# Beatrice Offshore Windfarm Limited Construction Operations



Issue Date: 18th December 2017

LF000005-WNO-013: Weekly Notice of Operations - Rev 33

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

Work Planned for the Period 18.12.2017 to 24.12.2017

Construction of the Beatrice Offshore Wind Farm commenced on the 1<sup>st</sup> 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 130km² and will consist of 84 7MW offshore wind turbines (with a total capacity of 588MW) 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, the OFTO cable corridor in black.

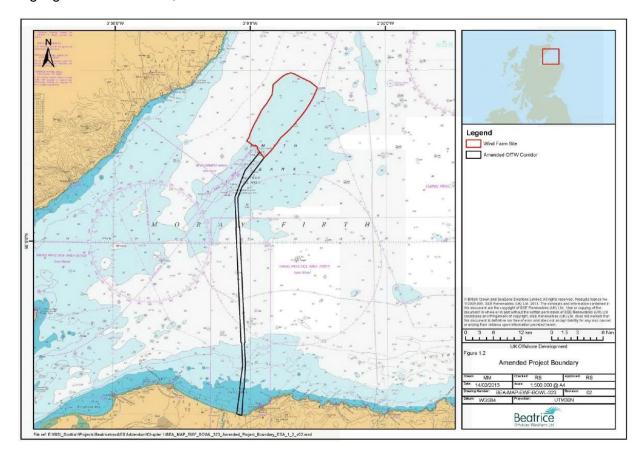


Fig. 1 Beatrice Offshore Wind Farm Location

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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

The Oleg Strashnov will be on site from 16<sup>th</sup> November until the beginning of January, Stanislav Yudin will then take over jacket installation.

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:	Oleg Strashnov (On site from 16 <sup>th</sup> November – January) Union Sovereign, Vos Prelude, Centaurus, Pegasus, Kamarina, Eraclea, Smit Seraya & Bremen Fighter
Equipment:	HLV equipment, Pile cleaning equipment, Grouting equipment.

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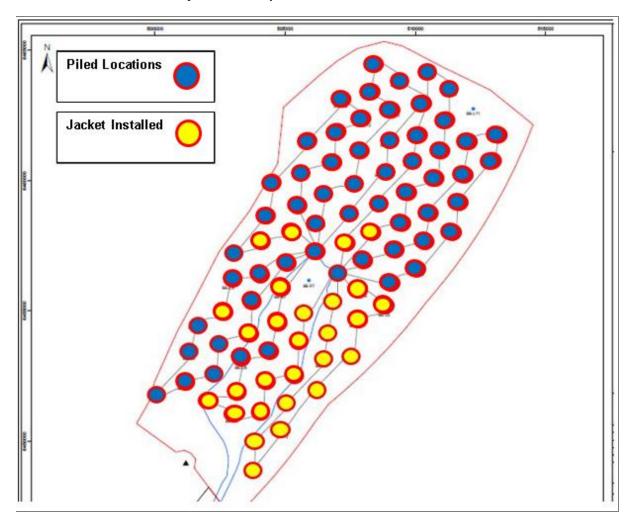


Fig. 2 Pile installation completed at 86 Locations & Foundation installation completed at 28 Locations

**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	
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	13.12.2017
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	

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	Latitude	Longitude	Piling	Jacket
Location ID	WGS84	WGS84	Complete	installed
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	
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	21.09.2017
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	02-12-2017
BE-E4	58° 12.712' N	002° 55.710' W	02.07.2017	20.09.2017
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	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	
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	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	
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	
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	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	

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Location ID	Latitude WGS84	Longitude WGS84	Piling Complete	Jacket installed
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	13.09.2017
BE-H9	58° 16.461' N	002° 51.289' W	15.11.2017	
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	
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	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	
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	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	
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	
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 EC1.

### **Activity Description**

CLV Nexans Skagerrak has completed trenching the second section of the export cable to the wet store loop at KP 67.7

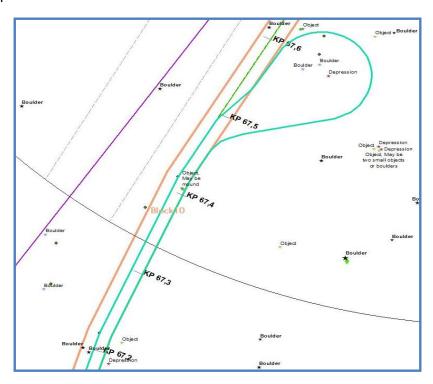


Fig. 3 Cable wet store location within the array area

Approximate location of cable wet store loop EC1.2	Latitude WGS84	Longitude WGS84
KP 67.7 on EC1	58° 14.806'N	002°53.028'W

### 2.2.1 BOWL Export Cable EC1 Rock Emplacement Operations

The rock emplacement campaign for the installation of the first of two export cables (EC1) in the Beatrice Offshore Windfarm export corridors and construction site will commence around 21<sup>st</sup> December 2017.

