# **Beatrice Offshore Windfarm Limited Construction Operations**



Issue Date: 30th April 2018

LF000005-WNO-013: Weekly Notice of Operations - Rev 52

**Notice of Operations at Beatrice Offshore Wind Farm** 

Work Planned for the Period 30-04-2018 to 06-05-2018

Construction of the Beatrice Offshore Wind Farm commenced on the 1<sup>st</sup> of April 2017. 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  $38 \, \text{m}$  below LAT in the south of the field to  $60 \, \text{m}$  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  $38 \, \text{nm}$  from the wind farm boundary back to the landfall. The Beatrice Offshore Wind Farm development area is highlighted in red below, the OFTW cable corridor in black.

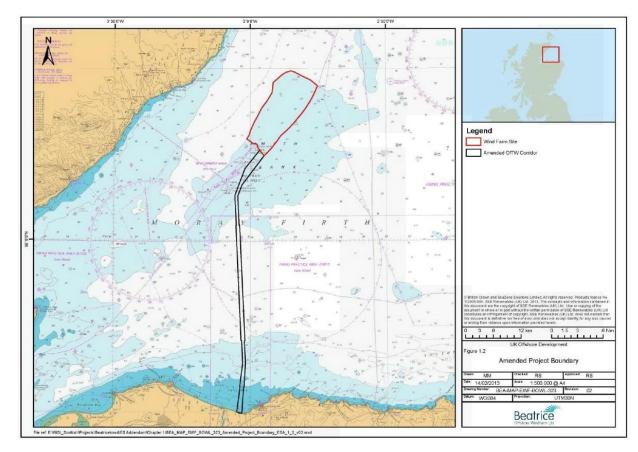


Fig. 1 Beatrice Offshore Wind Farm Location

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#### 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

#### 2.1 Beatrice Offshore Wind Farm Jacket Installation Campaign

Project:	Jacket Installation Campaign (See Notice to Mariners) NTM-032 Rev01
Contractor:	SHL
Contract Purpose:	To install WTG & OTM Jackets at completed piled locations within the construction site.
Area:	BOWL Construction Site: Jacket Locations (See Fig. 2 Table1)
Deployment Dates:	08 August 2017 – September 2018
Deployment Vessels:	HLV Oleg Strashnov, Smit Sentosa, AHT Maersk Trader, Britoil 120, Pegasus, Smit Seraya, Bremen Fighter, Kamarina, Centaurus, VOS Prelude, Fairplay-33, Bremen Fighter
Equipment:	HLV equipment, Pile cleaning equipment, Grouting equipment.

On Behalf of BOWL, Seaways Heavy Lifting have installed the second OTM foundation (BE-F8), using the HLV Oleg Strashnov. The OTM2 Topsides will be installed at a date to be confirmed.

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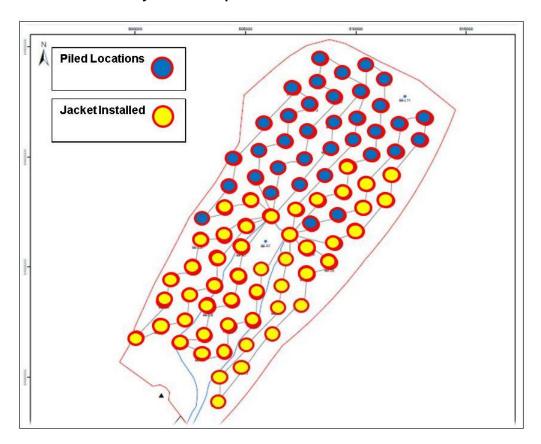


Fig. 2 Pile installation completed at 86 Locations

#### Foundation installation completed at 50 Locations

**Table 1 - WTG and OTM Location Coordinates** 

Location ID	Latitude WGS84	Longitude WGS84	Piling Complete	Jacket installed
BE-A5	58° 12.471' N	002° 59.996' W	14.07.2017	21.04.2018
BE-B5	58° 12.687' N	002° 58.873' W	12.07.2017	23.03.2018
BE-B6	58° 13.308' N	002° 58.664' W	16.06.2017	22.02.2018
BE-B7	58° 13.929' N	002° 58.456' W	18.07.2017	20.02.2018
BE-C4	58° 12.307' N	002° 57.948' W	23.05.2017	13.12.2017
BE-C5	58° 12.902' N	002° 57.749' W	11.07.2017	09.02.2018
BE-C6	58° 13.524' N	002° 57.541' W	10.07.2017	08.02.2018
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	20.01.2018
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	12.12.2017
BE-D4	58° 12.497' N	002° 56.834' W	22.06.2017	14.12.2017
BE-D5	58° 13.117' N	002° 56.626' W	26.05.2017	21.01.2018
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	18.01.2018

