# **Beatrice Offshore Windfarm Limited Construction Operations**



Issue Date: 27th November 2017

LF000005-WNO-013: Weekly Notice of Operations - Rev 30

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

#### Work Planned for the Period 27.11.2017 to 03.12.2017

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  $38 \, \text{m}$  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 OFTO cable corridor in black.

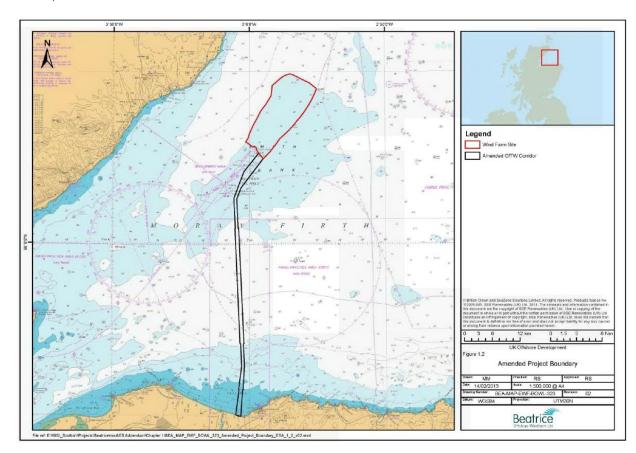


Fig. 1 Beatrice Offshore Wind Farm Location

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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 Piling Campaign

Project:	Foundation Piling Campaign
Contractor:	SHL
Contract Purpose:	To install 4 x piles at the two OTM's and each turbine location within the construction site.
Area:	BOWL Construction Site: Foundation Locations. (See Fig 2 for details).
Deployment Dates:	01 April 2017 – 30 November 2017. (Extended to complete final 2 locations)
Deployment Vessel (s):	Stanislav Yudin, Smit Seraya, Smit Sentosa, Rix Lynx, Union Fighter towing barge GB1
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 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.

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### 2.2 Beatrice Offshore Wind Farm Jacket Installation Campaign

The Oleg Strashnov will be on site from 16<sup>th</sup> November until mid-December. Then the Stanislav Yudin will take over and the Oleg Strashnov will depart.

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 – Mid December) Maersk
	Trader, Vos Prelude, Centaurus, Pegasus, Kamarina, Eraclea, Union
	Sovereign& Bremen Fighter
Equipment:	HLV equipment, Pile cleaning equipment, Grouting equipment.

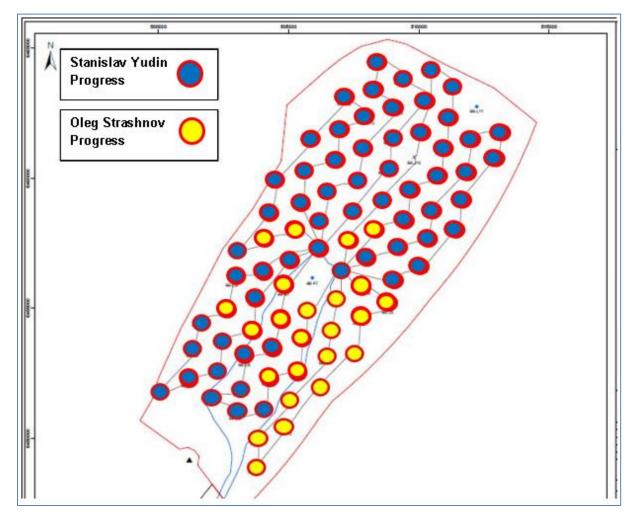


Fig. 2 Pile installation completed at 85 Locations & Foundation installation completed at 24 Locations

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**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	
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	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	
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

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Location ID	Latitude WGS84	Longitude WGS84	Piling Complete	Jacket installed
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	
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		
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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### 2.3 Installation of Export Cable EC1.2

