# NOTICE TO MARINERS

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

| Date of Issue | 07.08.2017 | Notice Number | LF000005-NTM-011 |
|---|---|---|---|

**Jacket Installation for Wind Turbine Generators & Offshore Transmission Modules.**

**Work Planned for the Period of 8th August 2017 – September 2018.**

### 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.


BOWL Marine Coordinator
Beatrice Offshore Windfarm Limited
Unit 1
Harbour Office
Wick
Caithness
KW1 5HA
email: mc.bowl@sse.com
phone: +44 (0) 3302020329
web site: www.sse.com/beatrice


### 2. Area of Planned Activity

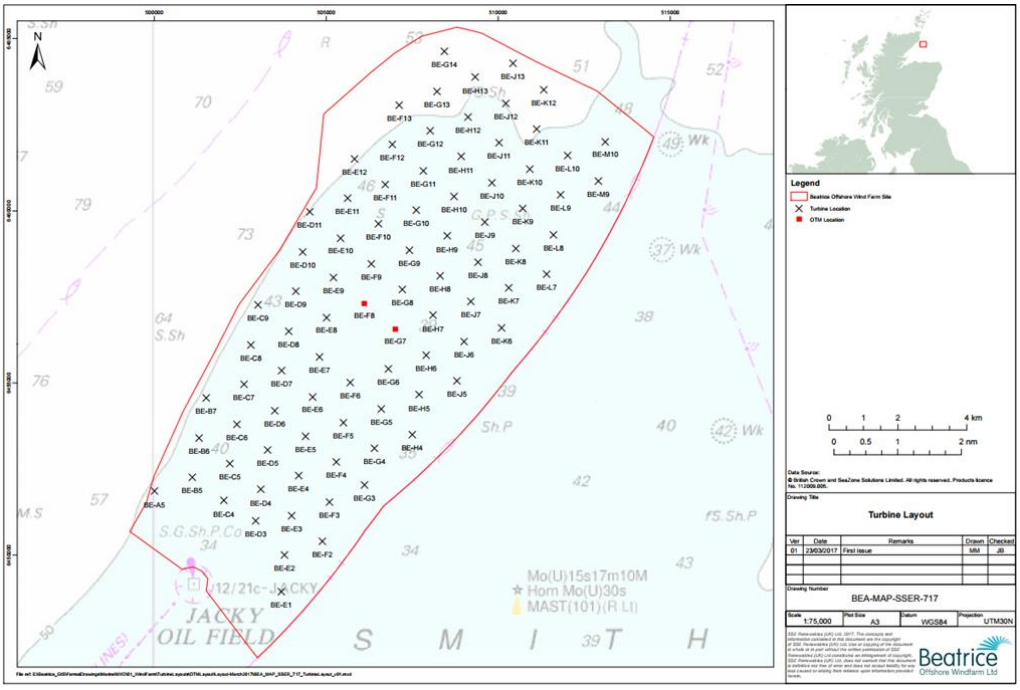


**Fig 1.** BOWL construction site showing proposed Jacket locations

**Table 1 WTG and OTM Location Coordinates**

| Location ID | Latitude (ddm) WGS84 | Longitude (ddm) WGS84 |
|---|---|---|
| BE-A5 | 58 12.471' N | 002 59.996' W |
| BE-B5 | 58 12.687' N | 002 58.873' W |
| BE-B6 | 58 13.308' N | 002 58.664' W |
| BE-B7 | 58 13.929' N | 002 58.456' W |
| BE-C4 | 58 12.307' N | 002 57.948' W |
| BE-C5 | 58 12.902' N | 002 57.749' W |
| BE-C6 | 58 13.524' N | 002 57.541' W |
| BE-C7 | 58 14.144' N | 002 57.332' W |
| BE-C8 | 58 14.766' N | 002 57.124' W |
| BE-C9 | 58 15.386' N | 002 56.915' W |
| BE-D3 | 58 11.995' N | 002 57.002' W |
| BE-D4 | 58 12.497' N | 002 56.834' W |
| BE-D5 | 58 13.117' N | 002 56.626' W |
| BE-D6 | 58 13.739' N | 002 56.417' W |
| BE-D7 | 58 14.359' N | 002 56.209' W |
| BE-D8 | 58 14.981' N | 002 55.999' W |
| BE-D9 | 58 15.602' N | 002 55.790' W |
| BE-D10 | 58 16.223' N | 002 55.582' W |
| BE-D11 | 58 16.844' N | 002 55.373' W |
| BE-E1 | 58 10.900' N | 002 56.256' W |
| BE-E2 | 58 11.470' N | 002 56.128' W |
| BE-E3 | 58 12.090' N | 002 55.920' W |
| BE-E4 | 58 12.712' N | 002 55.710' W |
| BE-E5 | 58 13.333' N | 002 55.502' W |
| BE-E6 | 58 13.954' N | 002 55.293' W |
| BE-E7 | 58 14.575' N | 002 55.084' W |
| BE-E8 | 58 15.196' N | 002 54.875' W |
| BE-E9 | 58 15.817' N | 002 54.665' W |
| 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 |
| BE-F3 | 58 12.306' N | 002 54.796' W |
| BE-F4 | 58 12.927' N | 002 54.588' W |
| BE-F5 | 58 13.548' N | 002 54.378' W |
| BE-F6 | 58 14.168' N | 002 54.169' W |
| BE-F8 (OTM) | 58 15.411' N | 002 53.750' W |
| BE-F9 | 58 16.031' N | 002 53.540' W |
| BE-F10 | 58 16.653' N | 002 53.330' W |
| BE-F11 | 58 17.274' N | 002 53.120' W |
| BE-F12 | 58 17.894' N | 002 52.911' W |
| BE-F13 | 58 18.516' N | 002 52.701' W |
| BE-G3 | 58 12.544' N | 002 53.726' W |