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Location ID	Latitude	Longitude	Piling	Jacket
DE Do	WGS84	WGS84	Complete	installed 20.12.2017
BE-D8 BE-D9	58° 14.981' N	002° 55.999' W	02.06.2017	21.09.2017
BE-D10	58° 15.602' N 58° 16.223' N	002° 55.790' W 002° 55.582' W	16.07.2017	21.09.2017
BE-D10 BE-D11			31.08.2017	
	58° 16.844' N	002° 55.373' W	13.08.2017	01.09.2017
BE-E1	58° 10.900' N	002° 56.256' W	10.04.2017	16.08.2017
BE-E2	58° 11.470' N	002° 56.128' W	14.04.2017	02.12.2017
BE-E3	58° 12.090' N	002° 55.920' W	19.04.2017	20.09.2017
BE-E4	58° 12.712' N	002° 55.710′ W	02.07.2017	03.02.2018
BE-E5	58° 13.333' N	002° 55.502' W	19.05.2017	24.08.2017
BE-E6	58° 13.954' N	002° 55.293' W	18.05.2017	25.08.2017
BE-E7	58° 14.575' N	002° 55.084' W	01.06.2017	18.12.2017
BE-E8	58° 15.196' N	002° 54.875' W	30.05.2017	21.09.2017
BE-E9	58° 15.817' N	002° 54.665' W	15.07.2017	21.09.2017
BE-E10	58° 16.438' N	002° 54.456' W	01.09.2017	
BE-E11	58° 17.059' N	002° 54.247' W	19.09.2017	
BE-E12	58° 17.680' N	002° 54.037' W	14.08.2017	06.09.2017
BE-F2	58° 11.685' N	002° 55.005' W	03.07.2017	
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	19.09.2017
BE-F5	58° 13.548' N	002° 54.378' W	17.05.2017	14.09.2017
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	25.04.2018
BE-F9	58° 16.031' N	002° 53.540′ W	22.09.2017	
BE-F10	58° 16.653' N	002° 53.330' W	20.09.2017	
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	
BE-F13	58° 18.516' N	002° 52.701' W	10.09.2017	45.00.0047
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	06.02.2018
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	04.11.2017	
BE-G10	58° 16.867' N	002° 52.204' W	21.09.2017	
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	13.09.2017	
BE-G14	58° 19.351' N	002° 51.362' W	14.09.2017	40.00.0047
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	10.00.0017
BE-H8	58° 15.840' N	002° 51.499' W	06.05.2017	13.09.2017
BE-H9	58° 16.461' N	002° 51.289' W	15.11.2017	

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Lagation ID	Latitude	Longitude	Piling	Jacket
Location ID	WGS84	WGS84	Complete	installed
BE-H10	58° 17.082' N	002° 51.079' W	27.10.2017	
BE-H11	58° 17.703' N	002° 50.867' W	10.10.2017	
BE-H12	58° 18.324' N	002° 50.657' W	09.09.2017	
BE-H13	58° 18.944' N	002° 50.446′ W	07.10.2017	
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	25.03.2018
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	22.12.2017
BE-J9	58° 16.675' N	002° 50.163' W	04.08.2017	
BE-J10	58° 17.296' N	002° 49.952' W	03.12.2017	
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	08.10.2017	
BE-K6	58° 15.027' N	002° 49.669' W	07.08.2017	24.12.2017
BE-K7	58° 15.648' N	002° 49.459' W	08.08.2017	30.12.2017
BE-K8	58° 16.269' N	002° 49.247' W	31.07.2017	27.04.2018
BE-K9	58° 16.890' N	002° 49.036' W	05.08.2017	29.04.2018
BE-K10	58° 17.510' N	002° 48.825' W	21.08.2017	
BE-K11	58° 18.131' N	002° 48.614' W	25.08.2017	
BE-K12	58° 18.752' N	002° 48.403' W	09.10.2017	
BE-L7	58° 15.862' N	002° 48.333' W	09.08.2017	01.01.2018
BE-L8	58° 16.482' N	002° 48.122' W	25.07.2017	20.04.2018
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	
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	