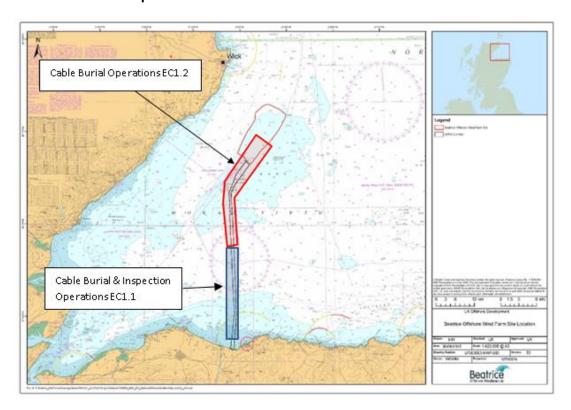


Fig. 3 Cable lay operations, approximately 33.5km - 69km from Portgordon Beach

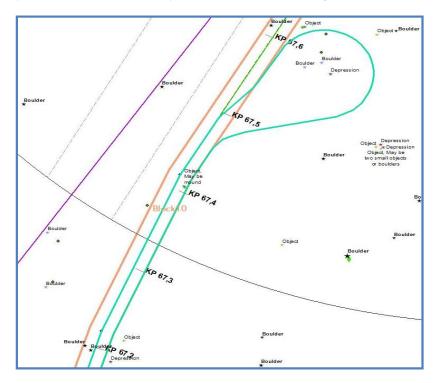


Fig. 4 Cable wet store location within the array area

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

#### 2.3.1 Activity Description

On behalf of BOWL, Nexans Norway AS using the CLV Nexans Skagerrak will trench the second section of the export cable.

The export cable EC1 has now been jointed and surface laid to approximately KP67.7 where the cable end has been wet stowed as shown in Fig 4 above. Nexans Skagerrak will continue operations, trenching the exposed cable. Trenching is planned to commence at KP34 moving inbound towards the site, using a 1megaWatt high pressure water jetting system known as Capjet. This is deployed from the Skagerrak and uses swords with water jet nozzles to penetrate and liquefy the seabed to allow the cable to drop in. Control of the Capjet is remote from on board the Skagerrak. The final part of the operation will be further burial of cable EC1.1 between KP4.5 and KP7. Also inspection and second pass work on other areas.

The cable layer is supported by two guard vessels, Artemis and Seagull, who will guard the unprotected cable on the seabed. Shemarah II, will guard the unprotected cable within the site, issuing regular broadcasts to shipping containing relevant information.

CLV 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	



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Seagull / BF74		
General Description and Dimensions:	Guard Vessel, L:30 m / B:8 m/ D 3.0m	
Call Sign:	MVBO2	
MMSI:	233714000	
Onshore Representative:	Øyvind Haug	



GV Artemis INS569		
General Description and	Guard Vessel L 27.6m / B 8.7m / D 5.1m	
Dimensions:		
Call sign	MVIX5	
MMSI	233975000	
Onshore representative	Øyvind Haug – Nexans Norway AS	
BEATRICE Installation Engineering Manager		
Mob: +47 916 27 674		
	Office: +47 22 88 65 09	



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

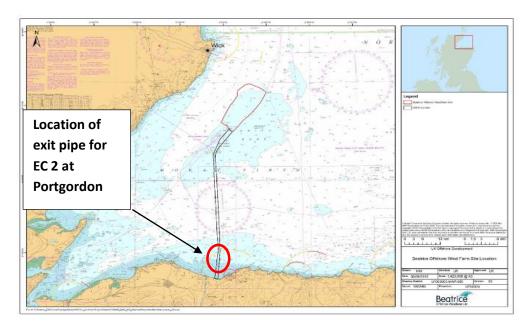


Fig. 5 Location of exit pipe for EC 2 at Portgordon

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

### 2.4.1 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.

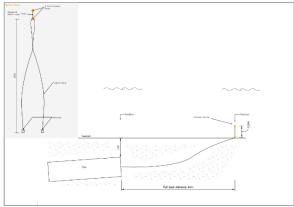


Fig. 6 EC2 direct pipe end marker buoy rig

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

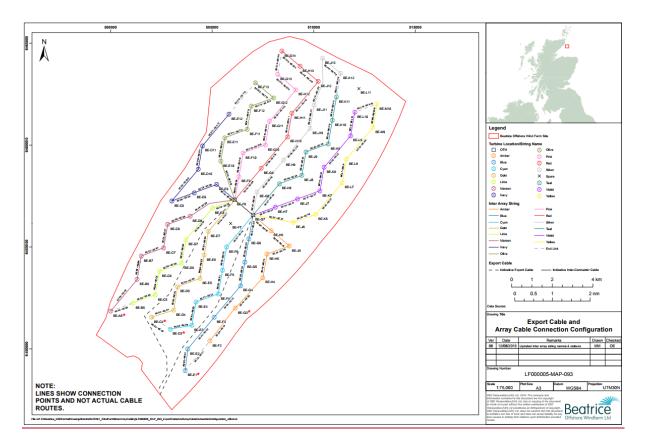


Fig. 7 Array Cable Connection Configuration

### 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 will install up to 24 Inter Array Cables during the first cable installation campaign. 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 foundations listed in Table 2 below. Cable burial will be undertaken by a tracked jet trencher launched from the Siem Aimery.

