Beatrice Offshore Windfarm Limited

Construction Operations

Issue Date: 11th September 2017

LF000005-WNO-013: Weekly Notice of Operations - Rev 18



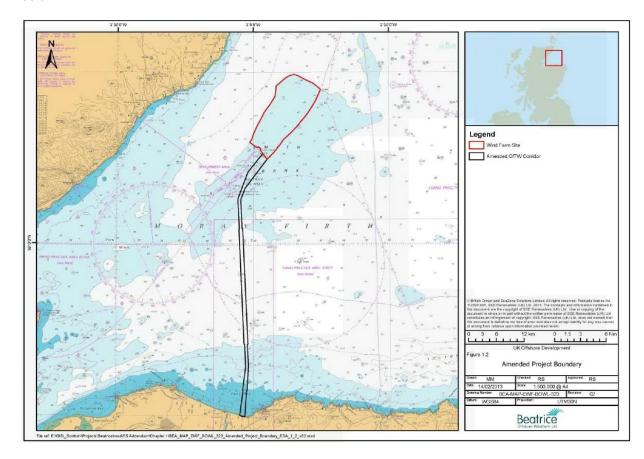
Notice of Operations at Beatrice Offshore Wind Farm

Work Planned for the Period 11.09.2017 to 17.09.2017

Construction of the Beatrice Offshore Wind Farm commenced on the 1st of April.

This notice will be updated weekly giving information on the progress and resources involved in the offshore project. The intention is to give an overview of activities and vessels involved. Should anyone have questions regarding the operations, we kindly ask you to put them forward well in advance.

Beatrice Offshore Windfarm Limited (BOWL) is developing the Beatrice Offshore Wind Farm in the 'Outer' Moray Firth on the north-western point of the Smith Bank, approximately 7 nm off the Caithness coastline. The development site will cover an approximate area of up to $130 \, \text{km}^2$ and will consist of 84 7MW offshore wind turbines (with a total capacity of $588 \, \text{MW}$) and two HVAC Offshore Transformer Modules (OTM). Water depths in the area range from approximately 38m below LAT in the south of the field to 60m below LAT in the north. The generated power will be transmitted to the grid via two subsea export / transmission cables with a landfall near Portgordon to the south of the field and grid connection at Blackhillock. The transmission cables will cover a route of approximately 38 nm from the wind farm boundary back to the landfall. The Beatrice Offshore Wind Farm development area is highlighted in red below.



Beatrice Offshore Wind Farm Location

Beatrice Offshore Windfarm Limited

Construction Operations

Issue Date: 11th September 2017

LF000005-WNO-013: Weekly Notice of Operations - Rev 18



1. Contact Details for Marine Coordination

The following contact can provide more information if required. Please note that specific queries can also be addressed to the relevant vessel or shore based representative.

Telephone Number	+44 (0) 3302 020329
Emergency Contact (24/7)	+44 (0) 7342 028207
Email for Marine Coordinator	mc.bowl@sse.com
Address	Unit 1 Harbour Office Wick Caithness KW1 5HA

2. Ongoing Operations

Beatrice Offshore Wind Farm Piling Campaign

Project:	Foundation Piling Campaign
Contractor:	SHL
Contract Purpose:	To install x 4 piles at the two OTM's and each Turbine Location within the construction site.
Area:	BOWL Construction Site: Foundation Locations. (See Fig 5 for details).
Deployment Dates:	01 April 2017 - 31 October 2017.
Deployment Vessel (s):	Stanislav Yudin, Bremen Fighter, Smit Sentosa & Rix Lynx, with various tugs and associated barges.
Equipment:	Pile Installation Frame (PIF), Piling Hammer and Transport barges.

On behalf of BOWL, Seaway Heavy Lifting will deploy various vessels to carry out the aforementioned work during the period 01/04/2017 – 31/10/2017 within the boundary of the BOWL construction site (See Vessel Data Matrix).

In preparation for the installation of wind turbine foundations, in the Beatrice Offshore Windfarm construction site, a set of four piles will be installed in the seabed at each of the foundation locations. On completion, the date will be recorded in Table 1 below. A chart of piled locations will be recorded in Fig 2 below.

Beatrice Offshore Windfarm Limited

Construction Operations

Issue Date: 11th September 2017

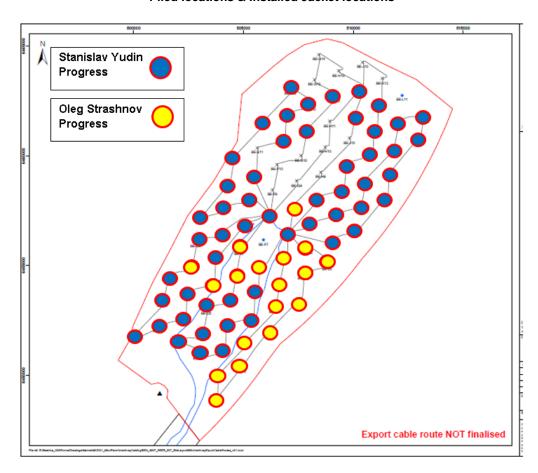
LF000005-WNO-013: Weekly Notice of Operations - Rev 18



Beatrice Offshore Wind Farm Jacket Installation Campaign

Project:	Jacket Installation Campaign (See Notice to Mariners) NTM-011
Contractor:	SHL
Contract Purpose:	To install WTG & OTM Jackets at completed piled locations within the construction site.
Area:	BOWL Construction Site: Jacket Locations. (See Fig1, Fig2, Table1.)
Deployment Dates:	08 August 2017 – September 2018.
Deployment Vessel (s):	Oleg Strashnov, Maersk Trader, VOS Prelude, Smit Seraya, Centaurus, Pegasus, Kamarina, Eraclea, President Hubert, Union Sovereign.
Equipment:	HLV equipment, Pile cleaning equipment, Grouting equipment.