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#### 2.2 Installation of Export Cable EC2.2

On behalf of BOWL, Nexans AS vessels Nexans Skagerrak will pull in EC2.2 to the OTM 2, turning point anchors and cable bow have been positioned on the seabed for this operation as per fig 3 below

Approximate location of cable laydown ends EC2.2	Latitude WGS84	Longitude WGS84	
KP 68 on EC2	58° 14.9062' N	2° 54.8284' W	

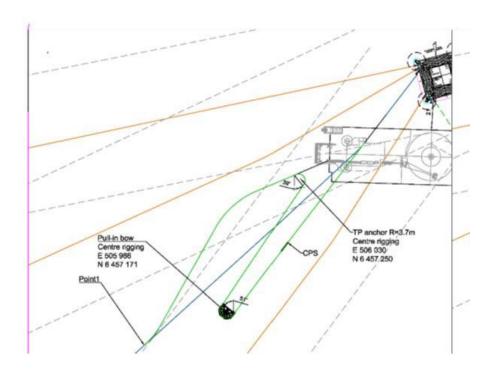


Fig 3 – EC2 Turning Point Anchor & Pull-In Bow Positions.

#### 2.2.1 Activity Description

Nexans AS using the vessel Nexans Skagerrak will recover the EC2.2 cable end from the wet stowed position and pull the cable into OTM2. The cable is currently deployed South of the planned OTM2, and the cable laid Northwards in a loop and then South following the planned cable route. Turning Point Anchor and Pull-In Bow will be positioned on the seabed as per fig 3.

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#### 2.2.2 Vessel involved in this operation

	Nexans Skagerrak
General Description and Dimensions:	Cable Layer L:99.75m / B:35.41m
Call Sign:	LCEK
MMSI:	257253000
Onshore Representative:	Øyvind Haug BEATRICE Installation Engineering Manager Mob: +47 916 27 674 Office: +47 22 88 65 09

#### 2.3 Export Cable 3 – Pull-In and jointing.

On behalf of BOWL the Nexans AS vessel Nexans Skagerrak has recovered the EC3 cable end from the wet stow location and laid along the EC3 cable route, the cable has been cut and wet stowed approximately 300 metres from OTM2. Nexans Skagerrak will conduct a first end pull-in at OTM2 and the EC3 cable will then be jointed.

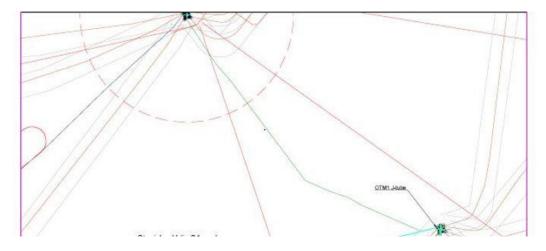


Fig. 5 EC3 cable route.

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#### 2.4 Export Cable 2.1 - Export Cable Trenching and Rock Net installation works

On behalf of BOWL, Nexans Norway AS using the TSV Elektron will conduct the following operations.

- 1. Install final rock nets (11) at EC2.2 OTM2.
- 2. Trench small section of EC3 from OTM2 to hairpin joint area.
- 3. Trench remainder of EC2.2 to OTM after Skagerrak pull in (~1000m).
- 4. Trench EC3 hairpin joint and remaining cable sections after Skagerrak joint overboarding
- 5. Post trenching survey of recent Elektron trenching works on EC1.2, EC2.2 and EC3 (~3.5km).