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 Aimery		
	Length overall 95. m	
<b>General Description and Dimensions:</b>	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		



Siem Stingray		
	Length overall 95. m	
General Description and Dimensions:	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		



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

Installation Start		Finish	PLGR	Cable	Cable		
Sequence	Start	1 1111311	Complete	Installed	Trenched		
1	H6	J5	11.11.2017	16.11.2017	16.11.2017		
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	22.11.2017		
5	G3	F2	12.11.2017	20.11.2017	24.11.2017		
6	F2	E1	15.11.2017	21.11.2017			
7	G6	G5	21.11.2017				
8	G5	G4	21.11.2017				
9	G4	F3	21.11.2017				
10	F3	E2	21.11.2017				
11	E2	E1	15.11.2017				
12	F6	F5					
13	F5	F4					
14	F4	E4					
15	E4	E3					
16	E3	D3					
17	D3	C4					
18	E7	E6					
19	E6	E5					
20	E5	D5					
21	D5	D4					
22	D4	C4					
23	E8	D7					
24	D7	D6					

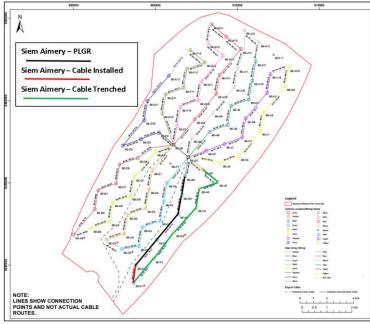


Fig 8 Cable installation Progress

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### 3. Completed Operations

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.

Name		oordinates 4 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.
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.

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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.
			Subsurface with acoustic release.
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.
190	58° 07.723' N	3° 07.467' W	
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):

Name		oordinates 4 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.

# **Beatrice Offshore Windfarm Limited Construction Operations**



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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. 8 Examples of equipment which the above moorings support

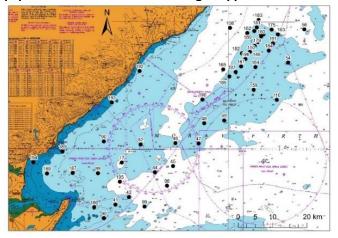
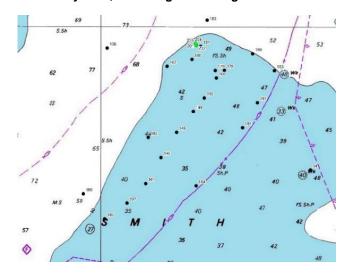


Fig. 9 Mooring locations Moray Firth, excluding sites along the southern shore



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Fig. 10 Mooring locations; Detail of Smith Bank sites, showing new locations in green

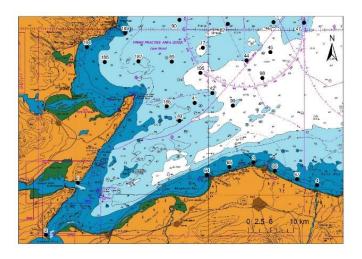


Fig. 11 Mooring locations; Detail of South side of Moray Firth sites

### 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.
- 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 and Artemis are guarding the export cable. All guard vessels can be contacted on VHF Ch.16

# **Beatrice Offshore Windfarm Limited Construction Operations**



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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

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

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

# **Beatrice Offshore Windfarm Limited Construction Operations**



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Beatrice Offshore Windfarm Vessels & Operators

