Location | Start of Exposure | End of Exposure |
|--------------------------------|--------------------------|--------------------------|
| Cable between turbines C06-D06 | 51°44.590'N 001°14.923'E | 51°44.383'N 001°15.101'E |
| Cable between turbines F09-F08 | 51°44.736'N 001°17.428'E | 51°44.480'N 001°16.772'E |
| Cable between turbines F08-F07 | 51°44.481'N 001°16.772'E | 51°44.225'N 001°16.115'E |
| Cable between turbines F07-F06 | 51°44.225'N 001°16.115'E | 51°43.969'N 001°15.459'E |
| Cable between turbines G08-G07 | 51°44.274'N 001°16.950'E | 51°44.018'N 001°16.294'E |

For further information: Merlin Jackson email: merlinjackson@btinternet.com Tel: 07989520484

**Seabed Activity**First Published: 08 March 2018 | **Latest Update: 08 March 2018****Thanet Offshore Wind Farm – Extension Project**

Vattenfall is currently developing a proposal for an extension to the existing and operational Thanet Offshore Wind Farm which is located approximately 12km from the shore at Margate in Kent.

The extension would involve the addition of up to 34 turbines on the edges of the existing wind farm, with the nearest located around 8km from the coastline.

METOCEAN MEASUREMENT EQUIPMENT

All Mariners are to be advised that during recovery of Metocean Monitoring Equipment, all equipment was successfully recovered from site A3b (south of the Thanet Wind Farm) however the mooring equipment from the A2b location (north of the existing Thanet Offshore Wind Farm) was unrecoverable. Another attempt will be made to retrieve the remaining equipment from A2b location. An updated Notice to Mariners will be issued with vessel and proposed dates, and a final notice will be issued once the mooring equipment has been recovered from A2b.

LOCATION OF REMAINING EQUIPMENT

| | |
|---|--------------------------|
| 500kg chain clump weight and mooring line | 51°27.950'N 001°38.782'E |
| 200kg chain clump weight | 51°28.034'N 001°38.894'E |

For further information: Jennifer Munns, Vattenfall Marine Supervisor, Tel: +44(0)1843 572136 email: Jennifer.munns@vattenfall.com



Seabed Activity

First Published: 14 December 2017 | **Latest Update: 25 January 2018**

London Array Wind Farm – Inter array Cable Repairs

Please be advised that following cable repairs between E16 and F16 within the London Array Offshore wind farm potential cable exposure may exist until seabed resettlement has occurred.



The potential exposures are limited to an area extending 250m around E16 Wind Turbine Generator. The cable is contained within a trench that over time will natural fill. Periodic surveys will be conducted, and updates issued when the exposure has been removed.

E16 Location: 51°37'43.37" N 001°27'10.97" E

During diving operations, a 500m exclusion zone will implemented at the required dive location, but within the designated restricted zones.

| | Latitude | Longitude |
|----|--------------|--------------|
| 1 | 51° 38.075'N | 01° 26.370'E |
| 2 | 51° 38.192'N | 01° 26.689'E |
| 3 | 51° 38.292'N | 01° 26.934'E |
| 4 | 51° 38.219'N | 01° 27.200'E |
| 5 | 51° 38.021'N | 01° 27.270'E |
| 6 | 51° 37.841'N | 01° 26.995'E |
| 7 | 51° 38.007'N | 01° 26.297'E |
| 8 | 51° 38.075'N | 01° 26.370'E |
| 9 | 51° 38.192'N | 01° 26.689'E |
| 10 | 51° 38.292'N | 01° 26.934'E |
| 11 | 51° 38.219'N | 01° 27.200'E |
| 12 | 51° 38.021'N | 01° 27.270'E |
| 13 | 51° 37.841'N | 01° 26.995'E |
| 14 | 51° 37.811'N | 01° 26.817'E |

It should be noted that only 8 of these anchor locations will be utilised at any one time, which will be determined by operational requirements.