#### 2.4.1 Vessels involved in Activity

Elektron				
General Description and Dimensions:	Trenching/Cable burial L:87m / B:18m			
Call Sign:	LADO			
MMSI:	258538000			
Onshore Representative:	Øyvind Haug BEATRICE Installation Engineering Manager Mob: +47 916 27 674 Office: +47 22 88 65 09			



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### 2.5 Inter Array Cable Pre Lay Grapnel Run (PLGR) & Inter Array Cable Installation

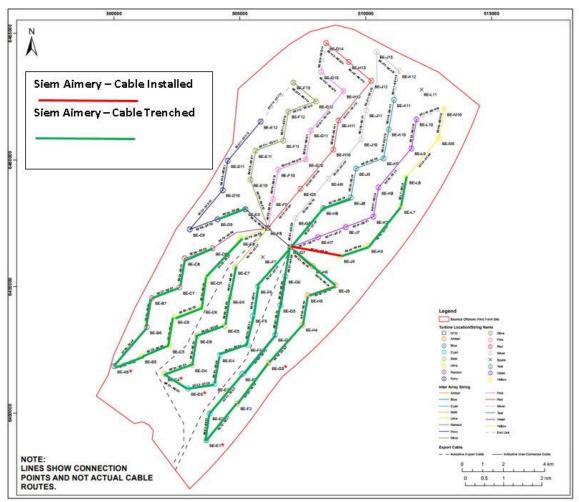


Fig. 6 Cable installation Progress

The CLV Siem Aimery will install up to 34 Inter Array Cables during the second cable installation campaign, which commenced on the 10<sup>th</sup> of March 2018. Prior to installation, cable routes will be cleared of any surface debris by performing a pre-lay grapnel run (PLGR). The cables will be laid and buried between the Wind Turbine Generator (WTG) & Offshore Transformer Module (OTM) foundations listed below. Cable burial will be undertaken by a tracked jet trencher launched from the Siem Aimery. Three trenching trial cables will be surface laid and secured by clump weights. These trial cables will be trenched / recovered during the third cable installation campaign during July / August 2018. The sequence below is indicative only and subject to amendment. Sixteen (16) cables were laid and buried during campaign 1 in Nov/Dec 2017

The CSV Siem Barracuda will support inter-array cable installation activities in the south-west and central areas of the Beatrice wind farm, working in parallel with the CLV Siem Aimery. The Siem Barracuda will undertake the following workscopes; personnel transfer to WTG foundations by Ampelmann Gangway; crane operations to transfer equipment to / from WTG foundations and Offshore Transformer Modules (OTMs); Work class ROV activities at the seabed in the vicinity of WTG

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foundations and OTMs; and survey activities along the planned inter-array cable routes linking the appropriate WTG foundations / OTMs.

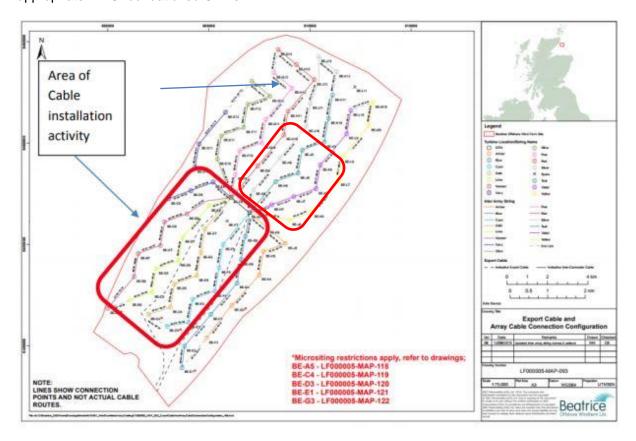


Fig. 7 Inter Array Cable Installation work location

Installation Sequence.

