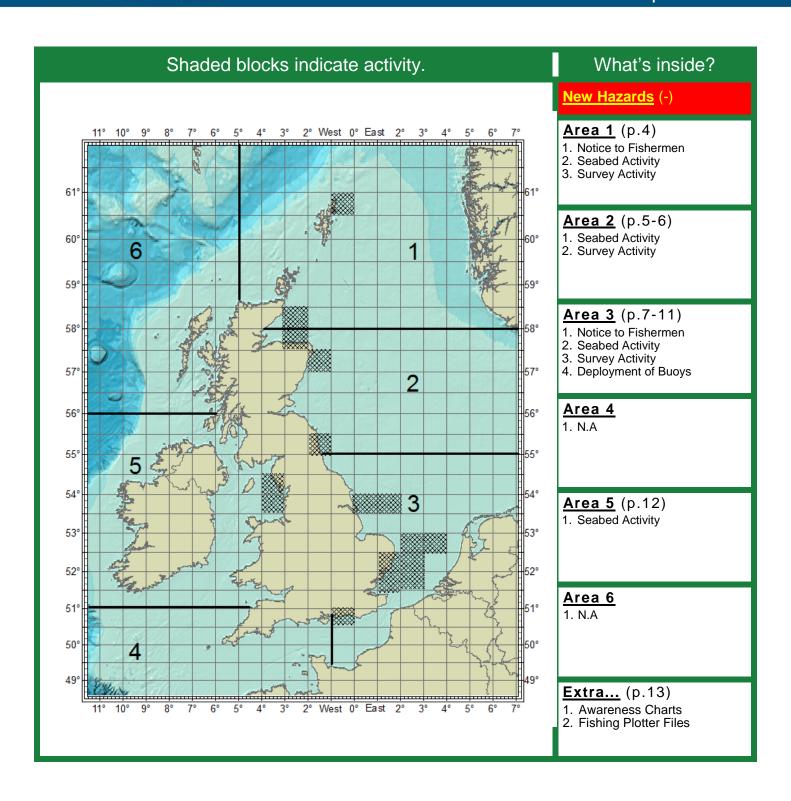
Kingfisher Bulletin Offshore News

RENEWABLE ENERGY

08 FEBRUARY 2018 | ISSUE 03



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

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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: 25 January 2018 | Latest Update: 25 January 2018

KIS-ORCA Information – 2018 Now Available



The latest release of the KIS-ORCA data is now being distributed to fishermen and is available to download here.

KIS-ORCA Data 2018 contains the latest renewables and cable information and is available for the following fishing plotter systems: Sodena, Maxsea, Olex, Penta, SIS MicroPlot, Transas Navifisher, Litton FishMaster, TMPlanner Quodfish, Trax and also your FishSAFE Unit.

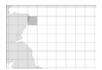
For further information: Kingfisher Information, using the details at the foot of this page.

Seabed Activity

First Published: 30 November 2017 | Latest Update: 02 January 2018

Hywind - Subsea Rock Installation

Please be informed that the rock installation works, carried out by our contractor Van Oord, to protect Hywind Scotland's export cable, was completed 30 December 2017. The vessel involved in the works was the fallpipe vessel, Stornes.



This works was the last rock installation works required to protect Hywind Scotland's export cable and also the last construction works for the Hywind Scotland Pilot Park.

All construction works for the Hywind Scotland Pilot Park have now been completed.

For further information: Ove Vold, Statoil ASA, Tel: +47 41516519 email: owo@statoil.com

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 000°59.917'W	5.	60°41.818'N 000°59.400'W	9.	60°41.878'N 000°59.917'W
2.	60°41.813'N 000°59.862'W	6.	60°41.835'N 000°59.217'W	10.	60°41.813'N 000°59.862'W
3.	60°41.814'N 000°59.701'W	7.	60°41.869'N 000°59.101'W		
4.	60°41.815'N 000°59.437'W	8.	60°41.900'N 000°59.030'W		

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

First Published: 18 May 2017 | Latest Update: 07 February 2018

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 is progressing at these locations and export cabling underway.