Piled locations & Installed Jacket locations



Pile installation completed at: 72 Locations

Foundation installation completed at: 18 Locations

Beatrice Offshore Windfarm Limited

Construction Operations

Issue Date: 11th September 2017





Location ID	Latitude WGS84	Longitude WGS84	Piling Complete	Jacket installed
BE-A5	58° 12.471' N	002° 59.996' W	14.07.2017	
BE-B5	58° 12.687' N	002° 58.873' W	12.07.2017	
BE-B6	58° 13.308′ N	002° 58.664' W	16.06.2017	
BE-B7	58° 13.929' N	002° 58.456′ W	18.07.2017	
BE-C4	58° 12.307' N	002° 57.948' W	23.05.2017	
BE-C5	58° 12.902' N	002° 57.749' W	11.07.2017	
BE-C6	58° 13.524' N	002° 57.541' W	10.07.2017	
BE-C7	58° 14.144' N	002° 57.332' W	15.06.2017	01.09.2017
BE-C8	58° 14.766′ N	002° 57.124' W	17.07.2017	
BE-C9	58° 15.386' N	002° 56.915' W	28.08.2017	
BE-D3	58° 11.995' N	002° 57.002′ W	21.05.2017	
BE-D4	58° 12.497' N	002° 56.834' W	22.06.2017	
BE-D5	58° 13.117' N	002° 56.626′ W	26.05.2017	
BE-D6	58° 13.739' N	002° 56.417' W	13.06.2017	31.08.2017
BE-D7	58° 14.359' N	002° 56.209' W	31.05.2017	
BE-D8	58° 14.981' N	002° 55.999' W	02.06.2017	
BE-D9	58° 15.602' N	002° 55.790′ W	16.07.2017	
BE-D10	58° 16.223' N	002° 55.582′ W	31.08.2017	
BE-D11	58° 16.844' N	002° 55.373′ W	13.08.2017	
BE-E1	58° 10.900' N	002° 56.256′ W	10.04.2017	01.09.2017
BE-E2	58° 11.470' N	002° 56.128′ W	14.04.2017	16.08.2017
BE-E3	58° 12.090' N	002° 55.920' W	19.04.2017	
BE-E4	58° 12.712' N	002° 55.710′ W	02.07.2017	
BE-E5	58° 13.333' N	002° 55.502' W	19.05.2017	
BE-E6	58° 13.954' N	002° 55.293' W	18.05.2017	24.08.2017
BE-E7	58° 14.575' N	002° 55.084' W	01.06.2017	25.08.2017
BE-E8	58° 15.196' N	002° 54.875' W	30.05.2017	
BE-E9	58° 15.817' N	002° 54.665' W	15.07.2017	
BE-E10	58° 16.438' N	002° 54.456' W	01.09.2017	
BE-E11	58° 17.059' N	002° 54.247' W		
BE-E12	58° 17.680' N	002° 54.037' W	14.08.2017	
BE-F2	58° 11.685' N	002° 55.005' W	03.07.2017	06.09.2017
BE-F3	58° 12.306' N	002° 54.796' W	17.04.2017	07.09.2017
BE-F4	58° 12.927' N	002° 54.588' W	04.07.2017	
BE-F5	58° 13.548' N	002° 54.378' W	17.05.2017	
BE-F6	58° 14.168' N	002° 54.169′ W	11.05.2017	11.09.2017
BE-F8 (OTM2)	58° 15.411' N	002° 53.750′ W	08.04.2017	
BE-F9	58° 16.031' N	002° 53.540′ W		
BE-F10	58° 16.653' N	002° 53.330' W		
BE-F11	58° 17.274' N	002° 53.120′ W	07.09.2017	
BE-F12	58° 17.894' N	002° 52.911' W	05.07.2017	