The installation of rock will be restricted to KP67 to KP63 within the array and KP32 to KP 39.2 and KP10.8 to KP3.3 on the Export Cable Corridor.

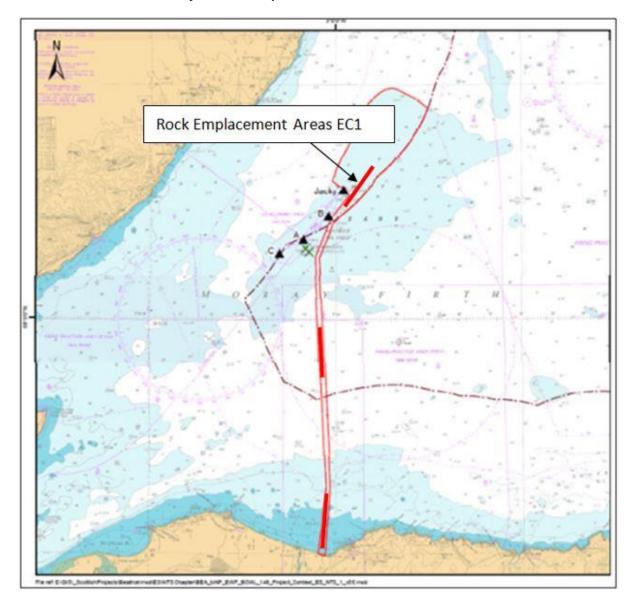
The estimated duration of the works is 10 days un-weathered.

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### Fig 4 Rock Placement areas highlighted in red

The rock emplacement operation will be carried out by FPV Rockpiper, supported by guard vessel Artemis / INS564 between KP 4 to KP 11 and by the guard vessel in the Southern sector of the wind farm array. After rock emplacement is completed, the guard vessel between KP 3.3 to KP 11 will be released.

The guard vessel within the wind farm array will remain until the pull-in operations at the exposed wet stored cable-end, close to the Offshore Transmission Module (OTM) commence. This is planned for January 2018.

8" grade rock will be installed in the locations stated below.

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Start KP	End KP	Start Lat / Long	End Lat / Long	Comments
3.358	10.753	57° 41.636' N	57° 45.717' N	Nearshore
		003° 02.168' W	003° 01.307' W	
32.547	39.173	57° 57.304' N	58° 00.869' N	Includes Inline
		003° 02.193' W	003° 02.515' W	Joint
63.061	67.000	58°12.506' N	58°14.447' N	Within Array
		002° 54.856' W	002° 53.353' W	area

### **Vessels Associated with the Activity**

The vessels that are associated with the described operation are the FPV Rockpiper and the guard vessels Artemis / INS564 and Morning Dawn / PD359. Note that the guard vessels may vary during operations.

FPV Rockpiper			
General Description and Dimensions:	Rock Dumper L:158.6m / B:36m		
Call Sign:	5BML3		
MMSI: 209449000			
Onshore Representative:	Øyvind Haug BEATRICE Installation Engineering Manager Mob: +47 916 27 674 Office: +47 22 88 65 09		



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### 2.3 Sub-sea marker buoys on the exit pipe of EC2 at Portgordon

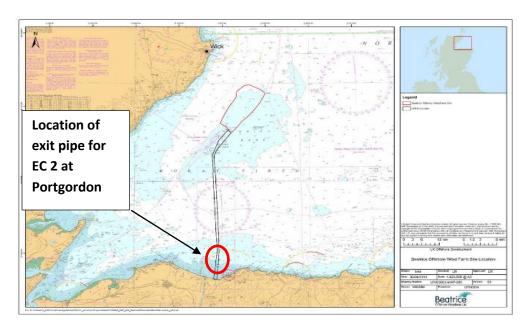


Fig. 5 Location of exit pipe for EC 2 at Portgordon

Exit pipe marker buoy Location	Latitude WGS84	Longitude WGS84
EC2 pipe exit	57°40.143'N	003° 02.655'W

### 2.3.1 Activity Description

Diving works have been completed at EC2. At the exit point, approximately 450m offshore, the sealed pipe end has been marked with sub-sea marker buoys to assist divers locate the exit point when EC2.1 is being prepared for pull in. The marker buoy rig consists of a 10mm steel wire, 30m long, with both ends attached to the pipe flange with shackles. The remaining slack (loop) will be stretched out along the pipe route and is fitted with two 6inch trawler buoys. Both will be sub-sea and have a maximum height of 0,5m over seabed.

