

# Weekly Notice of Operations (WNoO)

## Beatrice Offshore Windfarm Limited

### Construction Operations



Issue Date: 14<sup>th</sup> August 2017

LF000005-WNO-013: Weekly Notice of Operations - Rev 14

## Notice of Operations at Beatrice Offshore Wind Farm

Work Planned for the Period 14.08.2017 to 20.08.2017

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 130km<sup>2</sup> 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.

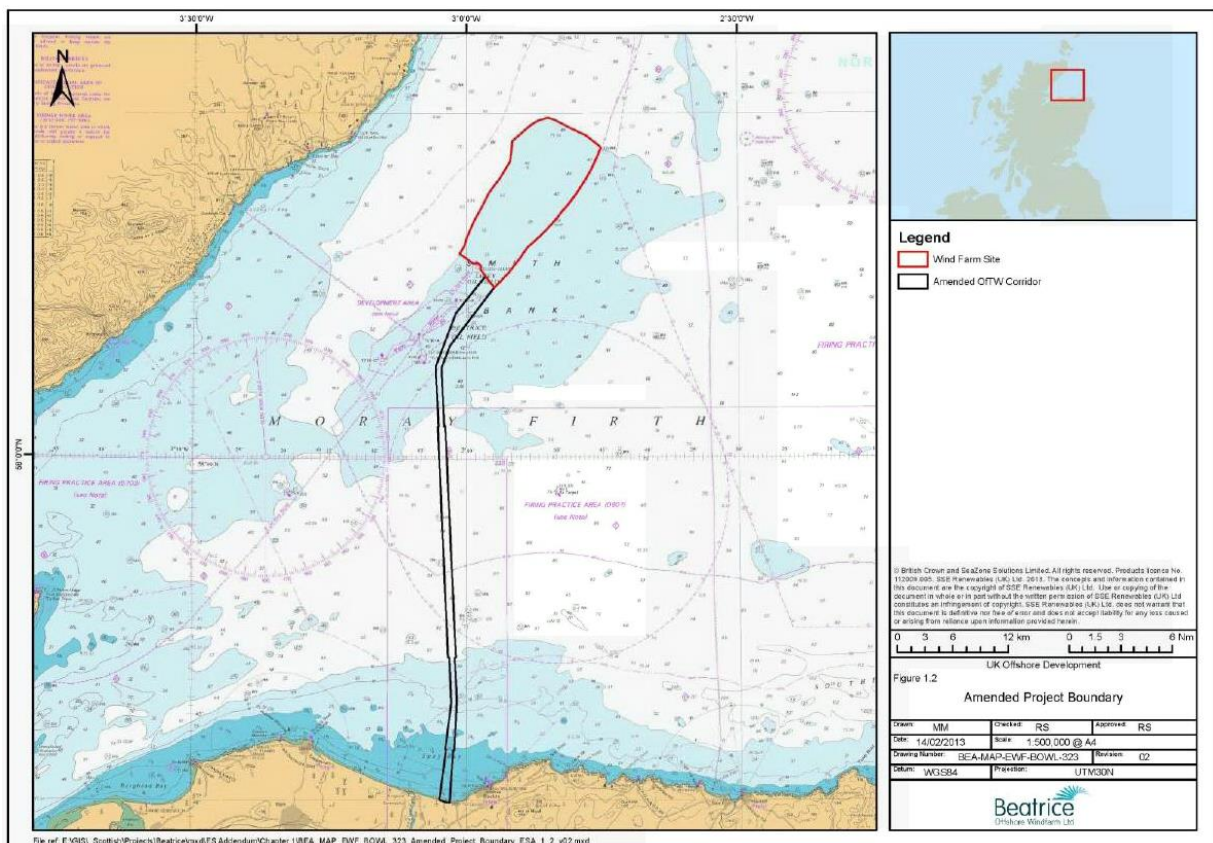


Fig 1 - Beatrice Offshore Wind Farm Location

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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	<a href="mailto:mc.bowl@sse.com">mc.bowl@sse.com</a>
Address	Unit 1 Harbour Office Wick Caithness KW1 5HA