For further information: Duty Marine Coordinator, Tel: +44 07920854358 email: marinecoordinators@londonarray.com

Seabed Activity

First Published: 08 February 2018 | **Latest Update: 22 March 2018**

East Anglia One Offshore Wind Farm – Confirmed Unexploded Ordnance

Please be advised that confirmed unexploded ordnance has been identified at the following as found coordinates:



| Location | Location | Location |
|--------------------------|--------------------------|--------------------------|
| 52°16.636'N 002°31.259'E | 52°16.547'N 002°33.295'E | 52°15.498'N 002°28.164'E |
| 52°18.125'N 002°28.624'E | 52°15.730'N 002°33.763'E | 52°13.236'N 002°29.351'E |
| 52°18.397'N 002°28.516'E | 52°18.610'N 002°34.039'E | 52°15.667'N 002°31.968'E |
| 52°18.251'N 002°30.449'E | 52°18.788'N 002°33.930'E | 52°10.642'N 002°30.731'E |
| 52°18.351'N 002°32.430'E | 52°19.474'N 002°33.631'E | 52°10.497'N 002°30.874'E |
| 52°18.381'N 002°30.384'E | 52°11.547'N 002°12.908'E | 52°10.222'N 002°32.822'E |
| 52°18.308'N 002°30.456'E | 52°10.912'N 002°06.912'E | 52°17.442'N 002°30.806'E |
| 52°18.239'N 002°30.460'E | 52°16.028'N 002°27.845'E | 52°17.472'N 002°30.826'E |
| 52°17.162'N 002°32.883'E | 52°18.352'N 002°30.331'E | 52°12.880'N 002°31.513'E |
| 52°17.178'N 002°32.917'E | 52°15.688'N 002°28.028'E | 52°16.244'N 002°31.406'E |

For further information: Graham Farrant, Tel: 0141614290 or 7834 603291 email: gfarrant@scottishpower.com

Seabed Activity

First Published: 14 December 2016 | Latest Update: 22 February 2018

Gallopier Wind Farm – Fishing Hazard & Exposed Cable

Please be advised that the Multi-Cat “Coastal Chariot” PCWZ is expected to commence operations at Gallopier Offshore Windfarm circa 15th December 2017 until further notice.



The vessel will be conducting Subsea cable works in the vicinity of Sizewell beach (approximately 300m at nearest point). A wide berth is requested when passing this vessel during operations. The vessel can be contacted on VHF Channel 16 throughout for any further information.

For reference, the cable could be envisaged to be bound by a box with the corners at the following coordinates,-

52°12.372'N 001°37.394'E
 52°12.359'N 001°37.392'E
 52°12.392'N 001°37.543'E
 52°12.369'N 001°37.550'E

Fishing Hazard

Please be advised that a concrete mattress has been dropped within the windfarm. The mattress is 6 metres x 3 metres and 0.15 metres high. It weighs 4.5 tonnes. Positon: 51°57.077'N 002°01.141'E

The Secretary of State has approved the Application of Safety Zones on the Gallopier Wind Farm project. These are defined as:

1. A Statutory 500m Safety Zone at the location of each wind turbine, offshore sub-station and their foundations whilst work is being performed, as indicated by the presence of construction vessels;
2. A Statutory 50m Safety Zone around all structures until construction and commissioning is completed.

All Vessels not involved in construction are prohibited from entering or remaining in the Safety Zones.

During the commissioning process, construction vessels will be coming and going from the Site frequently. The 500m Safety Zone will therefore be in force around various assets on the site, dependent on which area is being worked on and it may not be obvious when the 500m safety zone will come into effect. In the interests of reducing the navigational risk, all vessels are advised to remain well clear of 500m safety zones at all times and to avoid doing anything that may interfere with or obstruct the commissioning process.

For further information: Lee Cornwell, Gallopier Wind Farm Limited, Mob: +44 (0)7917 474352, Email: lee.cornwell@rwe.com

Seabed Activity

First Published: 08 March 2018 | Latest Update: 08 March 2018

East Anglia One Offshore Wind Farm – Construction Commencement

NOTICE IS HEREBY GIVEN East Anglia ONE Offshore Windfarm will commence construction March 12th 2018. Rock placement within the windfarm area will be the first operation.