Installation Sequence	Cable Name	Seabed Route- length m	Latitude Start	Longitude Start	Latitude Finish	Longitude Finish	Cable laid	Cable buried
17	BE-E3-BE-D3	1300.7	58°12.084N	2°55.908W	58°11.99N	2°56.974W	12.03.2018	13.03.2018
18	BE-D3-BE-C4	1419.8	58°12.010N	2°56.975W	58°12.31N	2°57.918W	13.03.2018	13.03.2018
19	BE-E5-BE-D5	1354.3	58°13.327N	2°55.488W	58°13.12N	2°56.615W	20.03.2018	23.03.2018
20	BE-E6-BE-E5	1235.9	58°13.948N	2°55.279W	58°13.34N	2°55.490W	21.03.2018	23.03.2018
21	BE-D4-BE-C4	1253.0	58°12.491N	2°56.821W	58°12.32N	2°57.920W	19.03.2018	20.03.2018
22	BE-D5-BE-D4	1233.6	58°13.112N	2°56.611W	58°12.50N	2°56.824W	26.03.2018	07.04.2018
23	BE-D7-BE-D6	1257.0	58°14.353N	2°56.196W	58°13.744N	°56.406W	21.03.2018	24.03.2018
24	BE-E8-BE-D7	2086.7	58°14.366N	2°56.198W	58°15.189N	2°54.862W	22.03.2018	24.03.2018
25	BE-D6-BE-C6	1300.5	58°13.733N	2°56.405W	58°13.529N	2°57.531W	09.04.2018	10.04.2018
26	BE-C6-BE-C5	1257.8	58°13.517N	2°57.529W	58°12.908N	2°57.740W	09.04.2018	10.04.2018
27	BE-C5-BE-B5	1291.4	58°12.896N	2°57.736W	58°12.693N	2°58.863W	09.04.2018	10.04.2018
28	BE-J7-BE-K7	1291.5	58°15.439N	2°50.574W	58°15.642N	2°49.445W		
29	BE-H7-BE-J7	1289.3	58°15.224N	2°51.698W	58°15.428N	2°50.572W		

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30	BE-C8-BE-C7	1231.2	58°14.760N	2°57.110W	58°14.150N	2°57.322W	14.04.2018	28.04.2018
31	BE-C7-BE-B7	1334.5	58°14.139N	2°57.320W	58°13.936N	2°58.445W	10.04.2018	12.04.2018
32	BE-D8-BE-C8	1346.3	58°14.975N	2°55.985W	58°14.772N	2°57.113W	20.04.2018	28.04.2018
33	BE-B7-BE-B6	1232.9	58°13.923N	2°58.443W	58°13.314N	2°58.654W	15.04.2018	
34	BE-K6-BE-L7	2087.5	58°15.033N	2°49.659W	58°15.856N	2°48.319W	15.04.2018	18.04.2018
35	BE-E9-BE-D9	1351.8	58°15.811N	2°54.651W	58°15.609N	2°55.780W	21.04.2018	29.04.2018
36	BE-J6-BE-K6	1301.9	58°14.819N	2°50.784W	58°15.021N	2°49.656W	19.04.2018	
37	OTM1 -BE-H6	1624.4	58°14.995N	2°52.838W	58°14.592N	2°51.907W	17.04.2018	
38	OTM1 -BE-F6	2052.5	58°15.004N	2°52.849W	58°14.175N	2°54.158W	18.04.2018	23.04.2018
39	OTM1 -BE- G6	1261.5	58°14.995N	2°52.841W	58°14.389N	2°53.033W	19.04.2018	23.04.2018
40	OTM2 -BE-E7	2023.3	58°15.403N	2°53.760W	58°14.584N	2°55.075W		
41	OTM2 -BE-E8	1146.7	58°15.412N	2°53.765W	58°15.201N	2°54.865W		
42	BE-H8-BE-J8	1292.3	58°15.846N	2°51.487W	58°16.049N	2°50.359W	21.04.2018	23.04.2018
43	OTM1 -BE-H7	1327.2	58°15.000N	2°52.817W	58°15.213N	2°51.696W		
44	OTM1 -BE-H8	2116.7	58°15.009N	2°52.822W	58°15.834N	2°51.484W	22.04.2018	23.04.2018
45	OTM2 -BE-D8	2375.6	58°15.414N	2°53.766W	58°14.987N	2°55.989W		
46	OTM1 -BE-J6	2320.0	58°14.997N	2°52.820W	58°14.806N	2°50.781W	23.04.2018	
47	OTM2 -BE-E9	1462.4	58°15.407N	2°53.733W	58°16.025N	2°53.526W		
48	BE-L7-BE-L8	1249.0	58°15.868N	2°48.322W	58°16.477N	2°48.108W	24.04.2018	25.04.2018
49	BE-D9-BE-C9	1462.4	58°15.596N	2°55.777W	58°15.381N	2°56.901W		
50	BE-C9-BE- D10	2084.4	58°15.393N	2°56.904W	58°16.214N	2°55.570W		
*Trial 1	BE-A6-BE-B5	~100m	58°12.704N	2°59.391W	58°12.701N	2°59.461W		
*Trial 2	BE-H11-BE- J12	~100m	58°18.042N	2°50.221W	58°18.122N	2°50.085W		
*Trial 3	BE-J11-BE- J13	~150m	58°18.166N	2°49.490W	58°18.217N	2°49.458W		