Jacket Installation

The Heavy Lift Vessel (HLV) Oleg Strashnov has returned to site and will re-mobilise to continue the jacket foundation



nstallation 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° 55.58°2' 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° 50.58°5' 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 BE-F2	58° 17.680' N 58° 11.685' N	002° 54.037' W 002° 55.005' W	BE-K6 BE-K7	58° 15.027' N 58° 15.648' N	002° 49.669' W 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 BE-F5	58° 12.927' N 58° 13.548' N	002° 54.58°8' W 002° 54.378' W	BE-K9 BE-K10	58° 16.890' N 58° 17.510' N	002° 49.036' W 002° 48.825' W
BE-F6	58° 14.168' N	002 54.376 W	BE-K10 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 53.750 W 002° 53.540' W	BE-L7	58° 15.862' N	002 48.403 W
BE-F10	58° 16.653' N	002° 53.330' W	BE-L8	58° 16.482' N	002 46.333 W 002° 48.122' W
BE-F11	58° 17.274' N	002° 53.120′ W	BE-L9	58° 17.104' N	002 46.122 W 002° 47.910' W
BE-F12	58° 17.894' N	002° 52.911' W	BE-L10	58° 17.724' N	002 47.910 W 002° 47.698' W
BE-F13	58° 18.516' N	002 52.911 W	BE-M9	58° 17.317' N	002 47.096 W 002° 46.784' W
BE-G3	58° 12.544' N	002° 53.726′ W	BE-M10	58° 17.938' N	002° 46.571' W
Fun ant Cable	.2.01111	1 002 00.120 **	22 11110	1 00000 11	1 002 10.071 11

xport Cable

Cable wet store location at KP 67.7. 58° 14.806' N | 002° 53.028' W

BOWL Export Trenching EC2.2

The installation of two export cables (EC) in the Beatrice Offshore Windfarm construction site will continue with the jetting/trenching of the installed section of EC2.2 from KP68 to KP33 (positions below). In this respect the work listed here is due to be carried out as described below starting on 7th Feb 2018. Expected to be completed by the 15th Feb 2018.

57° 57.260' N 003° 02.640' W

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

Survey Activity

First Published: 11 January 2018 | Latest Update: 08 February 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 is expected to recommence site investigations on 13 February 2018 at the earliest. The Fugro Scout commenced site investigations on 4 January 2018. The Gargano commenced site investigations on 17 January 2018.

1. 58°19.380'N 002°44.280'W
2. 58°13.140'N 002°34.260'W
5. 58°12.600'N 002°52.440'W

58°08.100'N 002°34.200'W

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

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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: 14 December 2017 | Latest Update: 26 December 2017

Aberdeen OWF - Pre Lay Cable Grapnel Run

Please be advised of the following activities proposed to be undertaken at the Aberdeen Offshore Wind Farm Site. Pre lay cable grapnel run.

TEMPORARY LAYDOWN OF ANCHORS – From 22nd January 2018 for 4 Weeks

The area position below will be used as the Temporary Lay down area.

North: 57°12.883'N 002°03.035'W West: 57°12.839'N 002°03.091'W East: 57°12.572'N 002°02.179'W South: 57°12.528'N 002°02.233'W

All items that will be placed in the temporary laydown area are to be well marked with buoys and lights.

Please note - All mariners are requested to maintain a minimum 500m 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

Latitude	Longitude
57° 13.420' N	02° 00.758' W
57° 13.703' N	02° 00.132' W
57° 14.010' N	01° 59.371' W
57° 14.405' N	01° 58.551' W
57° 12.948' N	02° 00.671' W
57° 13.203' N	02° 00.013' W
57° 13.465' N	01° 59.274' W
57° 13.809' N	01° 58.450' W
57° 12.476' N	02° 00.627' W
57° 12.704' N	01° 59.921' W
57° 12.960' N	01° 59.151' W
57° 12.993' N	02° 03.484' W
57° 12.399' N 57° 12.390' N	02° 02.666' W 02° 01.474' W 02° 00.641' W
	57° 13.420' N 57° 13.703' N 57° 14.010' N 57° 14.405' N 57° 12.948' N 57° 13.203' N 57° 13.465' N 57° 13.809' N 57° 12.476' N 57° 12.704' N 57° 12.960' N 57° 12.993' N 57° 12.399' N

For further information: aowf.marinecoordination@vattenfall.com



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

Aberdeen OWF - Cable Shore Landing

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

Deployment of Buoys

First Published: 11 January 2018 | Latest Update: 08 February 2018

Aberdeen OWF - Retrieval of Floating Lidar Buoy

Mariners are advised that, around 11 to 18 FEBRUARY 2018, the temporary buoy station complete with 3 x 20 Tonne anchor mooring arrangement with the following characteristics will be powered down and recovered to shore.