Reference to Marine Licence Conditions 2.5, 2.6 and 3.1.2

### **Vessel Data Matrix OWF**



Date: 20-Nov-17

No Ref	Vessel Picture	Vessel Name / Flag	Type / Function	Operator	Contact / contact details	Call sign / M M S I / I M O	LOA (m ) Beam (m ) Draft (m )	Date on Site	Marine Licence applicable
1		Siem Stingray	Inter-array Cable laying	Siem Offshore Contractors for Sea way Heavy Lifting (SHL)	Danny Sprangers (SHL) C/o Subsea 7 East Campus Amhall Business Park Westhill, Aberdeenshire AB32 6FE +31 65399 7158 EMAIL xisprangers @shl nl	C6DA3/311000620/ 9676292	120/27/6.3	09/11/2017	OWF
2	A CONTRACTOR OF THE PARTY OF TH	Siem Aimerų	Pre Lay Grapnel run (PLGR) Inter-array Cable laying	Siem Offshore Contractors for Sea way Heavy Lifting (SHL)	Danny Sprangers (SHL) C/o Subsea 7 East Campus Amhall Business Park Westhill, Ab endeenshire AB32 6FE +31 663997168 EMAIL xisprangers @shl .nl	LATX7 / 25818 2000 / 96947 37	95/21/65	08/11/2017	OWF
3		Stanislav Yudin	Heavy Lift Vessel	Seaway Heavy Lifting (SHL)	Danny Sprangers (SHL) C/o Subsea 7 East Campus Amhall Business Park Westhill, Aberdeenshire AB32 6FE +31 65399 7168 EMAIL xisprangers @shl nl	5BYM2 /210334000 ,8219463	183.3 / <b>4</b> 0.0 / 8.9	27.03 20 17	OWF& OfTW
4		Oleg Strashnov	Heavy Lift Vessel	Seaway Heavy Lifting (SHL)	Danny Sprangers (SHL) C/o Subsea 7 East Campus Amhall Business Park Westhill, Ab endeenshire AB32 6FE +31 663997168 BMAIL xisprangers @shl nl	5BNL2/212905000/ 9452701	183 x 47 x 9.5	16/11/2017	OWF& OfTW
5		Vos Prelude	Supply Vessel	Seaway Heavy Lifting (SHL)	Danny Sprangers (SHL) Clo Subsea 7 East Campus Amhall Business Park Westhill, Ab endeenshire AB32 6FE +31 663997168 EMAIL dsprangers @shl .nl	PBZK/245969000	73m x 20m	16/11/2017	OWF& OfTW
6	nath	Maersk Trader	Supply Vessel	Seaway Heavy Lifting (SHL)	Danny Sprangers (SHL) C/o Subsea 7 East Campus Amhall Business Park Westhill, Aberdeenshire AB32 6FE +31 65399 7158 EMAIL xisprangers @shl nl	OXR02	73m x 20m	16/11/2017	OWF & OfTW
7		Smit Sentosa	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 BMAIL/dsprangers@shl.nl	ORRX /205696000	51.8/150/62	27.03 20 17	OWF

# **Beatrice Offshore Windfarm Limited Construction Operations**



Issue Date: 27th November 2017

8	m	Rix Lynx	Crew Transfer Vessel / CTV	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	2JGQ6 / 235115745	26/7.0/2.0	27.03.2017	OWF
9	Para de la constante de la con	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/205568000	40.6/ 12.7/ 6.3	03.08.2017	OWF
10		Smit Seraya	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	9V9845/ 588804000/	51.8 x 16 x 6	13.05.2017	OWF
11		Centauras	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	V2ED3 / 305820000	48.81m × 14.06m	08.08.2017	OWF
12		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	OWF
13		Kamarina	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	IITW2 / 247278400	50m × 15m	08.08.2017	OWF
14		Eraclea	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	IITX2 / 247278500	50m × 15m	08.08.2017	OWF
15		Shemarah II LH65	Guard Vessel	Scottish fishing federation (SFF) forSeaway 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	MVRR7 / 232007650	27/ 8 m	20/11/2017	OWF & OFTW
16		Morning Dawn PD359	Guard Vessel	Scottish fishing federation (SFF) forSeaway 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	MHEU3 / 232253000	45/9 m	21/11/2017	OWF & OfTW

# **Beatrice Offshore Windfarm Limited Construction Operations**



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17	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	27m x 10m x 1.5	25.09.2017	OWF & OfTW
18	Skagerrak	Export Cable laying Vessel	Nexans NorwayAS Innspurten 9, 0863 Oslo, Norway +47 22 88 61 00	Øyvind Haug BEATRICE Installation Engineering Manager Mob: +47 916 27 674 Office: +47 22 88 65 09	LCEK / 25723000	99.75m x 35.41m	09.11.2017	OFTW

Beatrice Offshore Windfarm

Date: 27-Nov-17

Vessels & Operators

Reference to Marine Licence Conditions 2.5, 2.6 and 3.1.2

### **Vessel Data Matrix for OfTW Corridor**



No Ref	Vessel Picture	Vessel Name / Flag	Type / Function	Operator	Company Name / Contact / contact details	Call sign / MMSI / IMO	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 x 9.0m x 5.0m	13.11.2017	OfTW
3		Artemis INS569	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	MVIX5 / 233975000	28 x 8 x 5m	04.11.2017	OfTW