## 2. Ongoing Operations

### Beatrice Offshore Wind Farm Piling Campaign

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

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

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

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### Beatrice Offshore Wind Farm Jacket Installation Campaign

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

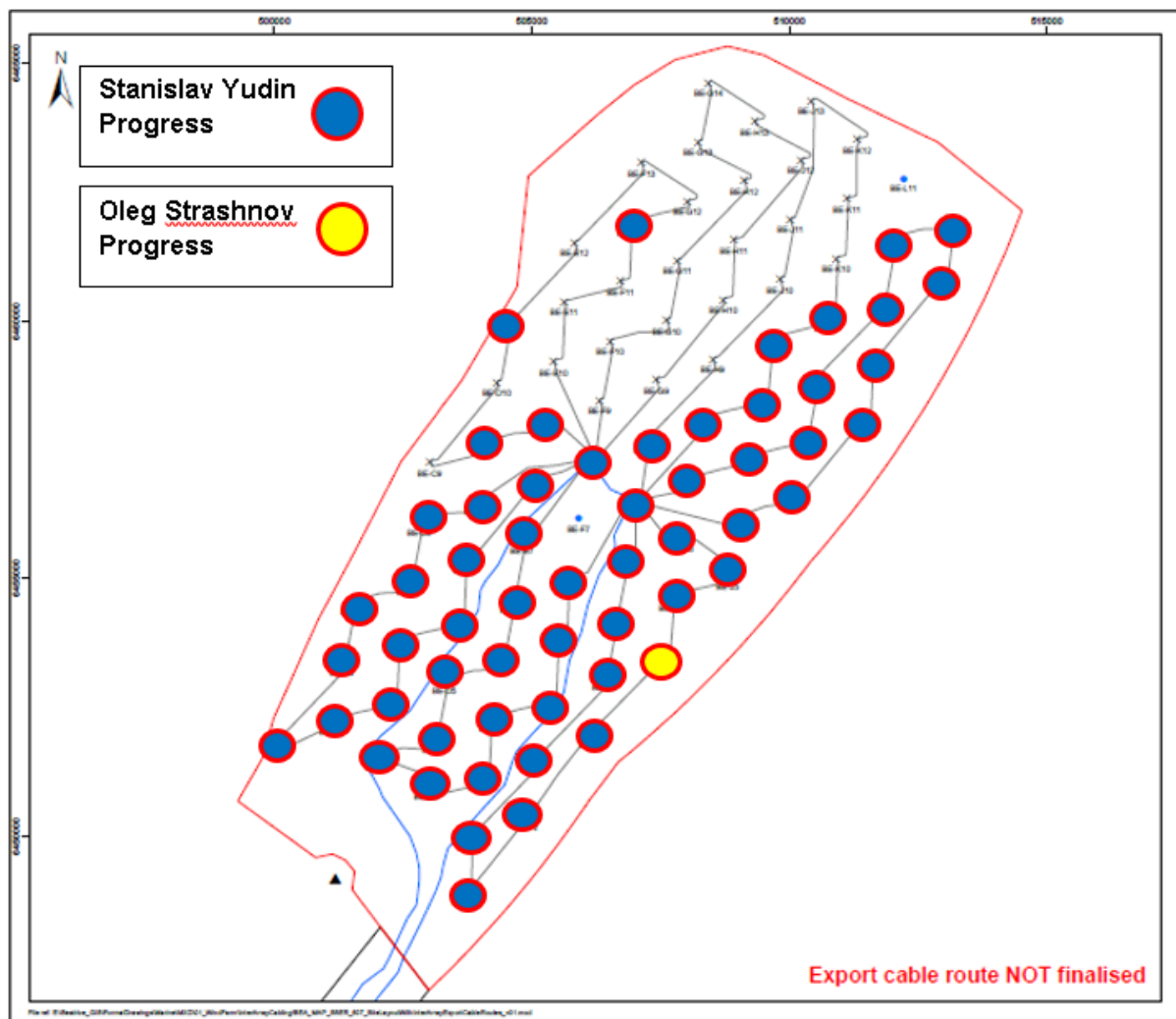


Fig 2 – Piled locations & Installed Jacket locations.