Beatrice Offshore Windfarm Limited

Construction Operations

Issue Date: 11th September 2017



Location ID	Latitude WGS84	Longitude WGS84	Piling Complete	Jacket installed
BE-F13	58° 18.516' N	002° 52.701' W	10.09.2017	
BE-G3	58° 12.544' N	002° 53.726′ W	28.05.2017	15.08.2017
BE-G4	58° 13.142' N	002° 53.464′ W	17.06.2017	08.09.2017
BE-G5	58° 13.762' N	002° 53.254′ W	10.05.2017	09.09.2017
BE-G6	58° 14.384' N	002° 53.044′ W	06.05.2017	20.08.2017
BE-G7 (OTM1)	58° 15.004' N	002° 52.834′ W	03.04.2017	
BE-G8	58° 15.625' N	002° 52.625′ W	07.07.2017	10.09.2017
BE-G9	58° 16.247' N	002° 52.415′ W		
BE-G10	58° 16.867' N	002° 52.204' W		
BE-G11	58° 17.488' N	002° 51.994' W	20.08.2017	
BE-G12	58° 18.109' N	002° 51.784′ W	18.08.2017	
BE-G13	58° 18.730' N	002° 51.574′ W		
BE-G14	58° 19.351' N	002° 51.362′ W		
BE-H4	58° 13.356' N	002° 52.339′ W	19.06.2017	13.08.2017
BE-H5	58° 13.977' N	002° 52.130′ W	20.06.2017	27.08.2017
BE-H6	58° 14.598' N	002° 51.920′ W	20.04.2017	21.08.2017
BE-H7	58° 15.219' N	002° 51.709′ W	08.07.2017	
BE-H8	58° 15.840' N	002° 51.499' W	06.05.2017	
BE-H9	58° 16.461' N	002° 51.289′ W		
BE-H10	58° 17.082' N	002° 51.079′ W		
BE-H11	58° 17.703' N	002° 50.867' W		
BE-H12	58° 18.324' N	002° 50.657' W	09.09.2017	
BE-H13	58° 18.944' N	002° 50.446′ W		
BE-J5	58° 14.192' N	002° 51.005′ W	04.05.2017	26.08.2017
BE-J6	58° 14.812' N	002° 50.795' W	21.06.2017	
BE-J7	58° 15.433' N	002° 50.585' W	06.08.2017	
BE-J8	58° 16.055' N	002° 50.373′ W	12.06.2017	
BE-J9	58° 16.675' N	002° 50.163′ W	04.08.2017	
BE-J10	58° 17.296' N	002° 49.952' W		
BE-J11	58° 17.917' N	002° 49.741' W	26.08.2017	
BE-J12	58° 18.538' N	002° 49.530′ W	27.08.2017	
BE-J13	58° 19.159' N	002° 49.319′ W		
BE-K6	58° 15.027' N	002° 49.669' W	07.08.2017	
BE-K7	58° 15.648' N	002° 49.459' W	08.08.2017	
BE-K8	58° 16.269' N	002° 49.247' W	31.07.2017	
BE-K9	58° 16.890' N	002° 49.036' W	05.08.2017	
BE-K10	58° 17.510' N	002° 48.825' W		
BE-K11	58° 18.131' N	002° 48.614' W		
BE-K12	58° 18.752' N	002° 48.403' W		
BE-L7	58° 15.862' N	002° 48.333' W	09.08.2017	
BE-L8	58° 16.482' N	002° 48.122' W	25.07.2017	
BE-L9	58° 17.104' N	002° 47.910' W	31.07.2017	
BE-L10	58° 17.724' N	002° 47.698' W	30.07.2017	

Beatrice Offshore Windfarm Limited

Construction Operations

Issue Date: 11th September 2017

LF000005-WNO-013: Weekly Notice of Operations - Rev 18



Location ID	Latitude WGS84	Longitude WGS84	Piling Complete	Jacket installed
BE-M9	58° 17.317' N	002° 46.784' W	27.07.2017	
BE-M10	58° 17.938' N	002° 46.571' W	28.07.2017	

Pre-Lay Grapnel Run and Route Clearance (PLGR)

The Export cable and OTM Interconnector cable PLGR run will commence 6th September 2017.

The PLGR will be carried by the vessel Blue Castor, to a minimum 0.5 m depth into the seabed, along the centreline of the export (EC1and EC2) and Interconnector (IC) cable routes, a total of approximately 129 km PLGR.

PLGR is to be performed where new power cable will be protected by jetting. This is to ensure that the burial area is clear of debris. The operation has the aim of clearing any debris (such as discarded rope or fishing nets) from the route, to prevent damage to the jetting tool, or any hindrance to the burial.

A grapnel designed to hook surface debris such as fish nets, wires and ropes will be used as a minimum. Where any significant debris is recovered a second run will be performed with at least 100m overlap over the same area to ensure no additional debris remains.

A diagram of the grapnels and arrangement is shown below. There is no weak link in this rigging,



Grapnel Array

The method is to deploy the grapnel array and pay out a towing line to the appropriate length relative to the water depth. The towing line is passed over a sensitive load cell, which is monitored continuously both visually and recorded by the online computer. Changes in recorded tension may indicate that debris has been encountered. The grapnel is recovered and any debris cleared and retained on board. The grapnel array is then redeployed with an overlap of at least 100 meters. It shall be noted that these operations cannot guarantee that all seabed debris will be removed from the route. Should any significant sub-surface debris be determined then a minor deviation from planned route may be considered.

During the UXO-survey some possible UXOs have been detected along the cable routes. The PLGR will follow the cable route centre lines and avoid any possible UXO target by at least 10 meters.

Beatrice Offshore Windfarm Limited

Construction Operations

Issue Date: 11th September 2017

LF000005-WNO-013: Weekly Notice of Operations - Rev 18



Blue Castor		
General Description and Dimensions: 46.02m x 7.95m x 5.6m		
Call Sign:	OUKR2	
MMSI:	220294000	
Onshore Representative:	Oyvind Haug	
	E-mail: oyvind.haug@nexans.com	



Near Shore Diving Works

DSV Aramis		
General Description and Dimensions: Aluminium Workboat;15.7m, 4.95m 0.80m		
Call Sign:	LDEH	
MMSI:	257167000	
Onshore Representative:	Oyvind Haug	
Offshore representative:	E-mail: oyvind.haug@nexans.com	



Beatrice Offshore Windfarm Limited

Construction Operations

Issue Date: 11th September 2017

LF000005-WNO-013: Weekly Notice of Operations - Rev 18

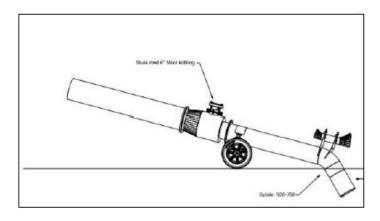


Dvergen		
General Description and Dimensions:	Tender Boat: 5.32m, 2.07m, 1.82m	
Call Sign:	n/a	
MMSI:	n/a	
Onshore Representative:	Oyvind Haug E-mail: oyvind.haug@nexans.com	



On behalf of Nexans Norway AS, Agder Dykk AS will install a pull in pipe to the already installed intake of the Export cable landfall pipe on both of the Export cable shore landing points. A surface diving operation will be conducted to install the pull in pipes over a distance of roughly 30m from the Export cable breakout location.

