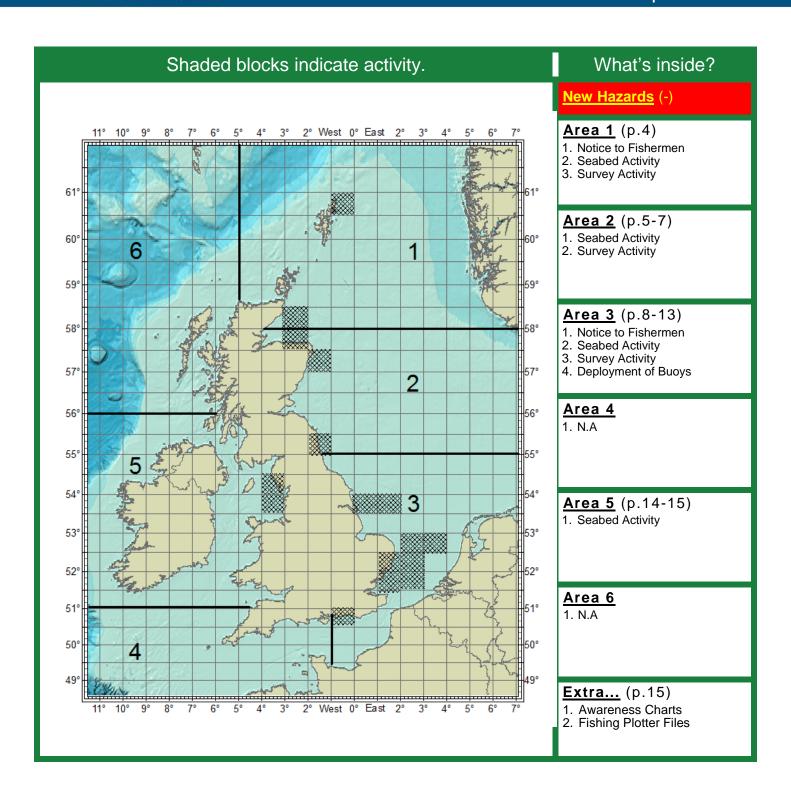
Kingfisher Bulletin Offshore News

RENEWABLE ENERGY

22 FEBRUARY 2018 | ISSUE 04



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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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: 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

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 (V	VGS84 datum)	Characteristics
	,	3° 33.018' W	
41	57° 51.141' N		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		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 email: t.r.barton@addn.ac.uk

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t: +44 (0)1472 252 307 | e: kingfisher@seafish.co.uk

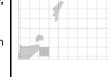


First Published: 18 May 2017 | Latest Update: 21 February 2018

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.

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	Installation campaign. The HLV Stanislav Yudin Will remain on standby in invergordon. Location ID Lat WGS84 Long WGS84 Location ID Lat WGS84 Long WG				
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	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° 54.58°8' 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 BE-L9	58° 16.482' N	002° 48.122′ W
BE-F11	58° 17.274' N	002° 53.120′ W		58° 17.104' N	002° 47.910′ W
BE-F12 BE-F13	58° 17.894' N 58° 18.516' N	002° 52.911' W 002° 52.701' W	BE-L10 BE-M9	58° 17.724' N 58° 17.317' N	002° 47.698' W 002° 46.784' W
BE-F13 BE-G3	58° 18.516 N 58° 12.544' N	002° 52.701°W	BE-M10	58° 17.317 N 58° 17.938' N	002° 46.784 W
DE-G3	00 12.044 IV	1 002 33.720 W	DE-IVITU	1 00 17.830 14	1 002 40.37 I W

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

BOWL Export Trenching EC2.2

The CLV Nexans Skagerrak has completed trenching the second section of the export cable to the wet store loop at KP 67.