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

Completed Piled locations highlighted in yellow. Total completed so far: 59.

Installed Jackets in location highlighted in yellow. Total completed so far: 1.

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	
BE-C8	58 14.766' N	002 57.124' W	17.07.2017	
BE-C9	58 15.386' N	002 56.915' W		
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	
BE-D7	58 14.359' N	002 56.209' W	31.05.2017	
BE-D8	58 14.981' N	002 55.999' W	02.06.17	
BE-D9	58 15.602' N	002 55.790' W	16.07.2017	
BE-D10	58 16.223' N	002 55.582' W		
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	
BE-E2	58 11.470' N	002 56.128' W	14.04.2017	
BE-E3	58 12.090' N	002 55.920' W	19.04.2017	
BE-E4	58 12.712' N	002 55.710' W	02.07.2017	
BE-E5	58 13.333' N	002 55.502' W	19.05.2017	
BE-E6	58 13.954' N	002 55.293' W	18.05.2017	
BE-E7	58 14.575' N	002 55.084' W	01.06.2017	
BE-E8	58 15.196' N	002 54.875' W	30.05.2017	
BE-E9	58 15.817' N	002 54.665' W	15.07.2017	
BE-E10	58 16.438' N	002 54.456' W		
BE-E11	58 17.059' N	002 54.247' W		
BE-E12	58 17.680' N	002 54.037' W		
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	
BE-F4	58 12.927' N	002 54.588' W	04.07.2017	
BE-F5	58 13.548' N	002 54.378' W	17.05.2017	
BE-F6	58 14.168' N	002 54.169' W	11.05.2017	
BE-F8 (OTM2)	58 15.411' N	002 53.750' W	08.04.2017	
BE-F9	58 16.031' N	002 53.540' W		
BE-F10	58 16.653' N	002 53.330' W		

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Location ID	Latitude WGS84	Longitude WGS84	Piling Complete	Jacket installed
BE-F11	58 17.274' N	002 53.120' W		
BE-F12	58 17.894' N	002 52.911' W	05.07.2017	
BE-F13	58 18.516' N	002 52.701' W		
BE-G3	58 12.544' N	002 53.726' W	28.05.2017	
BE-G4	58 13.142' N	002 53.464' W	17.06.2017	
BE-G5	58 13.762' N	002 53.254' W	10.05.2017	
BE-G6	58 14.384' N	002 53.044' W	06.05.2017	
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	
BE-G9	58 16.247' N	002 52.415' W		
BE-G10	58 16.867' N	002 52.204' W		
BE-G11	58 17.488' N	002 51.994' W		
BE-G12	58 18.109' N	002 51.784' W		
BE-G13	58 18.730' N	002 51.574' W		
BE-G14	58 19.351' N	002 51.362' W		
BE-H4	58 13.356' N	002 52.339' W	19.06.2017	13.08.2017
BE-H5	58 13.977' N	002 52.130' W	20.06.2017	
BE-H6	58 14.598' N	002 51.920' W	20.04.2017	
BE-H7	58 15.219' N	002 51.709' W	08.07.2017	
BE-H8	58 15.840' N	002 51.499' W	06.05.2017	
BE-H9	58 16.461' N	002 51.289' W		
BE-H10	58 17.082' N	002 51.079' W		
BE-H11	58 17.703' N	002 50.867' W		
BE-H12	58 18.324' N	002 50.657' W		
BE-H13	58 18.944' N	002 50.446' W		
BE-J5	58 14.192' N	002 51.005' W	04.05.2017	
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		
BE-J12	58 18.538' N	002 49.530' W		
BE-J13	58 19.159' N	002 49.319' W		
BE-K6	58 15.027' N	002 49.669' W	07.08.2017	
BE-K7	58 15.648' N	002 49.459' W	08.08.2017	
BE-K8	58 16.269' N	002 49.247' W	31.07.2017	
BE-K9	58 16.890' N	002 49.036' W	05.08.2017	
BE-K10	58 17.510' N	002 48.825' W		
BE-K11	58 18.131' N	002 48.614' W		
BE-K12	58 18.752' N	002 48.403' W		
BE-L7	58 15.862' N	002 48.333' W	09.08.2017	
BE-L8	58 16.482' N	002 48.122' W	25.07.2017	
BE-L9	58 17.104' N	002 47.910' W	31.07.2017	