The dive support vessel Aramis will be positioned over the required location using a 4-point anchor system. Using a manually positioned dredging system, the divers will first clear the pipe trench over the 30m distance to a depth of 2m, moving the DSV on the anchors as required.



Recoil balanced jet dredging equipment

Beatrice Offshore Windfarm Limited

Construction Operations

Issue Date: 11th September 2017

LF000005-WNO-013: Weekly Notice of Operations - Rev 18



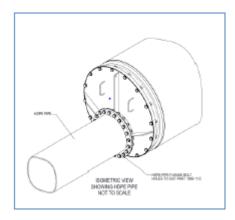
When the clearing of the intake pipe is finished the work with installing a PE pull in pipe can begin.

The scope of work is to lower the PE pull in pipe to the seabed and connect it to the steel flange on the intake pipe.

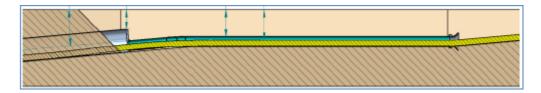
The PE pipe will be welded together in Buckie Harbour with electro fusing and be sealed in both ends before it gets towed to site with DSV Aramis.

For lowering the PE pipe, which has a positive buoyancy, it will use concrete weights. The pipe will be positioned over the steel flange and a diver will carefully open the seal so the pipe will start to sink slowly to sea bottom while air escapes out via a valve in the opposite end.

The pipe will be positioned in front of the steel flange still floating in the other end. A diver will use a lift bag to lift the PE pipe to the steel flange so the two parts can be connected.



Steel flange and PE pipe connected



PE pipe with power cable inside on seabed

Beatrice Offshore Windfarm Limited

Construction Operations

Issue Date: 11th September 2017

LF000005-WNO-013: Weekly Notice of Operations - Rev 18



3. Operations Commencing This Week

Installation of Horizontal Cable Pipes at EC2

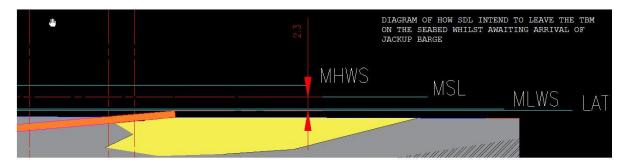
BOWL intends to install the export cables beneath Portgordon Beach. Pre-installed horizontal cable pipes require to be installed from the shoreline to an offshore exit point. These pipes are installed using a micro-tunnelling machine pushed through the ground beneath the seabed. At the exit points approximately 420-450m offshore, the removal of the Tunnelling tool and excavation works associated with this operation will take place. During this period Diving & Underwater operations shall be conducted.

The micro-tunnelling machine and pipeline behind it are pushed into the ground from onshore by a pipe thruster from a launch pit. The cutting wheel at the machines head breaks down and removes the material as it is directed along the determined route beneath the seabed.



Direct Pipe Drilling.

The drill machine is disconnected once it reaches the appropriate distance offshore and is recovered by divers or crane barge once it reaches the outfall. The pipe opening is then sealed to prevent sediment entering the pipeline.



Direct Pipe Pop Out.

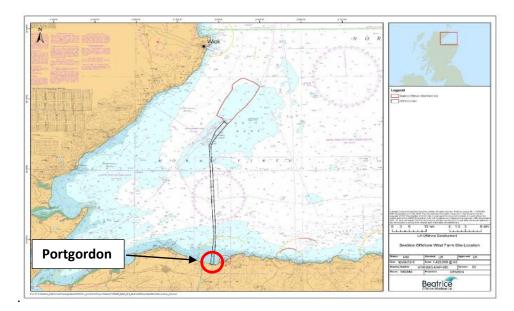
Beatrice Offshore Windfarm Limited

Construction Operations

Issue Date: 11th September 2017

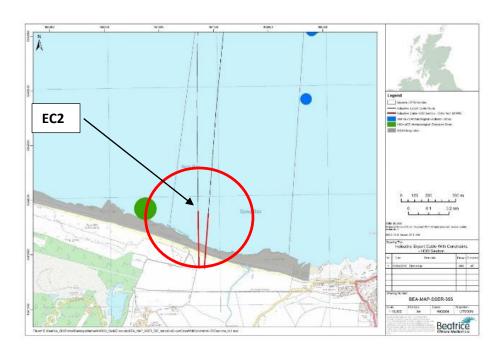
LF000005-WNO-013: Weekly Notice of Operations - Rev 18





Portgordon work location.

Jack Up Barge Location	Latitude WGS84	Longitude WGS84
EC2	57º 40.143'N	003º 02.655'W



EC2 work location is approximately 420-450m from the Portgordon Beach near Buckie.

Beatrice Offshore Windfarm Limited

Construction Operations

Issue Date: 11th September 2017

LF000005-WNO-013: Weekly Notice of Operations - Rev 18



The vessels that are involved with the described operation are the Jack-up Barge **Haven Seariser 1**, the **Forth Constructor** a Multicat work vessel and the Crew Transfer Vessel the **Skua**.