57°13.509'N 001°59.895'W

For further information: aowf.marinecoordination@vattenfall.com

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Notice to Fishermen

First Published: 11 January 2018 | Latest Update: 07 February 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° 38.023'N 0° 57.631'E	53° 46.393'N 1° 37.600'E
53° 30.845'N 0° 34.862'E	53° 37.041'N 0° 50.270'E	53° 39.297'N 1° 4.352'E	53° 47.179'N 1° 42.476'E
53° 31.578'N 0° 39.614'E	53° 36.853'N 0° 52.049'E	53° 42.785'N 1° 14.597'E	53° 46.897'N 1° 42.521'E
53° 35.867'N 0° 44.724'E	53° 37.398'N 0° 55.881'E	53° 44.551'N 1° 23.470'E	53° 46.110'N 1° 37.631'E
53° 36.351'N 0° 43.759'E	53° 37.795'N 0° 55.860'E	53° 44.142'N 1° 23.786'E	53° 46.393'N 1° 37.600'E
53° 32.269'N 0° 39.237'E	53° 37.419'N 0° 51.589'E	53° 42.481'N 1° 16.200'E	
53° 31.201'N 0° 34.736'E	53° 37.502'N 0° 50.291'E	53° 38.563'N 1° 3.812'E	
		53° 37.767'N 0° 57.686'E	
		53° 38.023'N 0° 57.631'E	

Expected Open Trench area:

Area 1 Coordinates	Area 2 Coordinates
53° 44.832'N 1° 24.462'E	53° 47.167'N 1°42.202'E
53° 46.387'N 1° 37.436'E	53° 49.302'N 1° 45.995'E
53° 46.088'N 1° 37.608'E	53° 49.054'N 1° 46.321'E
53° 44.432'N 1° 24.635'E	53° 46.844'N 1° 42.444'E
53° 44.832'N 1° 24.462'E	53° 47.167'N 1° 42.202'E

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

Notice to Fishermen

First 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 Fishermen

First 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'F	51°44 018'N 001°16 294'F

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

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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.

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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: 14 December 2016 | Latest Update: 14 December 2017

Galloper Wind Farm – Fishing Hazard & Exposed Cable

Please be advised that the Multi-Cat "Coastal Chariot" PCWZ is expected to commence operations at Galloper 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

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

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

52°16.636'N 002°31.259'E 52°18.125'N 002°28.624'E 52°18.397'N 002°28.516'E 52°18.251'N 002°30.449'E 52°18.351'N 002°32.430'E 52°18.381'N 002°30.384'E 52°18.308'N 002°30.456'E



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

Seabed Activity

First Published: 14 December 2016 | Latest Update: 03 January 2018

East Anglia One Offshore Wind Farm – Construction Buoyage Established

NOTICE IS HEREBY GIVEN East Anglia ONE Offshore Windfarm has installed temporary construction buoyage to mark the boundaries of the East Anglia ONE Windfarm.

Location

52°10.926'N 002°26.366'E

52°12.754'N 002°25.339'E

52°14.874'N 002°26.092'E

52°16.987'N 002°26.889'E

вибу	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	52°08.629'N 002°31.675'E
West Cardinal Buoy Q (9) 15s	52°09.089'N 002°27.359'E



The above buoys will have a range of 5 nautical miles . Confirmation of location will be issued on deployment

Special Mark Buoy Fl Y 5s

Special Mark Buoy FI Y 5s

West Cardinal Buoy, Q (9) 15s

West Cardinal Buoy, V Q (9) 10s

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

First Published: 03 December 2015 | Latest Update: 22 January 2017

Rampion Offshore Wind Farm – Installation of New East Export Cable

Installation of New East Export Cable

The Stemat Spirit has completed removal of the east export cable.

The Panda will be carrying out some work on the HDD inshore duct end over the next 2 days. She will be on a 3-point anchor spread and mariners are advised to remain a minimum safe distance of 1000m during the vessel operations.

The Stemat Spirit and associated vessels will depart site after the Pandas operation and sail to Velson where she will load the new export cable.