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Location ID	Latitude WGS84	Longitude WGS84	Piling Complete	Jacket installed
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	

### 3. Operations Commencing This Week

#### Pre-Lay Grapnel Run and Route Clearance

Pre-Lay Grapnel-run shall be made along the centreline of the export (EC1 and EC2) and Interconnector (IC) cable routes.

From: Export Cable 1, EC1 End of Trench KP4.5	To: Export Cable 1, EC1 OTM1	Approximate length (KM)
57° 42.236' N 003° 01.956' W	58° 15.004' N 002° 52.834' W	63.3km

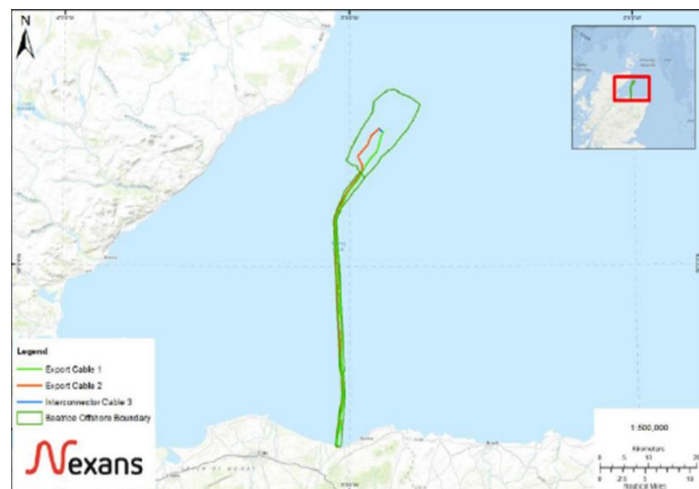
**Table.1** Latitude and Longitude of start and finish PGLR works.

From: Export Cable 2, EC2 End of Trench KP4.5	To: Export Cable, EC2 OTM2	Approximate length (KM)
57° 42.272' N 003° 02.299' W	58° 15.411' N 002° 53.750' W	64.5km

**Table.2** Latitude and Longitude of start and finish PGLR works.

From: Interconnector Cable IC OTM1	To: Interconnector Cable IC OTM2	Approximate length (KM)
58° 15.004' N 002° 52.834' W	58° 15.411' N 002° 53.750' W	1.2km

**Table.3** Latitude and Longitude of start and finish PGLR works.



**Fig.3** Cable Routes.

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PLGR is to be performed where new power cable will be protected by jetting. This is to ensure that the burial area is clear of debris.

A PLGR operation has the aim of clearing any debris (such as discarded rope or fishing nets) from the route, to prevent damage to the jetting tool, or any hindrance to the burial.

A Route Clearance (RC) operation aims to clear any identified Out of Service (OOS) cables from the planned cable route(s), to allow continuous burial.

Pre-Lay Grapnel-run will be made along the centreline of the export (EC1 and EC2) and Interconnector (IC) cable routes. This gives a total of approximately 129 km PLGR.

The PLGR will be performed by Blue Castor.