Haven Seariser 1	
General Description and Dimensions:	Jack Up Barge, L:29.6 / B:17.07 / D:2.44
Call Sign:	N/A
MMSI:	N/A
Onshore Representative:	Øyvind Haug BEATRICE Installation Engineering Manager Mob: +47 916 27 674 Office: +47 22 88 65 09



MV Skua		
General Description and Dimensions:	Crew Transfer Vessel, L:10.5m B:3.51m D:1.1m	
Call Sign:	N/A	
MMSI:	N/A	
Onshore Representative:	Øyvind Haug BEATRICE Installation Engineering Manager Mob: +47 916 27 674 Office: +47 22 88 65 09	



Beatrice Offshore Windfarm Limited

Construction Operations Issue Date: 11th September 2017



Forth Constructor				
General Description and Dimensions:	Multicat Work Vessel.L:28.50m B:9.45m D:4.27m			
Call Sign:	GXAD			
MMSI:	235004217			
Onshore Representative:	Øyvind Haug BEATRICE Installation Engineering Manager Mob: +47 916 27 674 Office: +47 22 88 65 09			



Beatrice Offshore Windfarm Limited

Construction Operations

Issue Date: 11th September 2017

LF000005-WNO-013: Weekly Notice of Operations - Rev 18



4. Completed Operations

Mariners are advised that, further to notice UoA/08/2017 and in conjunction with Beatrice Offshore Windfarm Limited (BOWL), the University of Aberdeen has <u>installed</u> scientific equipment moorings in the Moray Firth at the locations listed in table 1, below (see also chart extracts at the foot of this notice):

Table 1.

Name		oordinates 4 datum)	Characteristics
201	58° 19.109' N	2° 51.632' W	Subsurface.
202	58° 19.136' N	2° 51.652' W	Subsurface.
203	58° 19.163' N	2° 51.677' W	Subsurface.
204	58° 19.184' N	2° 51.691' W	Subsurface.

The moorings support sound recording equipment, and acoustic loggers that record echolocation clicks of dolphins and porpoises (see images of devices at the foot of this notice). All the above moorings are subsurface, consisting of a 50kg weight and a terminated rope riser. The above moorings do not extend more than three metres vertically from the seabed.

Mariners should also note that the following existing moorings (table 2) <u>remain in place</u> in the Moray Firth, as per our Notice to Mariners UoA/08/2017, and where appropriate in accordance with marine licence 05594/15/0 (see also chart extracts at the foot of this notice):

Table 2.

		ordinates	Characteristics
Name	(WGS84 datum)		
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.
40	57° 48.988' N	3° 36.379' W	Subsurface with acoustic release.
41	57° 51.141' N	3° 33.018' W	Subsurface with acoustic release.
42	57° 52.337' N	3° 29.058' W	Subsurface with acoustic release.
44	57° 56.261' N	3° 21.438' W	Subsurface with acoustic release.
45	57° 57.261' N	3° 16.084' W	Subsurface with acoustic release.
46	58° 00.861' N	3° 15.407' 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.
49	58° 04.450' N	3° 00.999' W	Subsurface.
54	58° 13.520' N	2° 41.961' W	Subsurface.
56	58° 18.724' N	2° 37.062' W	Subsurface.

Beatrice Offshore Windfarm Limited

Construction Operations

Issue Date: 11th September 2017



64	57° 42.521' N	3° 30.174' W	Surface marked (dhan, 12' aluminium & RADAR reflector)			
65	57° 43.485' N	3° 25.174' W	Surface marked (dhan, 12' aluminium & RADAR reflector)			
66	57° 43.082' N	3° 14.977' W	Surface marked (dhan, 12' aluminium & RADAR reflector)			
67	57° 42.069' N	3° 10.026' W	Surface marked (dhan, 12' aluminium & RADAR reflector)			
82	58° 00.625' N	3° 25.691' W	Subsurface with acoustic release.			
89	57° 56.056' N	3° 38.252' W	Subsurface with acoustic release.			
90	58° 01.064' N	3° 36.596' W	Subsurface with acoustic release.			
98	57° 54.168' N	3° 17.857' W	Subsurface.			
99	57° 50.854' N	3° 24.453' W	Subsurface with acoustic release.			
108	58° 18.993' N	2° 59.223' W	Subsurface.			
110	58° 07.668' N	2° 45.374' W	Subsurface.			
146	58° 15.224' N	2° 53.322' W	Subsurface with transponder.			
149	58° 16.151' N	2° 51.899' W	Subsurface with transponder.			
150	58° 16.755' N	2° 50.970' W	Subsurface with transponder.			
159	58° 09.260' N	2° 52.234' 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.			
163	58° 17.966' N	2° 44.992' W	Subsurface.			
164	58° 12.830' N	2° 51.669' W	Subsurface with transponder.			
165	58° 12.478' N	3° 01.251' W	Subsurface.			
175	58° 18.725' N	2° 46.841' W	Subsurface.			
178	58° 17.987' N	2° 49.250' W	Subsurface.			
179	58° 17.981' N	2° 50.020' W	Subsurface.			
180	58° 18.482' N	2° 52.002' W	Subsurface with transponder.			
181	58° 19.065' N	2° 51.260' W	Subsurface with transponder.			
182	58° 15.000' N	2° 55.733' W	Subsurface with transponder.			
183	58° 20.235' N	2° 50.708' W	Subsurface.			
184	58° 15.422' N	2° 47.713' W	Subsurface.			
185	58° 11.356' N	2° 59.450' W	Subsurface with transponder.			
186	57° 50.695' N	3° 39.256' W	Subsurface with acoustic release.			
187	57° 56.050' N	3° 45.720' W	Subsurface with acoustic release.			
188	57° 55.919' N	3° 53.286' W	Subsurface with acoustic release.			
189	57° 59.405' N	3° 48.781' W	Subsurface with acoustic release.			
190	58° 07.723' N	3° 07.467' W	Subsurface.			
191	58° 16.536' N	2° 46.446' W	Subsurface.			
192	58° 12.183' N	3° 26.160' W	Subsurface with acoustic release.			
193	58° 07.198' N	3° 34.320' W	Subsurface with acoustic release.			
194	57° 57.660' N	3° 57.358' W	Subsurface with acoustic release.			
195	57° 54.741' N	3° 31.761' W	Subsurface with acoustic release.			
196	58° 14.097' N	2° 54.656' W	Subsurface with transponder.			