KP 68 | 58° 14.900' N | 002° 54.820' W |

KP 33 | 57° 57.260' N | 003° 02.640' W |

BOWL Export Cable EC1.2 Pull In to OTM1

The installation of two export cables (EC) in the Beatrice Offshore Windfarm construction site will continue with the pull in of the export cable 1.2 to the Offshore Transformer Module OTM1. In this respect the work listed here is due to be carried out as described below starting on 24th Feb 2018. The works described are expected to be completed by the 30th Feb 2018.

| 58° 15.004'N | 002° 52.834'W |

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

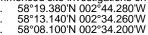
Survey Activity

First Published: 11 January 2018 | Latest Update: 20 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 20 February 2018 at the earliest. The Fugro Scout commenced site investigations on 4 January 2018. The Gargano commenced site investigations on 17 January 2018.



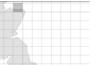
58°03.960'N 002°54.780'W 5. 58°12.600'N 002°52.440'W

2.

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

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Aberdeen OWF - Lost Clump Weight

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



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

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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

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
	57° 12.399' N	02° 02.666' W
Export Cable	57° 12.390' N	02° 01.474' W
	57° 12.473' N	02° 00.641' W

For further information: aowf.marinecoordination@vattenfall.com



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Survey Activity

First Published: 2 January 2018 | Latest Update: 20 February 2018

Blyth Offshore Wind Farm - Post Construction Fish/Shellfish & Trawl Survey

Natural Power will be conducting Fish, shell fish and Trawl surveys are proposed to commence on the 13th February 2018 and ending on the 1st March 2018. The Surveys will take 6 days in total this may vary due to weather conditions.

The vessel undertaking these surveys will be the 'Princess Royal'Call Sign: 2EYM2. The purpose of the survey is to assess the diversity and distribution of the fish and shellfish populations in and around the array. Survey details:

Three survey types will be used as part of this work – gill nets, pots and otter trawling.

- Potting survey will consist using eight fleets of 20 parlour pots set for 24 hours. This will be conducted over the course of three days.
- Otter trawl survey duration will be one day and consist of eight tows in total with duration of thirty minutes each at 3.5 knots. The trawl data will be collected across eight sampling stations.
- Set net survey five fleets of gill nets will be deployed across the survey area. Each fleet will measure 600 m in length and be constructed of monofilament. The surveys duration will be two days

55°16.070'N 001°34.070'W 55°11.650'N 001°14.220'W

3. 55°02.970'N 001°20.130'W

55°02.510'N 001°28.930'W 55°16.070'N 001°34.070'W 5.

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

Notice to Fishermen

First Published: 11 January 2018 | Latest Update: 20 February 2018

Hornsea Offshore Wind Farm – Export Cable Open Trenches

Map Link

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:

uo.				
Area 1 Coordinates	Area 2 Coordinates	Area 3 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° 30.845'N 0° 34.862'E	53° 37.041'N 0° 50.270'E	53° 39.297'N 1° 4.352'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° 35.867'N 0° 44.724'E	53° 37.398'N 0° 55.881'E	53° 44.551'N 1° 23.470'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° 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		

Area 4 Coordinates	Area 5 Coordinates
53° 46.393'N 1° 37.600'E	53° 44.830'N 1° 24.400'E
53° 47.179'N 1° 42.476'E	53° 44.280'N 1° 24.420'E
53° 46.897'N 1° 42.521'E	53° 44.855'N 1° 29.142'E
53° 46.110'N 1° 37.631'E	53° 45.464'N 1° 33.394'E
53° 46.393'N 1° 37.600'E	53° 45.870'N 1° 33.332'E
	53° 45.242'N 1° 28.670'E
	53° 44.830'N 1° 24.400'E

Expected Open Trench area:

Area 1 Coordinates	Area 2 Coordinates
53° 45.845'N 1° 32.727'E	53° 47.084'N 1°42.024'E
53° 46.437'N 1° 37.501'E	53° 49.919'N 1° 46.842'E
53° 46.019'N 1° 37.768'E	53° 51.705'N 1° 48.198'E
53° 45.354'N 1° 32.781'E	53° 50.965'N 1° 49.304'E
53° 45.845'N 1° 32.727'E	53° 48.920'N 1° 46.459'E
	53° 46.733'N 1° 42.233'E
	53° 47.084'N 1° 42.024'E
	53° 47.084'N 1°42.024'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'E	51°44.018'N 001°16.294'E