#### 2.5.1 - Vessels involved in activity

On behalf of BOWL, Seaway Heavy Lifting will deploy the vessels as detailed below to carry out the aforementioned works between 10.03.2018 – 31.05.2018

CLV Siem Aimery			
General Description and Dimensions:	Length overall 95.3 m Breadth moulded 21.5 m Draft max. 7.2 m		
Call Sign:	LATX7		
MMSI:	258182000		
Onshore Representative:	Majbritt Pauladottir, +47 95 93 60 32, mpa@siemoffshore.com		

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CSV Siem Barracuda		
General Description and	Length overall 121 m	
Dimensions:	Breadth moulded 22 m	
	Draft max. 7 m	
Call Sign:	5BZQ3	
MMSI:	212253000	
Onshore Representative:	Auden Oien + 47 38 600 460 Auden.oien@siemoffshore.com	



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#### 2.6 Offshore Transmission Module (OTM) commissioning works

Siemens Transmission and Distribution Ltd. (STDL) are carrying out commissioning works on OTM1 in preparation for the energisation of the system.

Nexans AS have commenced preparations on OTM2 for cable pull-in operations for EC2.2 and EC3.

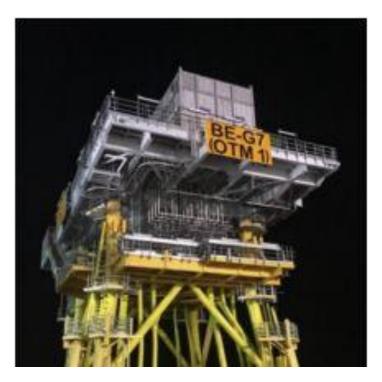


Fig 8 - OTM 1.

The Jack-Up vessel Seajacks Hydra is connected to OTM1 to provide accommodation facilities for OTM1 commissioning.

The walk to work vessel Island Crown is on site as the support and accommodation vessel for works on OTM 1and OTM2.

#### 2.6.1 - Vessels involved in activity

Island Crown					
General Description and Dimensions:	Accommodation and 'Walk to Work' vessel L:96.8m / B:20m				
Call Sign:	LACO8				
MMSI:	257245000				
Onshore Representative:	Project Manager Arnt Petter Osnes T +47 70400025 M +47 46829930 arnt@islandoffshore.com				

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Seajacks Hydra				
General Description and	Jack-Up Accommodation vessel			
Dimensions:	L:76m / B:36m			
Call Sign:	3FEI3			
MMSI:	370239000			
Onshore Representative:	Beatrice Offshore Windfarm Ltd. mc.bowl@sse.com			



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#### 2.7 Scientific Equipment Removal & Service and Re-installation

Mariners should take note that the following existing moorings (table 1) in the Moray Firth have been serviced and reinstalled in their current locations (see also chart extract at the foot of this notice.

Table 1

Name	As laid coordinates (WGS84 datum)		Characteristics			
1	57° 41.413' N		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.			
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			

The moorings support sound recording equipment and acoustic loggers that record echolocation clicks of dolphins and porpoises (see images as the foot of this notice)

All works are being carried out by Moray First Marine Ltd, using the Coral Wind.

A further Notice to Mariners will be issued when the 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.

+44 (0)1381 600548. t.r.barton@abdn.ac.uk



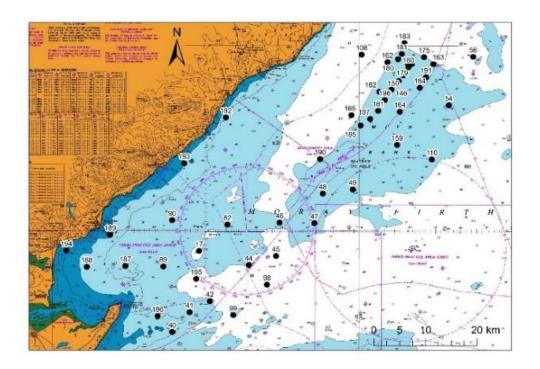
Fig. 9 Examples of equipment which the above moorings support

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#### 3. 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.

- 1. 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.
- 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.