Beatrice Offshore Windfarm Limited

Construction Operations

Issue Date: 11th September 2017

LF000005-WNO-013: Weekly Notice of Operations - Rev 18



197 58° 12.063' N 2° 57.544' W Subsurface with transponder.

A further Notice to Mariners will be issued when the removed moorings are permanently discontinued.

For information and enquiries please contact:

Tim Candido Barton,

Lighthouse Field Station, University of Aberdeen, George St., Cromarty, Ross-shire, IV11 8YL.

+44 (0)1381 600548.

t.r.barton@abdn.ac.uk



Examples of equipment which the above moorings support.

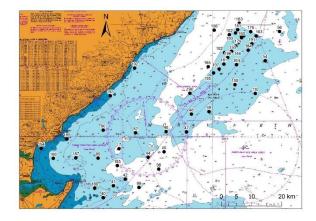
Beatrice Offshore Windfarm Limited

Construction Operations

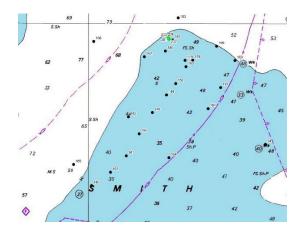
Issue Date: 11th September 2017

LF000005-WNO-013: Weekly Notice of Operations - Rev 18

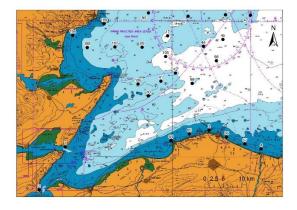




Mooring locations – Moray Firth, excluding sites along the Moray Firth southern shore.



Mooring locations – detail of Smith Bank sites, showing new locations (green). Moray Firth.



Mooring locations – detail of south side of Moray Firth sites.

Beatrice Offshore Windfarm Limited

Construction Operations

Issue Date: 11th September 2017

LF000005-WNO-013: Weekly Notice of Operations - Rev 18



5. General Safety Advice

All vessels engaged in the activity will exhibit appropriate lights and shapes prescribed by the International Regulations for Preventing Collisions at Sea; relative to their operations. All vessels engaged in the activity will also transmit an Automatic Identification System (AIS) message.

The Secretary of State has authorised the use of the following safety zones as per Notice to Mariners LF000005-NTM-004.

- 500 metres radius around each wind turbine, offshore transformer module and / or their substructures and foundations comprising the Beatrice Offshore Wind Farm whilst work is being performed as indicated by the presence of construction vessels.
- 2. 50 metres radius around each wind turbine, offshore transformer module and / or their substructure and foundations installed but waiting to be commissioned as part of the Beatrice Offshore Wind Farm.

ALL VESSELS ARE REQUESTED to give all construction and support vessels a wide berth.

MARINERS ARE REMINDED to navigate with caution and keep continued watch on VHF Ch. 70 / 16 when navigating the area.

6. Guard Vessel Deployment

Guard vessels currently on location are Pleiades BF155 and Sardonyx BF206. They can be contacted on VHF Ch.16

Project: Beatrice Offshore Windfarm Guard Vessel Deployment.			
Contractor:	SHL – SFF Services Ltd.		
Contract Purpose:	Guard Vessel for the Windfarm site.		
Area:	BOWL construction site: within the array cable routes and foundation		
	locations. (See Fig 1 for details)		
Deployment Dates:	1 st April 2017 – TBC.		
Deployment Vessel (s):	Various on a continuous 21 day rotation.		
Equipment:	N/A		

On behalf of BOWL, Seaways Heavy Lifting has contracted the Scottish Fishermen's Federation to provide guard vessels during the piling and foundation installation campaigns. These vessels will change regularly.

The guard vessel's primary duty is security of the construction site by informing and warning non-construction vessels of the ongoing activities and associated Safety Zones.

7. Fisheries Liaison

Fisheries liaison associated with the activity will be co-ordinated by Brown and May Marine. For any commercial fishery queries please contact: Alex Winrow-Giffin, telephone: +44 (0)1379 872144 and mobile: +44 (0)7760 160039. alex@brownmay.com

Beatrice Offshore Windfarm Limited

Construction Operations

Issue Date: 11th September 2017

LF000005-WNO-013: Weekly Notice of Operations - Rev 18



8. Distribution List

The distribution of this notice is as per email recipient's header. A central list of recipients is maintained by the Marine Coordinator. If you are not the appropriate recipient of these notices, or do not wish to receive the notices in the future, please contact us at the address included in Section 1 of this notice.