Blue Castor	
General Description and Dimensions:	46.02m x 7.95m x 5.6m
Call Sign:	OUKR2
MMSI:	220294000
Onshore Representative:	Rob Brown E-mail: rob.brown@nexans.com



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MarineTraffic.com

Grapnels to be used depending on seabed conditions, these include:

**Fine sand:** Rennies/gifford/sandgrapnel

**Sand:** Rennies/gifford/spearpoint

**Sand and gravel:** Rennies/gifford/spearpoint

**Gravel with cobbles:** Rennies/gifford

**Diamicton (Clay with small boulders):** Rennies/gifford

The PLGR will be performed to a minimum 0.5 m depth into the seabed.

A grapnel designed to hook surface debris such as fish nets, wires and ropes will be used as a minimum.

No crossing live cables or pipelines have been identified on the site.

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Where any significant debris is recovered a second run will be performed with at least 100m overlap over the same area to ensure no additional debris remains.

During all operations, reference will be made to the final Route Position List (RPL) as supplied by the Contractor.

A diagram of the grapnels and arrangement is shown below. There is no weak link in this rigging, but it is designed with a Work Load limit of 12 tons.



**Fig.4** A Grapnel.

All cable and materials recovered during the operations shall be stowed on board the vessel for disposal ashore.

The method is to deploy the grapnel array and pay out a towing line to the appropriate length

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

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

Should UXO be encountered, the master shall be informed immediately and steps shall be taken to ensure the safety of the vessel and the crew as a priority. The UXO will be marked and the coastguard, Contractor, Client and Subcontractor shall be notified as per emergency response plan.



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#### 4. Completed Operations

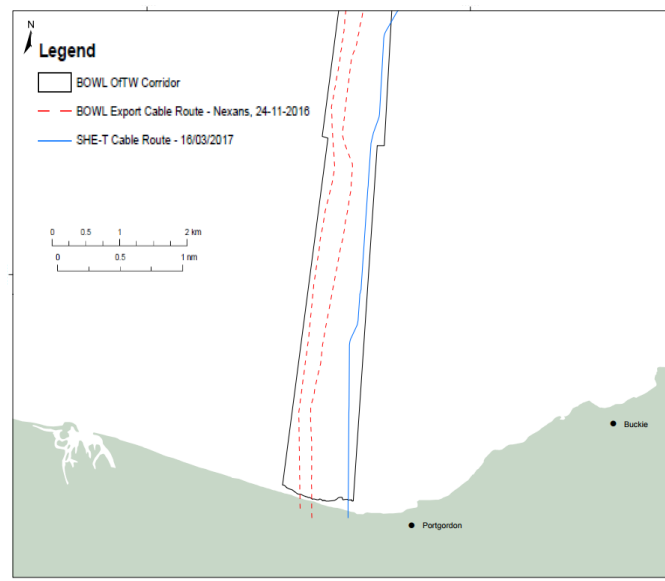
##### Export Cable Installation Stage 1 – Installation of Direct Cable Pipes at Portgordon

<b>Project:</b>	Export Cable Installation Stage 1 Commences May 2017.
<b>Contractor:</b>	Nexans
<b>Contract Purpose:</b>	Installation of Direct Cable Pipes at Portgordon
<b>Area:</b>	Portgordon near Buckie
<b>Deployment Dates:</b>	EC1 was completed on Monday 10 <sup>th</sup> July. EC2 works due to commence mid-August 2017 TBC.
<b>Deployment Vessel (s):</b>	N/A
<b>Equipment:</b>	N/A

Installation of Direct Cable Pipe at Portgordon on location EC1 was completed on Monday 10<sup>th</sup> July. Installation of direct Pipes at Portgordon on location EC2 will commence in mid August and Notice to Mariners and updates in Weekly Notice of operations will follow in due time.

##### Export Cable Installation – Backhoe Works.

Export Cable Backhoe trenching works were completed on Thursday 20<sup>th</sup> of July 2017. The vessels engaged in the work scope have now left site and demobilised.