**Description**

The East Anglia ONE Offshore Windfarm has a target power generation capacity of up to 714 MW with 102 Siemens 7MW turbines being installed. The East Anglia ONE(EA ONE) site is located in the southern North Sea within the south-eastern area of the East Anglia Zone, which was identified as part of The Crown Estate Round 3 offshore wind leasing process. The site covers an area of approximately 300 km², and it is located approximately 45 km southeast of the town of Lowestoft.

| Buoy | Location |
|--------------------------------------|--------------------------|
| North Cardinal Buoy VQ | 52°19.493'N 002°29.584'E |
| North Cardinal Buoy Q | 52°19.970'N 002°33.515'E |
| East Cardinal Buoy, Q (3) 10s | 52°18.554'N 002°34.586'E |
| Special Mark Buoy, FI Y 5s | 52°16.661'N 002°34.370'E |
| East Cardinal Buoy V Q (3) 5s | 52°14.203'N 002°34.089'E |
| Special Mark Buoy FI Y 5s | 52°12.025'N 002°33.840'E |
| East Cardinal Buoy Q (3) 10s | 52°09.849'N 002°33.538'E |
| South Cardinal Buoy Q (6) + L FI 15s | 52°08.629'N 002°31.675'E |
| West Cardinal Buoy Q (9) 15s | 52°09.089'N 002°27.359'E |
| Special Mark Buoy FI Y 5s | 52°10.926'N 002°26.366'E |
| West Cardinal Buoy, V Q (9) 10s | 52°12.754'N 002°25.339'E |
| Special Mark Buoy FI Y 5s | 52°14.874'N 002°26.092'E |
| West Cardinal Buoy, Q (9) 15s | 52°16.987'N 002°26.889'E |

For further information: Graham Farrant, Tel: 0141614290 or 7834 603291 email: gfarrant@scottishpower.com

Rampion OWF – Installation OF New East Export Cable Protection

The Deep Volans will be conducting surveys of the CR4 Export cable route. The vessel will be surveying the sea bed 250m either side of the below coordinates. Operations are planned to start on the 20/03/18 and last approx. 1-month weather permitting.



| | |
|-------------------------|-------------------------|
| 50°49.034'N 00°20.175'W | 50°44.011'N 00°18.881'W |
| 50°48.817'N 00°20.067'W | 50°43.729'N 00°18.779'W |
| 50°48.499'N 00°19.917'W | 50°43.441'N 00°18.649'W |
| 50°47.507'N 00°19.275'W | 50°43.297'N 00°18.571'W |
| 50°46.910'N 00°19.040'W | 50°43.245'N 00°18.534'W |
| 50°46.862'N 00°19.028'W | 50°43.179'N 00°18.477'W |
| 50°46.634'N 00°18.995'W | 50°43.131'N 00°18.427'W |
| 50°46.586'N 00°18.995'W | 50°42.958'N 00°18.205'W |
| 50°46.069'N 00°19.062'W | 50°42.787'N 00°17.929'W |
| 50°45.436'N 00°19.194'W | 50°42.383'N 00°17.155'W |
| 50°45.331'N 00°19.218'W | 50°42.290'N 00°16.978'W |
| 50°45.274'N 00°19.224'W | 50°41.902'N 00°16.244'W |
| 50°45.179'N 00°19.222'W | 50°41.796'N 00°16.006'W |
| 50°45.073'N 00°19.196'W | 50°41.647'N 00°15.666'W |
| 50°44.401'N 00°18.983'W | 50°41.623'N 00°15.635'W |
| 50°44.230'N 00°18.939'W | 50°41.576'N 00°15.598'W |
| 50°44.011'N 00°18.881'W | |

