

### Notice to Activities Associated with the Development of Beatrice Offshore Wind Farm

Date of Issue	8th October 2017	Notice Number	LF000005-NTM-028-Rev02
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Please promulgate the following as a Notice to Mariners:

### **BOWL Export Cable Trenching EC1.1**

The installation of two export cables (EC) in the Beatrice Offshore Windfarm construction site will continue with the jetting/trenching of the installed section of EC1.1 from around 2km North of the beach at Portgordon. In this respect the work listed here is due to be carried out as described below starting around 6<sup>th</sup> October.

### 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 (Day Operations)	+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. Area of Planned Activity

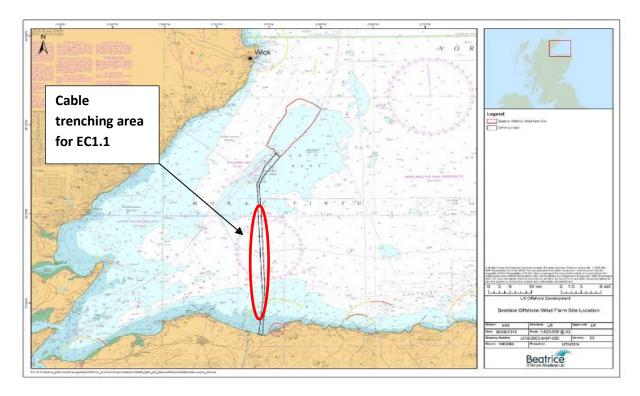


Fig.1 Cable trenching location, approximately 2km – 33km from the Portgordon Beach



### 3. Activity Description

On behalf of BOWL, Nexans Norway AS using the cable laying vessel Skagerrak & DSV Aramis will trench the first section of an export cable. The work will commence as follows:

- Trenching by the Skagerrak from KP2.0 to KP4.5
- Trenching by the Skagerrak from KP33 to KP7.0
- Trenching and Survey works by DSV Aramis from KP0.450 to KP2.0 using Capjet mini tool.

Additional trenching works will be performed once more cable sections have been installed. These will be notified separately.

**3.1 Capjet**. The equipment used for the trenching is 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.



Fig 2. The Capjet trenching machine

**3.2 Seabed Positioning System.** To assist with accurate positioning of the trenching equipment for the nearshore trenching works, a seabed positioning system will be deployed in a position  $57^{\circ}$  42.257"N  $003^{\circ}$  01.908"W (GRS1980), approximately 43m to the East of EC1.1 cable trench, within the OfTO corridor.

The positioning system is approximately 2m x 1.7m and extends 2m above the seabed. Transponder is removable so a vessel undertaking calibration can use its own calibration transponder HiPAP / uPAP etc.

The equipment will <u>not</u> be marked with a surface buoy. It will remain in this position until after the second part of the cable, EC1.2 has be laid and buried, including the rock placement phase, which is likely to be in November or December 2017.



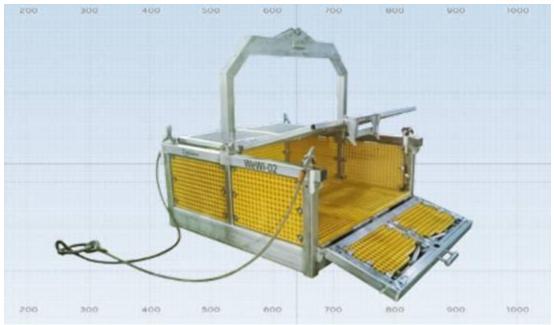


Fig 3 Seabed referencing system

### 4. Vessels Associated with the Activity

The vessels that are involved with the described operation are the Skagerrak, DSV Aramis and the guard vessels Fisher Boys FR 54 and Artemis FR 809

Skagerrak		
General Description and Dimensions:	Cable Layer & Trenching 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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DSV Aramis		
General Description and Dimensions:	Aluminium Workboat L:15.7m / B:4.95m / D:0.80	
Call Sign: LDEH		
MMSI:	257167000	
Onshore Representative:	Øyvind Haug BEATRICE Installation Engineering Manager Mob: +47 916 27 674 Office: +47 22 88 65 09	



Fisher Boys FR 54		
General Description and Dimensions:	Guard Vessel, L:20m / B: 6m	
Call Sign: MWHY7		
MMSI:	234750000	
Onshore Representative:	Øyvind Haug BEATRICE Installation Engineering Manager Mob: +47 916 27 674 Office: +47 22 88 65 09	



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Artemis		
General Description and Dimensions:	L 23.1m / B 6.4m / D 2.25m	
Call sign	2SNV	
MMSI	235006852	
Onshore representative	Øyvind Haug – Nexans Norway AS BEATRICE Installation Engineering Manager Mob: +47 916 27 674 Office: +47 22 88 65 09	



### 5. Adverse Weather Conditions

Should adverse weather occur during the trenching, the Skagerrak will cease operation and hold position until suitable working weather returns. The vessel is able to recover the Capjet within around 30 mins and move off station if required.

The operational limits for the trenching are listed in below table:

Operation(s)	Limiting Weather Criteria
Burial – Transit or standby at site	Hs = None / Master decision
CAPJET 1MW Jetting	Wind speed = None / Master decision
Burial – Launch / Recovery	Hs = 3 m
	Wind speed = 15 – 18 m/s
Burial < 10m Water Depth	Hs = 1.5 m
	Wind speed = 10 – 15 m/s
Burial >10m Water Depth	Hs = 3 m
	Wind speed = 15 – 18 m/s
Burial – Standby Onsite – Capjet	Hs = 3.5 m
deployed in water, standby on	Wind speed = 15 – 18 m/s
seabed or trenching	
Max. surface current	(2 knots)
Surface visibility	(100 m)

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### 6. General Safety Advice

All vessels engaged in the construction 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.

Use of Safety Zones within the Beatrice Offshore Windfarm Construction Area:

The Secretary of State for Business, Energy and Industrial Strategy (BEIS) has approved the use of safety zones under the Energy Act 2004 for the installation of wind turbines and offshore transformer module foundations/substructures within the Beatrice Offshore Windfarm. The approval was granted on the 17th March 2017.

The Secretary of State has declared Safety Zones under the following terms: During Construction

- 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.
- It is noted that the 500 metre safety zones will roll with the installation activity with no more than two construction vessels working at any one time. Vessels are advised that anchors associated with the construction vessels may extend outside of the 500 metre safety zone.
- A 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.
- Positions of foundations installed will be promulgated within the Weekly Notice of Operations.
  Only vessels associated with the Beatrice Offshore Wind Farm construction may enter statutory Safety Zones with prior permission.

The duty Guard Vessels and Marine Coordination centre will be responsible for monitoring and policing the Safety Zones; and can be contacted directly for advice.

Further information on the application of Safety Zones can be obtained from the Marine Coordinator. Users are advised to keep clear of construction activities, including Safety Zones, within the Beatrice Offshore Windfarm construction area in line with Marine Guidance Note 372.

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

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

### 7. Dedicated Guard Vessels

The Guard Vessels 'Fisher Boys FR54', and 'Artemis FR 809' will be in attendance along the cable route and at the Cable Lay Vessel 'Skagerrak'.

All vessels can be contacted on VHF CH16

#### 8. 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 or email: alex@brownmay.com



### 9. 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.

A copy of this notice can also be found at <a href="https://www.beatricewind.com/">https://www.beatricewind.com/</a>