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#### 4. Guard Vessel Deployment

Guard vessels currently on the main construction site are Seagull and Shemarah II, Opportune will relieve Shemarah II on 30th April. The Morning Dawn is guarding the exposed export cable on behalf of Nexans AS. Morning Dawn will be relieved by Artemis on 30<sup>th</sup> April All vessels can be contacted on VHF Ch. 16.

Project:	Beatrice Offshore Windfarm Guard Vessel Deployment.			
Contractor:	SHL & Nexans – 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 <sup>st</sup> April 2017 – TBC.			
Deployment Vessel (s):	Various on a continuous 21 day rotation.			
Equipment:	N/A			

On behalf of BOWL, Seaway Heavy Lifting has contracted the Scottish Fishermen's Federation (SFF) to provide guard vessels during the piling and foundation installation campaigns. Nexans Norway AS have contracted the SFF to provide guard vessels during the export cable installation campaign 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

#### 5. 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. <a href="mailto:alex@brownmay.com">alex@brownmay.com</a>

#### 6. 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.

#### 7. 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 <a href="https://twitter.com/beatricewind">https://twitter.com/beatricewind</a>.

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No Ref	Vessel Picture	Vessel Name / Flag	Type / Function	Operator	Contact / contact details	Call sign / MMS1 / IMO	LOA (m) Beam (m) Draft (m)	Date on Site	Marine Licence applicable
<b>4</b> 1	4.	Smit Sentosa	Anchor Handling Tug	Seaway Heavy Lifting (SHL)	Danny Sprangers (SHL) Clo Subsea 7 East Campus Arnhall Business Park Westhill, Aberdeenshire AB32 6FE +31 633997138 EMAIL:dsprangers@shi.nl	ORRX / 205696000 IMO9662356	51.8 x 15.0 x 6.2m	01.01.2018	OWF
2		Seajacks Hydra	Jack Up Accodation Vessel	Seajacks	BOWI Offshore Windfarm Ltd. mc.bowl@sse.com	3FEI3/ 370239000	62 x 36 m	15.04.2018	OWF & OfTW
3		Smit Seraya	Barge Tow Vessel	Seaway Heavy Lifting (SHL)	Danny Sprangers (SHL) Clo Subsea 7 East Campus Arnhall Business Park Westhill, Aberdeenshire AB32 6FE +31 653997158 EMAIL:dsprangers@shi.nl	9V9845 / 566804000 IMO9662368	51.8 x 16 x 6m	01.01.2018	OWF
4		Island Crown	Walk to work OTM commisioning	Stålhaugen 12, 6065 Ulsteinvik, Norway +47 70400000	Project Manager Arnt Petter Osnes T +47 70400025	LACO8/9630535 IMO257245000	96 x 20 m	01.02.2017	OWF & OfTW
5		Siem Barracuda	Walk to Work Vessel	Seaway Heavy Lifting (SHL)	Danny Sprangers (SHL) Clo Subsea 7 East Campus Arnhall Business Park Westhill, Aberdeenshire AB32 6FE +31 653997158 EMAIL.dsprangers@shl.nl	5BZQ3 / 212253000	120 X 22 m	10.03.2018	OWF
6	1	Siem Aimery	Inter Array Cable Installation 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	LATX7 / 258182000	95 X 21 m	10.03.2018	OWF
7	7.	Rix Lion	Crew Transfer Vessel / CTV	Seaway Heavy Lifting (SHL)	Danny Sprangers (SHL) Clo Subsea 7 East Campus Armhall Business Park Westhill, Aberdeenshire AB32 6FE +31 653997138 EMAIL.dsprangers@shl.nl	2HOH3 / 235105282	26 x 10 x 2.5m	06.04.2018	OWF
8		Britoil 120	Barge Tow Vessel	Seaway Heavy Lifting (SHL)	Danny Sprangers (SHL) C/O Subsea 7 East Campus Amhail Business Park Westhil, Aberdeenshire, AB22 6FE +31 653997158 Email - dsprangers@shl.nl	9V7116 / 564104000	59m x 16m	09.03.2018	OWF
9		Kamarina	Barge Tow Vessel	Seaway Heavy Lifting (SHL)	Danny Sprangers (SHL) C/O Subsea 7 East Campus Arnhall Business Park Westhill, Aberdeenshire, AB22 6FE +31 653997158 Email - dsprangers@shl.nl	IITW2 / 247278400 IMO9499644	50 x 15m	08.08.2017	OWF