Please note that ATOn on Wave rider 1 and 3 is extinguished

| Buoy | Current Position | Re-deployed Position |
|----------|-------------------------|-------------------------|
| #1 KP5 | 50°46.555'N 00°19.071'W | 50°46.547'N 00°18.864'W |
| #2 EOS | 50°41.394'N 00°16.146'W | 50°41.394'N 00°16.146'W |
| #3 Array | 50°40.203'N 00°12.950'W | 50°40.059'N 00°12.195'W |

Wave rider 1 and 3 will be relocated

Inter Array Cables - exposed sections

All inter array cables have now been installed. There are some sections of the installed inter array cables that are currently either shallow buried or exposed on the seabed. The shallow buried/exposed sections of cable could represent a significant hazard to fishing vessels and their gear (if fishing gear is deployed over them) and any vessels anchoring over them. Cable hazards will remain until completion of cable protection works planned for Q4 2017 and Q1 2018.

Dive Operations Nearshore Burial of Fibre Optic Cable

The Dive vessel Terramare 1 Call Sign: ZQWAM6 will be undertaking dive operations on the nearshore Fibre Optic cable. Operations are due to last approximately 5 days weather permitting. The divers will be jetting the cable into the seabed.

The anchor handler Willchallenge Call Sign: MYRX2 will be installing 8 x clump weights for the dive vessel. These will be removed once operations are complete.

| | | | |
|----------|--------------|-------------|---------|
| Anchor 1 | 50°48.8564'N | 0°20.0941'W | Planned |
| Anchor 2 | 50°48.8889'N | 0°20.0657'W | Planned |
| Anchor 3 | 50°48.7193'N | 0°20.0657'W | Planned |
| Anchor 4 | 50°48.7827'N | 0°19.8402'W | Planned |
| Anchor 5 | 50°48.5980'N | 0°19.9807'W | Planned |
| Anchor 6 | 50°48.6614'N | 0°19.7552'W | Planned |
| Anchor 7 | 50°48.4767'N | 0°19.8958'W | Planned |
| Anchor 8 | 50°48.5401'N | 0°19.6702'W | Planned |

The vessel will be operating on an anchor spread. All vessels are requested to remain a minimum safe distance of 500m from the vessel at all times. All mariners should be aware that High Speed project vessels (crew transfer vessels) are operating between the ports of Brighton, Shoreham, predominantly Newhaven and the wind farm.

Hazardous Areas:

| Hazard Area 1 | Hazard Area 2 | Hazard Area 3 |
|-------------------------|-------------------------|-------------------------|
| 50°48.875'N 00°20.141'W | 50°44.703'N 00°18.914'W | 50°43.711'N 00°18.308'W |
| 50°48.928'N 00°19.972'W | 50°44.724'N 00°18.747'W | 50°42.872'N 00°17.117'W |
| 50°47.587'N 00°18.982'W | 50°44.453'N 00°18.664'W | 50°42.481'N 00°17.677'W |
| 50°46.778'N 00°18.573'W | 50°44.434'N 00°18.834'W | 50°43.179'N 00°18.919'W |
| 50°46.683'N 00°18.981'W | | 50°43.432'N 00°18.985'W |
| 50°47.517'N 00°19.259'W | | |

- The Wind Farms requests, all such Gears DO NOT come within 500m of the exposed/shallow buried cables (as indicated above)
- The Wind Farms requests, mobile or towed demersal fishing gears (trawls, shellfish dredgers etc) gears DO NOT come within the vicinity of the cables in locations outside of these defined hazard areas.
- Furthermore, interaction between fishing gear (OR anchors) and the export cables could also cause damage to the export cables themselves. All mariners are requested NOT to anchor within 100m of the export cables and to make themselves aware of their obligations for conducting activities over buried cable.