**Fig.5 Showing the Export Cable OFTO Corridor and cable routes**

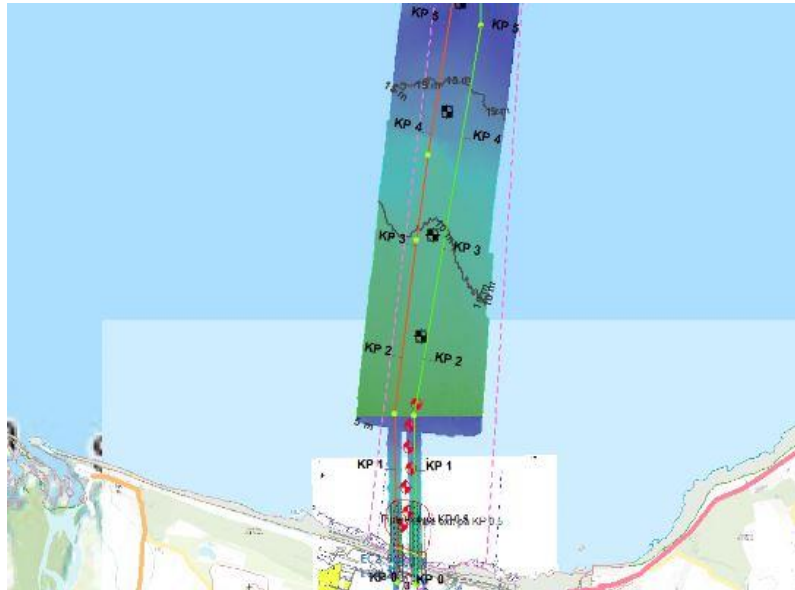
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**Fig.6 Showing the extent of the backhoe dredging of the Export Cable routes**

Vessels are advised to avoid engaging in fishing or laying of static gear in the vicinity of the cable routes. There is a raised berm, in some places >1m above the seabed on either side of the trenches from 400m to 4500m offshore for specific information please contact Alex Winrow-Giffin at Brown and May (see para 9 below).

#### Aberdeen University – Installed Seabed Mounted Scientific Equipment

Mariners are advised that, further to notice UoA/06/2017 and in conjunction with Beatrice Offshore Windfarm Limited (BOWL), the University of Aberdeen has **installed** scientific equipment moorings in the Moray Firth at the locations listed in table 1, below (see also chart extracts at the foot of this notice):

Table 1 .

Name	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.
82	58° 00.625' N	3° 25.691' W	Subsurface with acoustic release.

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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.
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.

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. Twenty-four of the above moorings are also equipped with an acoustic release or transponder.

Mariners are further advised that the following moorings (Table 2) have been **re-installed in their existing location** in the Moray Firth (see also chart extracts at the foot of this notice). Eight of these moorings are also equipped with an acoustic release or transponder:

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Table 2.

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.
108	58° 18.993' N	2° 59.223' W	Subsurface.
160	58° 17.648' N	2° 49.931' W	Subsurface with transponder.
161	58° 12.933' N	2° 55.954' W	Subsurface with transponder.
162	58° 18.176' N	2° 54.124' W	Subsurface with transponder.
164	58° 12.830' N	2° 51.669' W	Subsurface with transponder.

Mariners should note that the following existing moorings (table 3) **remain in place** in the Moray Firth, as per our Notice to Mariners UoA/05/2017, and in accordance with marine licence 05594/15/0 (see also chart extracts at the foot of this notice):

Table 3.

Name	As laid coordinates (WGS84 datum)		Characteristics
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)

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](mailto:t.r.barton@abdn.ac.uk)



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Acoustic logger  
(600 x 95mm)

Sound Recorder  
(900 x 170mm)

Sound recorder  
(200 x 60mm)

Fig.7 Examples of equipment which the above moorings support.