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·		22							
10		Seagull	Guard Vessel	Scottish Fishermens Federation (SFF) for 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	MVBO2 / 233714000	30 x 8 m	11.04.2018	OWF
11	200	Opportune WK171	Guard Vessel	Scottish Fishermens Federation (SFF) for Seaway Heavy Lifting (SHL)	Danny Sprangers (SHL) C/O Subsea 7 East Campus Arnhall Business Park Westhill, Aberdeenshire, AB23 6FE +31 653997158 Email - dsprangers@shl.nl	2WKH/ 233608006	26 x 7m	30.04.2018	OWF
12	10000	DSV Aramis	Dive Support Vessel	Nexans NorwayAS Innspurten 9, 0663 Oslo, Norway +47 22 88 61 00	Oyvind Haug BOWL Installation Engineering Manager Mob +47 916 27 674 Office +47 22886509	N/A	15 x 5m	23.03.2018	огтw
13	Actes and	DSV Athos	Dive Support Vessel	Nexans NorwayAS Innspurten 9, 0663 Oslo, Norway +47 22 88 61 00	Oyvind Haug BOWL Installation Engineering Manager Mob +47 916 27 674 Office +47 22886509	N/A	5 x 2m	23.03.2018	огтw
14		Seacat Intrepid	Crew Transfer Vessel / CTV	Seacat Services Ltd	Lea Hurst Marine Manager, Seacat Services Ltd 2 Mariners Way. Cowes, Isle of Wight +44 (0)1983 475315 lea.hurst@seacatservices.co.uk	2HWU6 / 235107284	27 x 10 x 1.5m	25.09.2017	OWF & OFTW
15	THE STATE OF THE S	Morning Dawn PD359	Guard Vessel	Scottish Fishermens Federation (SFF) for Nexans AS	Øyvind Haug BEATRICE Installation Engineering Manager Mob: +47 912 27 674 Office: +47 22 88 65 09	MHEU3 / 232253000	45 x 9 m	21.11.2017	OWF & OFTW
16		GV Artemis INS564	Guard Vessel	Scottish Fishermens Federation (SFF) for Nexans AS	Øyvind Haug BEATRICE Installation Engineering Manager Mob: +47 916 27 674 Office: +47 22 88 65 09	MVIX5 / 233975000	28 x 8m	01/04/2018	OWF & OFTW
17	L. A	Elektron	Cable burial	Nexans NorwayAS Innspurten 9, 0663 Oslo, Norway +47 22 88 61 00	Oyvind Haug BOWL Installation Engineering Manager Mob +47 916 27 674 Office +47 22886509	LADO / 258538000	87 x 18 x 3.5m	05/04/2018	опт
18		Nexans Skagerrak	Cable Lay vessel	Nexans NorwayAS Innspurten 9, 0663 Oslo, Norway +47 22 88 61 00	Oyvind Haug BOWL Installation Engineering Manager Mob +47 916 27 674 Office +47 22886509	LCEK / 25723000	99m x 35m	09/11/2017	онти
19		Fairplay 33	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	V2QG6 / 305356000	48.8 x 14 x 6.2m	15/04/2018	OWF

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20		Maersk Trader	Supply 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	220584000 / OXRO2	73m x 20m	12/04/2018	OWF
21		Oleg Strashnov	Heavy Lift Vessel / HLV	Seaway Heavy Lifting (SHL)	Danny Sprangers (SHL) C/O Subsea 7 East Campus Arnhall Business Park Westhill, Aberdeenshire, AB23 6FE +31 653997158 Email - dsprangers@shl.nl	5BNL2 / 212905000	183.3 / 47 / 13.5	08.08.2017	OWF & OfTW
22	A L	Vos Prelude	Supply Vessel	Seaway Heavy Lifting (SHL)	Danny Sprangers (SHL) C/O Subsea 7 East Campus Arnhall Business Park Westhill, Abbredenshire, AB32 6FE +31 653997158 Email - dsprangers@shl.nl	2WKH/ 233608006	74m x 16m	16/11/2017	OWF
23	#	Bremen Fighter	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	V20Y1 / 304742000	48.1 x 14.06 x 6.0m	14.12.2017	OWF