9. Website

The official website of Beatrice Offshore Windfarm Limited can be found at:

https://www.beatricewind.com/

This contains all Notices to Mariners (NtM) published by BOWL and all Weekly Notices of Operations, together with a large amount of general information about the Project.

There is also a Twitter feed at https://twitter.com/beatricewind.

Beatrice Offshore Windfarm Limited

Construction Operations

Issue Date: 11th September 2017

LF000005-WNO-013: Weekly Notice of Operations - Rev 18



Beatrice Offshore Windfarm

Date: 10-Sep-17

Vessels, agents, contractors and sub-contractors

Reference to Marine Licence Conditions 2.5, 2.6 and 3.1.2

Vessel Data Matrix



No Ref	Vessel Picture	Vessel Name / Flag	Type / Function	Operator	Contact / contact details	Call sign / MMSI /	LOA (m) Beam (m) Draft (m)	Date on Site
1		Stanislav Yudin	Heavy Lift Vessel	Seaway Heavy Lifting (SHL)	Danny Sprangers (SHL) C/o Subsea 7 East Campus Arnhall Business Park Westhill, Aberdeenshire AB32 6FE +31 653997158 EMAIL:dsprangers@shl.nl	5BYM2 / 210334000	183.3 / 40.0 / 8.9	27.03.2017
2		Bremen Fighter	Anchor Handling Tug assisting the Stanislav Yudin	Seaway Heavy Lifting (SHL)	Danny Sprangers (SHL) C/o Subsea 7 East Campus Amhall Business Park Westhill, Aberdeenshire AB32 6FE +31 653997158 EMAIL:dsprangers@shl.nl	V20Y1 / 304742000	48.1 / 14.06 / 6.0	27.03.2017
3		Smit Sentosa	Anchor Handling Tug assisting the Stanislav Yudin	Seaway Heavy Lifting (SHL)	Danny Sprangers (SHL) C/o Subsea 7 East Campus Arnhall Business Park Westhill, Aberdeenshire AB32 6FE +31 653997158 EMAIL:dsprangers@shl.nl	ORRX / 205696000	51.8 / 15.0 / 6.2	27.03.2017
4	m to the second	Rix Lynx	Crew Transfer Vessel / CTV	Seaway Heavy Lifting (SHL)	Danny Sprangers (SHL) C/o Subsea 7 East Campus Arnhall Business Park Westhill, Aberdeenshire AB32 6FE +31 653997158 EMAIL:dsprangers@shl.nl	2JGQ6 / 235115745	26 / 7.0 / 2.0	27.03.2017
5		President Hubert	Anchor Handling Tug	Seaway Heavy Lifting (SHL)	Danny Sprangers (SHL) C/o Subsea 7 East Campus Arnhall Business Park Westhill, Aberdeenshire AB32 6FE +31 653997158 EMAIL:dsprangers@shl.nl	ORLD / 205067000	60.0 / 15.0 / 6.40	08.08.2017
6		Union Boxer	Anchor Handling Tug	Seaway Heavy Lifting (SHL)	Danny Sprangers (SHL) C/o Subsea 7 East Campus Amhall Business Park Westhill, Aberdeenshire AB32 6FE +31 653997158 EMAIL:dsprangers@shl.nl	ORPS / 205575000	96.3 / 21.5 / 6.3	01.04.2017
7		Oleg Strashnov	Heavy Lift Vessel / HLV	Seaway Heavy Lifting (SHL) Page 20	Danny Sprangers (SHL) C/o Subsea 7 East Campus Arnhall Business Park Westhill, Aberdeenshire AB32 6FE +31 653997158 EMAIL:dsprangers@shl.nl	5BNL2 / 212905000	183.3 / 47 / 13.5	08.08.2017