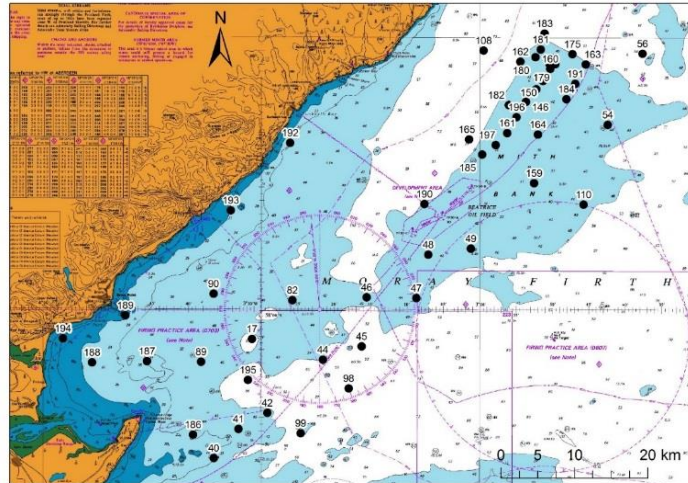


Fig.8 Mooring locations – Moray Firth, excluding sites along the Moray Firth southern shore.

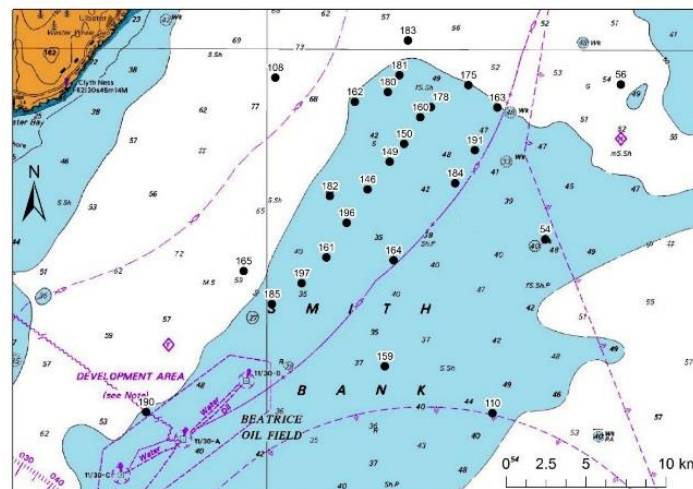


Fig.9 Mooring locations – detail of Smith Bank sites, Moray Firth.



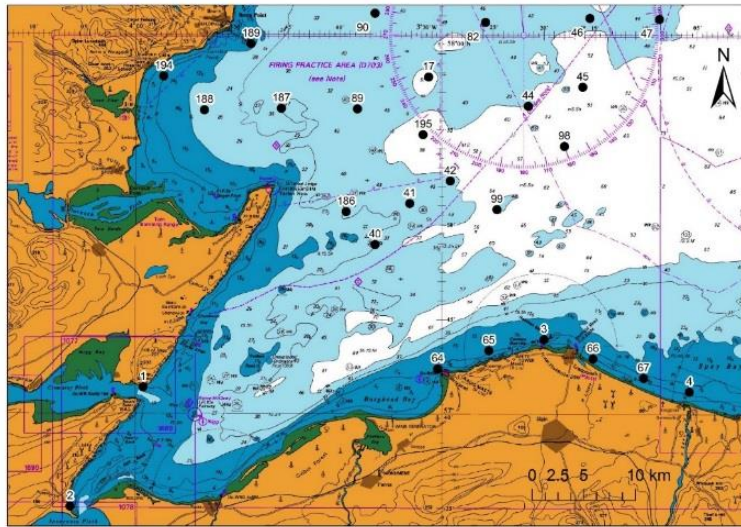
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**Fig.10 Mooring locations – detail of south side of Moray Firth sites.**

## 7. 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.
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.

## 8. Guard Vessel Deployment



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No new Guard Vessels to be deployed this week.