For further information: Gordon Bain (Eon Marine Coordination) +44(0)7787241442 email leadmc@rampionoffshore.com

Deployment of Buoys

First Published: 25 January 2018 | Latest Update: 08 February 2018

East Anglia One OWF – Meteorological Buoys

East Anglia ONE Offshore Windfarm has installed meteorological monitoring buoys in the following locations

EA 1 N 52°19.343'N 002°32.479'E
EA 1 S 52°09.171'N 002°32.987'E



The buoys are lit by FL (5) Y 20s Range 4 nautical miles and be equipped with radar reflectors. The buoys will be deployed until June 2020

With reference to the buoys, mariners are requested to:

- Please give 200 metres minimum clearance distance;
- Refrain from deploying any fishing gear in the vicinity to reduce the danger of entanglement and equipment loss;
- Under no circumstances moor to any part of the deployed mooring or buoy.

For further information: Graham Farrant, Scottish Power, Tel: +44(0)141614 2490 email: gfarranr@scottishpower.com

Survey

First Published: 08 March 2018 | Latest Update: 08 March 2018

East Anglia One Offshore Wind Farm – Survey

Please be advised that Bibby HydroMap Limited. will be carrying out hydrographic & geophysical survey operations of the East Anglia ONE (EA ONE) wind farm.



The majority of the survey effort will be focused on the wind farm site, however there may be a requirement for some additional minor survey works in the wider export cable route (between the site and the coast). This will be communicated through further Notice to Mariners.

The survey vessel will also be focused on the near shore area of the export cable routes.

Survey Operations with MV Felix Call Sign: FJVE will commence on 12th March 2018. The expected remaining duration is 3 weeks or sooner, weather permitting.

For further information: Lisa Chapman, Bibby Hydromap, Tel: +44(0)151 328 1120 email: email@lisa.chapman@bibbyhydromap.com

Survey Activity

First Published: 08 March 2018 | Latest Update: 08 March 2018

Triton Knoll Offshore Wind Farm – Survey

| Company, Vessel & Call Sign | Survey Area | Survey Area | Start Timeframe & Duration |
|--------------------------------|--|--|---|
| Fugro Fugro Scout 9V3887 | 53° 31.960' N 0° 42.642' E 53° 32.557' N 0° 51.914' E 53° 24.251' N 1° 00.462' E 53° 24.251' N 0° 59.284' E 53° 23.714' N 0° 59.744' E 53° 23.712' N 0° 55.686' E 53° 25.085' N 0° 51.444' E 53° 24.175' N 0° 50.459' E 53° 23.439' N 0° 48.637' E | 53° 23.731' N 0° 48.068' E 53° 22.844' N 0° 45.969' E 53° 22.899' N 0° 45.023' E 53° 24.177' N 0° 45.382' E 53° 24.810' N 0° 44.817' E 53° 27.524' N 0° 45.782' E 53° 29.084' N 0° 40.925' E | 6 th March 2018 For 3 Weeks |



For further information: Sally Dalrymple, Fugro, Tel: +44(0) 1491 820 500 email: s.dalrymple@fugro.com

Survey Activity

First Published: 11 January 2018 | Latest Update: 11 January 2018

East Anglia Offshore Wind Farm – UXO Survey

| Company, Vessel & Call Sign | Survey Area | Survey Area | Start Timeframe & Duration |
|---|--|--|--|
| Scottish Power Renewables Neptunus PGET Siem N-Sea C6YG5 Siem Barracuda 5BZQ3 | 52°45.176'N 002°45.563'E 52°46.452'N 003°04.291'E | 52°29.766'N 002°49.981'E 52°31.534'N 002°45.531'E | 15 th January 2018 For 40 Days |



For further information: Tim Searle, N-sea, Tel: 01224 459454 email: t.searle@n-sea.com

North Coast of Cornwall – Wave Hub Aids to Navigation

Please be advised that the previously notified clean swept Wave Hub South East Special Mark (site boundary marker) was replaced on the 13th March 2018. All Wave Hub operated navigation marks are currently on station, in good order and functioning correctly.