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

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

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

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

The Secretary of State has approved the Application of Safety Zones on the Galloper 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, Galloper Wind Farm Limited, Mob: +44 (0)7917 474352, Email: lee.cornwell@rwe.com

Seabed Activity

First Published: 08 February 2018 | Latest Update: 21 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	Location
52°16.636'N 002°31.259'E	52°17.162'N 002°32.883'E
52°18.125'N 002°28.624'E	52°17.178'N 002°32.917'E
52°18.397'N 002°28.516'E	52°16.547'N 002°33.295'E
52°18.251'N 002°30.449'E	52°15.730'N 002°33.763'E
52°18.351'N 002°32.430'E	52°18.610'N 002°34.039'E
52°18.381'N 002°30.384'E	52°18.788'N 002°33.930'E
52°18.308'N 002°30.456'E	52°19.474'N 002°33.631'E
52°18.239'N 002°30.460'E	52°11.547'N 002°12.908'E
	52°10.912'N 002°06.912'E
	52°16.028'N 002°27.845'E



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

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First Published: 03 December 2015 | Latest Update: 16 February 2017

Rampion OWF - Installation OF New East Export Cable Protection

Installation of New East Export Cable Protection

The rock bag installation vessel Voe Vanguard Call Sign: MBEN9 will be placing rock bags for cable protection between KP 0.95 and KP 1.5 on the East Export cable. Operations are planned to start on the 27/02/2018 and will last approx.. 5 days weather permitting.



During this 5-day work scope the vessel will also conduct identical works within the wind farm array. Installation of the new export cable will commence from around 21/01/18 and will last approximately 3 weeks.

	t Cable Route
	00°20.149'W
	00°20.147'W
	00°20.004'W
50°48.543'N	00°19.782'W
50°47.575'N	00°19.067'W

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



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.



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 Fl 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
Special Mark Buoy Fl 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 Fl Y 5s	52°14.874'N 002°26.092'E
West Cardinal Buoy, Q (9) 15s	52°16.987'N 002°26.889'E

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

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

Deployment of Buoys

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

Dudgeon OWF – Removal of Wave Buoy

Please be advised that the removal of the Wave buoy mooring will take place on the 20th February 2018. The vessels completing this task will be either the Grand Canyon I or Grand Canyon II.

The location of recovery is: 53°17.471'N 001°24.829'E



For further information: Michael Martins Statoil UK Ltd, tel: +44 7860849382 email: mimart@statoil.com

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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



First Published: 01 December 2016 | Latest Update: 19 February 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



Sub-stations

Both Offshore Sub-Stations, Z03 (section WOWO3) and Z04 (section WOWO4), are installed and commissioned.

Installation of wind turbine generators (WTGs)

Section WOWO3

All 40 of the Wind Turbine Generators in this section of the Wind Farm are installed, commissioning work in this section is ongoing as weather and conditions permit, 37 Turbines have been commissioned and are providing power to the national grid.

Section WOWO4 -

All 47 Mono-piles complete with the Transition Piece are installed in this section of the Wind Farm and work is progressing on the installation of the Tower sections, Nacelles and Blades (WTGs) as well as commissioning work, again as weather and conditions permit. 11 WTGs completed, 2 have been commissioned

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.

Accommodation 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

Dive Operations to support the trenching of a section of the W0W04 EXPORT CABLE in the Lune Deep/Heysham Lake area (off Middleton Sands) are scheduled to start on or around Wednesday 28th February. The Dive Support vessel will be 'VOS SUGAR' and the diving works will be to support the 15 meter Cable Trenching vessel 'HERMES 1V' The work area is identified as the blue box on the attached chartlet and below are the start and end positions of the Export Cable trenching and Dive Operations.

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

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

Shell Flats Bank - Removal of Two Met Masts

Mariners are advised that, around 26th 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

Extra...

Local Awareness Charts

Chart	Area	Location	Turbines	Developer	Completed	Link
Barrow	5	7km dudgeon Island	30	Orsted	1 Jul 2006	<u>Download</u>
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	Download
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	<u>Download</u>

National Awareness Charts

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

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