Beatrice Offshore Windfarm Limited

Construction Operations

Issue Date: 11th September 2017



8	Trans	Sardonyx II BF206	Guard Vessel	Seaway Heavy Lifting (SHL)	Danny Sprangers (SHL) C/o Subsea 7 East Campus Arnhall Business Park Westhill, Aberdeenshire AB32 6FE +31 653997158 EMAIL:dsprangers@shl.nl	9V9845/ 233608000	18.0 / 6.0 / 2.5	29.08.2017
9		Union Fighter	Barge Tow Vessel	Seaway Heavy Lifting (SHL)	Danny Sprangers (SHL) C/o Subsea 7 East Campus Armhall Business Park Westhill, Aberdeenshire AB32 6FE +31 653997158 EMAIL:dsprangers@shl.nl	ORPP/205566000	40.6/ 12.7/ 6.3	03.08.2017
10		Smit Seraya	Barge Tow Vessel	Seaway Heavy Lifting (SHL)	Danny Sprangers (SHL) C/o Subsea 7 East Campus Arnhall Business Park Westhill, Aberdeenshire AB32 6FE +31 653997158 EMAIL:dsprangers@shl.nl	9V9845/ 566804000/	51.8 x 16 x 6	13.05.2017
11	A B	Pleiades BF155	Guard Vessel	Seaway Heavy Lifting (SHL)	Danny Sprangers (SHL) C/O Subsea 7 East Campus Amhall Business Park Westhill, Aberdeenshire, AB32 6FE +31 653997158 Email - dsprangers@shl.nl	2BSR7 / 235069008	20 x 5.0	04.08.2017
12		Maersk Trader	Anchor Handler / ROV	Seaway Heavy Lifting (SHL)	Danny Sprangers (SHL) C/O Subsea 7 East Campus Amhall Business Park Westhill, Aberdeenshire, AB32 6FE +31 653997158 Email - dsprangers @shl.nl	OXRO2 / 220584000	73.2m × 20m	08.08.2017
13		VOS Prelude	Supply Vessel	Seaway Heavy Lifting (SHL)	Danny Sprangers (SHL) C/O Subsea 7 East Campus Amhall Business Park Westhill, Aberdeenshire, AB32 6FE +31 653997158 Email - dsprangers@shl.nl	PBZK / 245969000	73.2m×20m	08.08.2017
14	A STATE OF THE PARTY OF THE PAR	Centauras	Barge Tow Vessel	Seaway Heavy Lifting (SHL)	Danny Sprangers (SHL) C/O Subsea 7 East Campus Arnhall Business Park Westhill, Aberdeenshire, AB32 6FE +31 653997158 Email - dsprangers@shl.nl	V2ED3 / 305820000	48.81m×14.06m	08.08.2017
15		Pegasus	Barge Tow Vessel	Seaway Heavy Lifting (SHL)	Danny Sprangers (SHL) C/O Subsea 7 East Campus Amhall Business Park Westhill, Aberdeenshire, AB32 6FE +31 653997158 Email - dsprangers@shl.nl	V2ED2 / 305389000	48.81m×14.06m	08.08.2017
16		Kamarina	Barge Tow Vessel	Seaway Heavy Lifting (SHL)	Danny Sprangers (SHL) C/O Subsea 7 East Campus Arnhall Business Park Westhill, Aberdeenshire, AB32 6FE +31 653997158 Email - dsprangers@shl.nl	IITW2 / 247278400 Glasgow. G2 (50m×15m 6AY	08.08.2017

Beatrice Offshore Windfarm Limited

Construction Operations

Issue Date: 11th September 2017



17	Eraclea	Barge Tow Vessel	Seaway Heavy Lifting (SHL)	Danny Sprangers (SHL) C/O Subsea 7 East Campus Arnhall Business Park Westhill, Aberdeenshire, AB32 6FE +31 653997158 Email - dsprangers@shl.nl	IITX2 / 247278500	50m×15m	08.08.2017
18	Bugsier 10	Barge Tow Vessel	Seaway Heavy Lifting (SHL)	Danny Sprangers (SHL) C/O Subsea 7 East Campus Arnhall Business Park Westhill, Aberdeenshire, AB32 6FE +31 653997158 Email - dsprangers@shl.nl	DFWB2 / 218321000	32m × 12.6m	09.08.2017
19	Union Sovereign	Barge Tow Vessel	Seaway Heavy Lifting (SHL)	Danny Sprangers (SHL) C/O Subsea 7 East Campus Amhall Business Park Westhill, Aberdeenshire, AB32 6FE +31 653997158 Email - dsprangers@shl.nl	ORQW / 205644000	67.4m × 15.5m	21.08.2017

Beatrice Offshore Windfarm Limited

Construction Operations

Issue Date: 11th September 2017

LF000005-WNO-013: Weekly Notice of Operations - Rev 18



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Vessels, agents, contractors and sub-contractors

Reference to Marine Licence Conditions 2.5, 2.6 and 3.1.2

Vessel Data Matrix for Buckie



Date: 10-Sep-17

No Ref	Vessel Picture	Vessel Name / Flag	Type / Function	Vessel Contact / Master's name	Company Name / Contact / contact details	Call sign / MMSI / IMO	LOA (m) Beam (m) Draft (m)	Date on Site
1		Haven Seariser 1	Jack Up mobile barge.	Øyvind Haug BEATRICE Installation Engineering Manager Mob: +47 916 27 674 Office: +47 22 88 65 09	Øyvind Haug BEATRICE Installation Engineering Manager Mob: +47 916 27 674 Office: +47 22 88 65 09	N/A	29.6 / 17.07 / 2.44	13.09.2017
2		MV Skua	Crew Transfer Vessel / CTV.	Bill Ruck 07775802963 bill@moraymarine.com	Øyvind Haug BEATRICE Installation Engineering Manager Mob: +47 916 27 674 Office: +47 22 88 65 09	N/A	10.5/3.51/1.1	13.09.2017
3		Forth Constructor	Service Vessel	Øyvind Haug BEATRICE Installation Engineering Manager Mob: +47 916 27 674 Office: +47 22 88 65 09	Øyvind Haug BEATRICE Installation Engineering Manager Mob: +47 916 27 674 Office: +47 22 88 65 09	GXAD / 235004217	L:28.50m B:9.45m D:4.27m	13.09.2017
4	ADDR CITE AS	DSV Aramis	Workboat	Øyvind Haug BEATRICE Installation Engineering Manager Mob: +47 916 27 674 Office: +47 22 88 65 09	Øyvind Haug BEATRICE Installation Engineering Manager Mob: +47 916 27 674 Office: +47 22 88 65 09	LDEH / 257167000	15.7m, 4.95m 0.80m	11.09.2017
5		Dvergen	Workboat	Øyvind Haug BEATRICE Installation Engineering Manager Mob: +47 916 27 674 Office: +47 22 88 65 09	Øyvind Haug BEATRICE Installation Engineering Manager Mob: +47 916 27 674 Office: +47 22 88 65 09	N/A	5.32m, 2.07m, 1.82m	11.09.2017