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: 07 February 2018

East Anglia One OWF - Meteorological Buoys

East Anglia ONE Offshore Windfarm will install meteorological monitoring buoys in the following locations

EA 1 N 52°19.346'N 002°32.490'E EA 1 S 52°09.179'N 002°32.989'E EA 1 B 52°12.800'N 002°30.100'E



The buoys will be lit by FL (5) Y 20s Range 4 nautical miles and be equipped with radar reflectors. The buoys will be deployed on the 2nd February 2018 subject to weather and 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 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

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First Published: 01 December 2016 | Latest Update: 19 January 2018

Walney Extension Wind Farm - Operations

Please note that the whole of this area remains a designated construction site and all mariners are requested and advised to mark the positions of these Buoys on their charts/plotters and unless there are matters relating to their own safety or the safety of others they should keep clear and not enter the buoyed area until the Wind Farm has been commissioned with the Buoys removed



Section WOWO3

All 40 of the Wind Turbine Generators in this section of the Wind Farm are installed and commissioning work is progressing on the installation of the Tower sections, Nacelles and Blades (WTGs), again as weather and conditions permit. WTGs now Installed: D08, E08, F06, G05,

INSTALLATION VESSELS ON SITE 'SEAJACKS SCYLLA' for the installation of the WTGs WOWO4

'SEAJACKS SCYLLA' will make regular journeys to Belfast to re-load WTGs and will also at times be serviced by Helicopter for the transition of technicians or technical equipment. Two Crew Transfer/Service Vessels, the 26 meter 'NOS DETECTOR' and the 24.7 meter 'FOB SWATH 3' will act as support vessels.

ACCOMADATION VESSEL ON SITE 'WIND INNOVATION'

Various support and Anchor Handling Tugs (AHTs) are on site to assist in manoeuvring and installation, CTVs will also be operating between the area of the Wind Farm site and Barrow.

A 500 meter minimum Safe Working Distance is requested around all of the construction vessel at all times while on site

Pictures of the Installation vessels as well as some of the Anchor Handling and Transport Tugs that can be expected on site and in the area are on page 2 of the attachment.

CABLE LAY/CABLE BURIEL

The 15 meter Cable Trenching vessel 'HERMES 1V' is scheduled to carry out trenching operations at a section of the WOWO4 Export Cable in the Lune Deep/Heysham Lake area (off Middleton Sands)

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.

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 which are scheduled to arrive shortly after. Pinned Rollers that will be roughly less than 0.5m from beach high are also to be installed currently from the 12th January onwards.

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

Deployment of Buoys

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

Shell Flats Bank - Removal of Two Met Masts

Mariners are advised that, around 15 FEBRUARY 2018, the two Meterological Masts will be removed and is expected to last for approx. 28 days.

No.1 80m Mast: 53°52.423'N 003°12.133'W No.2 50m Mast: 53°51.600'N 003°17.663'W



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

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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	Statoil	-	Download
Galloper	3	27km off Suffolk Coast	56	Galloper Wind Farm Ltd	-	Download
Greater Gabbard	3	26km off Orford, Sufflk	140	SSE & RWE Npower Ren	7 Sept 2012	Download
Gwynt y Mor	5	13km off N Wales Cst	160	RWE Innogy / SWM / Siemens	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
Kentish Flats	3	9km off Whitstable	30	Vattenfall	1 Oct 2015	Download
Lincs	3	8km off Skegness	75	Centrica / Orsted / Siemens	10 Oct 2013	Download
London Array	3	24km off Clacton-on-S	175	Orsted / E.On / Masdar	1 May 2013	Download
Lynn and Inner Dowsing	3	5km off Skegness	54	Siemens	30 Mar 2009	<u>Download</u> <u>Download</u>
North Hoyle	5	7.5km off Prestatyn	30	Innogy SE	1 Dec 2003	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 Npower Renewables	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	Scira Offshore Energy Ltd	27 Sep 2007	Download
Teeside	3	1.5km NE Teesmouth	27	EdF ER	1 Aug 2013	<u>Download</u>
Thanet	3	11km Foreness Point	100	Vatenfall	23 Sept 2010	Download
Walney 1	5	14km Walney Island	51	Orsted / SSE (+ prtnrs)	9 Jan 2012	Download
Walney 2	5	14km Walney Island	51	Orsted / SSE (+ prtnrs)	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

Cha	rt Link
North Sea North & West	<u>Download</u>
North Sea Central	<u>Download</u>
North Sea South	Download
English Channel	<u>Download</u>
South Western Approaches	Download
Irish Sea	Download
Baltic North	<u>Download</u>
Baltic South	Download

National Fishing Plotter Files

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