It is respectfully requested that fishermen maintain a 250m clearance where possible from Wave Hub Aids to Navigation to avoid fouling of the catenary moorings.

| Wave Hub AtoN Name | Details | Assigned Position | Current Status |
|------------------------------|--|-------------------------|----------------|
| Wave Hub NW N18100 | North Cardinal – 3m Diameter Buoy | 50°23.059'N 05°38.241'W | OK |
| Wave Hub SE N18107 | AIS Station + 6m Focal Plane, White 7nm Light: VQ | 50°20.637'N 05°35.006'W | OK |
| Wave Hub Site – NW N18101 | South Cardinal – 3m Diameter Buoy | 50°22.791'N 05°37.943'W | OK |
| Wave Hub Site – NE N18102 | 6m Focal Plane , White 7nm Light: VQ(6)+LFI(1)10s | 50°22.999'N 05°35.901'W | OK |
| Wave Hub Site – SE N18106 | Special Mark – 3m Diameter Buoy | 50°20.894'N 05°35.378'W | OK |
| Wave Hub Site – SW N18105 | 4m Focal Plane, GPS Synchronised, Yellow 5nm Light: FL.Y.5s (Sync) | 50°20.541'N 05°37.196'W | OK |

For further information: Julius Besterman, Wave Hub Limited, [Tel:01736 800291](tel:01736800291) email: Julius.besterman@wavehub.co.uk

Walney Extension Wind Farm – Operations

A programme of work which will involve Controlled Flow Excavation operations on a section of the W0W04 EXPORT CABLE in the Lune Deep/Heysham Lake area (off Middleton Sands) is scheduled to start on or around Monday 26th March.



The work will be carried out by the 33 meter Utility Vessel 'VOE VANGUARD' and can be expected to run for approx. 4 days, dependant on weather and conditions.

Start of trenching: 54°00.04'N 003°01.83'W End of trenching: 54°00.20'N 003°02.63'W

'VOS SUGAR' will display the ALPHA FLAG whenever DIVERS are in the water. Duration of the work is expected to be approx. 4 days, depending on weather and conditions and the Dive Support vessel 'VOS SUGAR' will be on stand-by throughout trenching and post trenching survey. A support 'RIB' will also be in attendance as and when required.

A listening watch will be kept on VHF Channels 16 and 14 and 'HERMES 1V' or 'VOS SUGAR' can be contacted for information relating to vessel movement only.

WOWO4 Export Cable – Landfall position Middleton Sands

Remedial work to the WOWO4 Export Cable at the Landfall position off Middleton Sands is scheduled to be carried out as weather and conditions permit.

To facilitate this work four marker poles will be positioned off the shoreline and at the positions shown below, these marker poles will act as visual aids and positioning guides for two small Jack-ups. Pinned Rollers that will be roughly less than 0.5m from beach high are also to be installed.

Marker poles markings and positions

The top 500mm shall be painted yellow with 3M reflective tape. A wind sock shall be installed on two of the markers and the marker poles will be installed 4.5m into sea bed giving a 2.1m visual with a 5m sea depth.

| | | |
|----------|-------------|--------------|
| Marker 1 | 54°00.342'N | 002°55.828'W |
| Marker 2 | 54°00.333'N | 002°55.828'W |
| Marker 3 | 54°00.348'N | 002°55.542'W |
| Marker 4 | 54°00.342'N | 002°55.542'W |

Wind Farm site guard vessels

There are currently four Guard Vessels engaged :

'KARIMA' is primary Wind Farm Site, 'FAIRLINE SURVEYOR' secondary Wind Farm site/Export Cable 'OCTOPUS' and 'MARY ANN' along the Export Cable Route.

'KARIMA' will conduct 6 hourly Securite broadcasts informing Mariners of site relevant safety information, these will be announced on VHF Channel 16 and broadcast will take place on VHF channel 67 at 06:00, 12:00, 18:00 & 00:00. If required 'KARIMA' can be contacted on VHF Channels 16 & 12 for information relating to any Cable Lay, Cable Pull In, Turbine Installation or vessel movement.