The guard vessel's currently on location are Pleiades BF155 and Moremma PD135. Guard Vessels can be contacted on VHF Ch16 and Ch13

<b>Project:</b>	Beatrice Offshore Windfarm Guard Vessel Deployment.
<b>Contractor:</b>	SHL – SFF Services Ltd.
<b>Contract Purpose:</b>	Guard Vessel for the Windfarm site.
<b>Area:</b>	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.
<b>Deployment Vessel (s):</b>	Various on a continuous 21 day rotation.
<b>Equipment:</b>	N/A

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

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

## 9. 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](mailto:alex@brownmay.com)

## 10. 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.

## 11. 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>.

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Vessels, agents, contractors and sub-contractors

Date: 12-Aug-17

Reference to Marine Licence  
Conditions 2.5, 2.6 and 3.1.2

### Vessel Data Matrix



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

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8		<b>Union Fighter</b>	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	ORPP/205566000	40.6/ 12.7/ 6.3	03.08.2017
9		<b>Smit Seraya</b>	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/ 566804000/	51.8 x 16 x 6	13.05.2017
10		<b>Moremma PD135</b>	Guard Vessel	Seaway Heavy Lifting (SHL)	Danny Sprangers (SHL) C/o Subsea 7 East Campus Amhall Business Park Westhill, Aberdeenshire AB32 6FE +31 653997158 EMAIL:dsprangers@shl.nl	MKHC6 / 235007170	15.0 x 5.0 x 3.0	17.07.2017
11		<b>Pleiades BF155</b>	Guard Vessel	Seaway Heavy Lifting (SHL)	Danny Sprangers (SHL) C/O Subsea 7 East Campus Amhall Business Park Westhill, Aberdeenshire, AB32 6FE +31 653997158 Email - dsprangers@shl.nl	2BSR7 / 235069008	20 x 5.0	04.08.2017
12		<b>Maersk Trader</b>	Anchor Handler / ROV	Seaway Heavy Lifting (SHL)	Danny Sprangers (SHL) C/O Subsea 7 East Campus Amhall Business Park Westhill, Aberdeenshire, AB32 6FE +31 653997158 Email - dsprangers@shl.nl	OXRO2 / 220584000	73.2m x 20m	08.08.2017
13		<b>VOS Prelude</b>	Supply Vessel	Seaway Heavy Lifting (SHL)	Danny Sprangers (SHL) C/O Subsea 7 East Campus Amhall Business Park Westhill, Aberdeenshire, AB32 6FE +31 653997158 Email - dsprangers@shl.nl	PBZK / 245969000	73.2m x 20m	08.08.2017
14		<b>Centaurus</b>	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 x 14.06m	08.08.2017
15		<b>Pegasus</b>	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 x 14.06m	08.08.2017
16		<b>Kamarina</b>	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 x 15m	08.08.2017

Name and Registered Office: Beatrice Offshore Windfarm Limited. One Waterloo Street, Glasgow. G2 6AY

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17		<b>Eraclea</b>	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 x 15m	08.08.2017
18		<b>Bugsier 10</b>	Barge Tow Vessel	Seaway Heavy Lifting (SHL)	Danny Sprangers (SHL) C/O Subsea 7 East Campus Arnhall Business Park Westhill, Aberdeenshire, AB32 6FE +31 653997158 Email - dsprangers@shl.nl	DFWB2 / 218321000	32m x 12.6m	09.08.2017
19		<b>Union Sovereign</b>	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	ORQW / 205644000	67.4m x 15.5m	21.08.2017
20		<b>Blue Crastor</b>	PGLR Survey Vessel	Nexans	Rob Brown NEXANS NORWAY AS P.O.Box 6450 Etterstad N-0605 Oslo Norway +47-22 88 61 00 E-mail: rob.brown@nexans.com	OUKR2 / 220294000	46.02m x 7.95m	16.08.2017