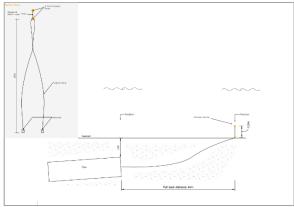


Fig. 6 EC2 direct pipe end marker buoy rig

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

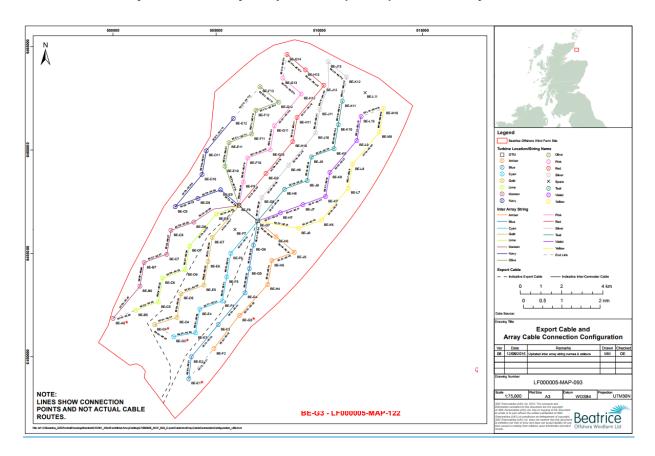


Fig. 7 Array Cable Connection Configuration

#### 2.5.1 Activity Description

On behalf of BOWL, Seaway Heavy Lifting with Siem Offshore Services, will continue the installation of the Inter Array Cables.

The CLV Siem Aimery has installed 15 Inter Array Cables during the first cable installation campaign. The cables were laid and buried between the foundations listed in Table 2 below.

The CSV Siem Stingray will support inter-array cable installation activities in the south of the Beatrice wind farm, working in parallel with the CLV Siem Aimery. The Siem Stingray will undertake the following workscopes. Personnel transfers to WTG foundations by Ampelmann Gangway, crane operations to transfer equipment to / from WTG foundations, work class ROV activities on the seabed in the vicinity of WTG foundations, and survey activities along the planned inter-array cable routes linking the appropriate WTG foundations.

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Siem Stingray			
General Description and Dimensions:	Length overall 95. m Breadth Extreme 21. m Draught max. 6.5 m		
Call Sign: LATX7			
MMSI:	258182000		
On Board Contact:	V-Sat phone: +44 2031454122		
Offshore Manager / Party Chief:	Bridge +44 2031454129		
E-mail:	-		
Onshore Representative:	Pia Curt Tronstad +47 91626791		



Table 2 - Installation Sequence for PLGR, Cable Installation and Trenching

Installation Sequence	Start	Finish	PLGR Complete	Cable Installed	Cable Trenched
Jequence	LIC	I.E			
<u> </u>	H6	J5	11.11.2017	16.11.2017	17.11.2017
2	J5	H5	13.11.2017	17.11.2017	18.11.2017
3	H5	H4	12.11.2017	19.11.2017	21.11.2017
4	H4	G3	12.11.2017	19.11.2017	25.11.2017
5	G3	F2	12.11.2017	20.11.2017	24.11.2017
6	F2	E1	15.11.2017	20.11.2017	24.11.2017
7	G6	G5	21.11.2017	02.12.2017	08.12.2017
8	G5	G4	21.11.2017	01.12.2017	08.12.2017
9	G4	F3	21.11.2017	01.12.2017	05.12.2017
10	F3	E2	21.11.2017	27.11.2017	28.11.2017
11	E2	E1	15.11.2017	26.11.2017	27.11.2017
12	F6	F5	29.11.2017	02.12.2017	04.12.2017
13	F5	F4	29.11.2017	03.12.2017	04.12.2017
14	F4	E4	29.11.2017	03.12.2017	04.12.2017
15	E4	E3			
16	E3	D3			
17	D3	C4			