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

Local Awareness Charts

| Chart | Area | Location | Turbines | Developer | Completed | Link |
|-------------------------|------|-------------------------|----------|---------------------------|---------------|--------------------------|
| Barrow | 5 | 7km dudgeon Island | 30 | Orsted | 1 Jul 2006 | Download |
| Blyth | 2 | 1km N.E Coast | 2 | E.ON | - | Download |
| Burbo Bank | 5 | 5.2km Crosby | 25 | Orsted | 27 Oct 2007 | Download |
| Dudgeon | 3 | 38km Outer Wash | 67 | Statkraft / Statoil | - | Download |
| Greater Gabbard | 3 | 26km off Orford, Sufflk | 140 | SSE & RWE Npower / Innogy | 7 Sept 2012 | Download |
| Gwynt y Mor | 5 | 13km off N Wales Cst | 160 | RWE Innogy / SWM | 18 Jun 2015 | Download |
| Gunfleet Sands 1, 2 & 3 | 3 | 8.5km off Clacton-On-S | 50 | Orsted | 19 April 2010 | Download |
| Humber Gateway | 3 | 8km off Holderness Cst | 73 | E.ON UK | 5 Jun 2015 | Download |
| Hywind | 2 | 25km off Peterhead | 5 | Statoil | - | Download |
| Inner Dowsing | 3 | 5km off Skegness | 27 | Siemens | 30 Mar 2009 | Download |
| Kentish Flats | 3 | 9km off Whitstable | 30 | Vattenfall | 1 Oct 2015 | Download |
| Lincs | 3 | 8km off Skegness | 75 | Centrica | 10 Oct 2013 | Download |
| London Array | 3 | 24km off Clacton-on-S | 175 | Orsted | 1 May 2013 | Download |
| Lynn | 3 | 5km off Skegness | 27 | Siemens | 30 Mar 2009 | Download |
| North Hoyle | 5 | 7.5km off Prestatyn | 30 | RWE Innogy UK | 1 Dec 2003 | Download |
| Race Bank | 3 | 27km Lincolnshire | 91 | Orsted | - | Download |
| Ormonde | 5 | off Walney Island | 30 | Vattenfall | 22 Feb 2012 | Download |
| Rampion | 3 | Off Sussex Coast | 116 | E.ON UK Renewables | - | Download |
| Rhyl Flats | 5 | 8km Abergele | 25 | RWE Innogy UK | 2 Dec 2009 | Download |
| Robin Rigg | 5 | 9.5km Maryport | 60 | E.ON UK Renewables | 16 Apr 2010 | Download |
| Scroby Sands | 3 | 3km NE Great Yarmth | 30 | E.ON UK Renewables | 1 Mar 2004 | Download |
| Sheringham Shoal | 3 | Sheringham, Grtr Wash | 88 | Statkraft / Statoil | 27 Sep 2007 | Download |
| Teesside | 3 | 1.5km NE Teesmouth | 27 | EdF ER | 1 Aug 2013 | Download |
| Thanet | 3 | 11km Foreness Point | 100 | Vattenfall | 23 Sept 2010 | Download |
| Walney 1 | 5 | 14km Walney Island | 51 | Orsted / SSE (+ prttrs) | 9 Jan 2012 | Download |
| Walney 2 | 5 | 14km Walney Island | 51 | Orsted / SSE (+ prttrs) | 9 Jan 2012 | Download |
| West of Duddon Sands | 5 | 14km Walney Island | 108 | Scottish Power / Orsted | 30 Oct 2014 | Download |
| Westermost Rough | 3 | 25km north of Spurn P | 35 | Orsted | 26 Mar 2015 | Download |

National Awareness Charts

| Chart | Link |
|--------------------------|--------------------------|
| North Sea North & West | Download |
| North Sea Central | Download |
| North Sea South | Download |
| English Channel | Download |
| South Western Approaches | Download |
| Irish Sea | Download |
| Baltic North | Download |
| Baltic South | Download |

National Fishing Plotter Files

| File | Link |
|---|--------------------------|
| Kingfisher Fishing Plotter Files – KIS-ORCA January 2018 (Subsea Cables and Wind Farms) | Download |