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Installation Sequence	Start	Finish	PLGR Complete	Cable Installed	Cable Trenched
18	E7	E6	29.11.2017	04.12.2017	06.12.2017
19	E6	E5			
20	E5	D5			
21	D5	D4			
22	D4	C4			
23	E8	D7			
24	D7	D6			

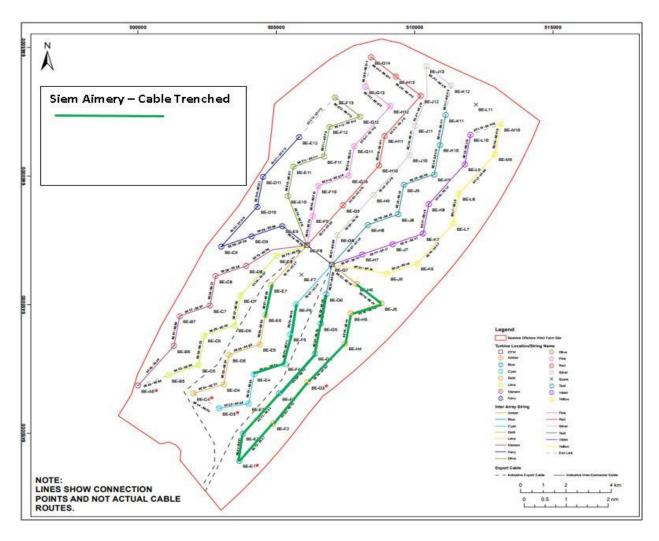


Fig. 8 Cable installation Progress

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### 3. Completed Operations

#### 3.1 Piling operations

The placement of four pin piles at both OTM locations and 84 WTG foundation locations was successfully completed on the 3<sup>rd</sup> of December 2017.

### 3.2 Scientific Equipment Installation

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):

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.

With the Piling campaign completed Aberdeen University intend recovering all their scientific equipment, this operation will be constrained by weather conditions, a further update will be given when the operation is due to commence.

Name	As laid coordinates (WGS84 datum)		Characteristics
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.
44	57° 56.261' N	3° 21.438' 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.
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.
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.

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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.
163	58° 17.966' N	2° 44.992' W	Subsurface.
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.
197	58° 12.063' N	2° 57.544' W	Subsurface with transponder.
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

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):

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Name	As laid 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.				
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.				

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



Fig. 9 Examples of equipment which the above moorings support

## **Beatrice Offshore Windfarm Limited Construction Operations**



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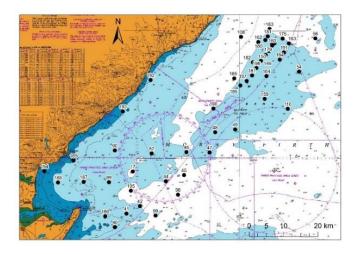


Fig. 10 Mooring locations Moray Firth, excluding sites along the southern shore

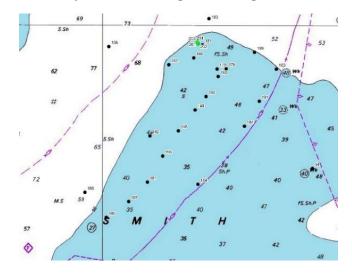


Fig. 11 - Mooring locations; Detail of Smith Bank sites, showing new locations in green

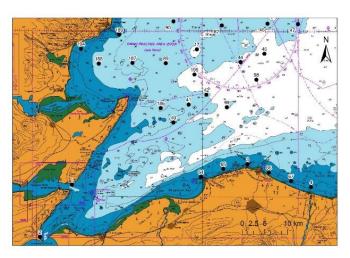


Fig. 12 - Mooring locations; Detail of South side of Moray Firth sites

# **Beatrice Offshore Windfarm Limited Construction Operations**



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### 4. 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.

### 5. Guard Vessel Deployment

Guard vessels currently on the main construction site are Morning Dawn and Shemarah II.

Seagull is guarding the unprotected portion of EC1 off Portgordon. All guard 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)
<b>Deployment Dates:</b>	1 <sup>st</sup> April 2017 – TBC.
Deployment Vessel	Various on a continuous 21 day rotation.
(s):	·
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.

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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

#### 6. 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

#### 7. 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.

#### 8. 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: 18th December 2017

Beatrice Offshore Windfarm  Vessels & Operators									
Refe	Reference to Marine Licence Conditions 2.5, 2.6 and 3.1.2  Vessel Data Matrix OWF								ICE
N^ R₁ ▼	¥essel Picture ↓	Yessel Name / F	Type / Function 🚽	Operator	Contact / contact details	Call sign / MMSI / IMC ▼	LOA (m) Beam (m) Draft (r ▼	Date on S	Marine Licence applicable
1		Siem Stingray	Inter-array Cable laying	Siem Offshore Contractors for Seaway Heavy Lifting (SHL)	Danny Sprangers (SHL) Clo Subsea 7 East Campus Arnhall Business Park Westhill, Aberdeenshire AB32 6FE +31653997158 EMAIL:dsprangers@shl.nl	C6DA3 / 311000620 / IMO9676292	120×27×6.3m	09.11.2017	OWF
2		Oleg Strashnov	Heavy Lift Vessel	Seaway Heavy Lifting (SHL)	Danny Sprangers (SHL) Cło Subsea 7 East Campus Arnhall Business Park Westhill, Aberdeenshire AB32 6FE +31 653997158 EMAIL:dsprangers@shl.nl	5BNL2 / 212905000 / IMO9452701	183 x 47 x 9.5m	16/11/2017	OWF&OfTW
3		¥os Prelude	Supply Vessel	Seaway Heavy Lifting (SHL)	Danny Sprangers (SHL) Clo Subsea 7 East Campus Arnhall Business Park Westhill, Aberdeenshire AB32 6FE +31653997158 EMAIL:dsprangers@shl.nl	PBZK /245969000	73 x 20m	16/11/2017	OWF&OfTW
4		Riz Lynz	Crew Transfer Vessel / CTV	Seaway Heavy Lifting (SHL)	Danny Sprangers (SHL) Cho Subsea 7 East Campus Arnhall Business Park Westhill, Aberdeenshire AB32 6FE 431 653 997 158 EMAIL:dsprangers@shi.nl	2JGQ6+235115745	26 x 7.0 x 2.0m	27.03.2017	OWF
5		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	OWF
6		Pegasus	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	V2ED2 / 305389000	48.81 × 14.06m	08.08.2017	OWF
7		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	50 × 15m	08.08.2017	OWF
8		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	OWF

# **Beatrice Offshore Windfarm Limited Construction Operations**



Issue Date: 18th December 2017

	ce Offshore Windfarm						Date:	18-Dec-17	<b>W</b> (c-	
Refe	Reference to Marine Licence Conditions 2.5, 2.6 and 3.1.2  Vessel Data Matrix OWF  Vessel Data Matrix OWF									
N≏ Bi ₹	Vessel Picture 🚽	Yessel Name / Fl <sub>→</sub> T	Type / Function 🐷	Operator	Contact / contact details	Call sign / MMSI / IMC	LOA (m) Beam (m) Draft (r	Date on S	Marine Licence applicable	
9		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	
10		Union Sapphire	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	ORLL # 205001000 # IMO 9220550	35.75 x 11.6m	18.12.2017	OWF	
11		Union Princess	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	ORQU / 205642000 / 9242766	67.4 x 16m	20.12.2017	OWF	
12		Union Sovereign	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	ORQW / 205644000	67.4 × 15.5m	21.08.2017	OWF	
13		Shemarah II	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	MVRR7 /232007650 / IMO9120889	27 X 8m	20.11.2017	OWF	
14		Artemis INS564	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	MVIX5 / 233975000	28 X 8m	12.12.2017	OWF	
15		Morning Dawn PD359	Guard Vessel	Scottish fishing federation (SFF) forSeaway 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	MHEU3 <i>1</i> 232253000	45 x 9 m	21/11/2017	OWF & OfTW	
16		Seacat Intrepid	Crew Transfer Vessel I 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	

# **Beatrice Offshore Windfarm Limited Construction Operations**



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Vessels & Operators

Reference to Marine Licence Conditions 2.5, 2.6 and 3.1.2 Vessel Data Matrix for OfTW
Corridor



No R€ →	Vessel Picture	Vessel Name / Flag	Type / Function	Operator	Company Name / Contact / contact details	Call sign / MMSI / IMC 🚽	LOA (m) Beam (m) Draft (m)	Date on Site	Marine Licence Applicable
1		Seagull BF74	Guard Vessel / export cable	Scottish Fishermens Federation (SFF) for Nexans Norway AS	Øyvind Haug BEATRICE Installation Engineering Manager Mob: +47 916 27 674 Office: +47 22 88 65 09	MVBO / 233714000	40.2m × 9.0m × 5.0m	13.11.2017	OfTW