| Location ID | Latitude (ddm) WGS84 | Longitude (ddm) WGS84 |
|---|---|---|
| BE-G4 | 58 13.142' N | 002 53.464' W |
| BE-G5 | 58 13.762' N | 002 53.254' W |
| BE-G6 | 58 14.384' N | 002 53.044' W |
| BE-G7 (OTM) | 58 15.004' N | 002 52.834' W |
| BE-G8 | 58 15.625' N | 002 52.625' W |
| 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 |
| BE-H5 | 58 13.977' N | 002 52.130' W |
| BE-H6 | 58 14.598' N | 002 51.920' W |
| BE-H7 | 58 15.219' N | 002 51.709' W |
| BE-H8 | 58 15.840' N | 002 51.499' W |
| 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 |
| BE-J6 | 58 14.812' N | 002 50.795' W |
| BE-J7 | 58 15.433' N | 002 50.585' W |
| BE-J8 | 58 16.055' N | 002 50.373' W |
| BE-J9 | 58 16.675' N | 002 50.163' W |
| 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 |
| BE-K7 | 58 15.648' N | 002 49.459' W |
| BE-K8 | 58 16.269' N | 002 49.247' W |
| BE-K9 | 58 16.890' N | 002 49.036' W |
| 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 |
| BE-L8 | 58 16.482' N | 002 48.122' W |
| BE-L9 | 58 17.104' N | 002 47.910' W |
| BE-L10 | 58 17.724' N | 002 47.698' W |
| BE-M9 | 58 17.317' N | 002 46.784' W |
| BE-M10 | 58 17.938' N | 002 46.571' W |

## 3. Vessels Associated with the Activity

**Below are details of vessels which may be involved with the Jacket Installation as outlined within the NTM.**

| Oleg Strashnov | |
|---|---|
| **General Description and Dimensions:** | HLV: 183m × 47m |
| **Call Sign:** | 5BNL2 |
| **MMSI:** | 212905000 |
| **Onshore Representative:** | d.sprangers@shl.com |

**Fig.2** Oleg Strashnov

**Supporting Vessel for the Oleg Strahnov**

| MAERSK TRADER | |
|---|---|
| **General Description and Dimensions:** | Anchor Handling Tug: 73.2m × 20m |
| **Call Sign:** | OXRO2 |
| **MMSI:** | 220584000 |
| **Onshore Representative:** | d.sprangers@shl.com |

**Fig.3** Maersk Trader

**Supporting Vessel for the Oleg Strashnov**

| VOS PRELUDE | |
|---|---|
| **General Description and Dimensions:** | Supply Vessel: 73.2m × 20m |
| **Call Sign:** | PBZK |
| **MMSI:** | 245969000 |
| **Onshore Representative:** | d.sprangers@shl.com |

**Fig.4 VOS Prelude**

**Vessels towing barges containing Turbine & OTM Jackets for the Oleg Strashnov to Install.**

| ERACLEA | |
|---|---|
| **General Description and Dimensions:** | Anchor Handling Tug: 50m × 15m |
| **Call Sign:** | IITX2 |
| **MMSI:** | 247278500 |
| **Onshore Representative:** | d.sprangers@shl.com |

**Fig.5** Eraclea

| CENTAURUS | |
|---|---|
| **General Description and Dimensions:** | Anchor Handling Tug: 48.81m × 14.06m |
| **Call Sign:** | V2ED3 |
| **MMSI:** | 305820000 |
| **Onshore Representative:** | d.sprangers@shl.com |

**Fig.6** Centaurus

| CARLO MAGNO | |
|---|---|
| **General Description and Dimensions:** | Anchor Handling Tug: 55.4m × 15.5m |
| **Call Sign:** | IBYF |
| **MMSI:** | 247153600 |
| **Onshore Representative:** | d.sprangers@shl.com |

**Fig.7** Carlo Magno

| PEGASUS | |
|---|---|
| **General Description and Dimensions:** | Anchor Handling Tug: 48.81m × 14.06m |
| **Call Sign:** | V2ED2 |
| **MMSI:** | 305389000 |
| **Onshore Representative:** | d.sprangers@shl.com |

**Fig.8** Pegasus

| KAMARINA | |
|---|---|
| **General Description and Dimensions:** | Anchor Handling Tug: 50m × 15m |
| **Call Sign:** | IITW2 |
| **MMSI:** | 247278400 |
| **Onshore Representative:** | d.sprangers@shl.com |

**Fig.9** Kamarina

| SMIT SERAYA | |
|---|---|
| **General Description and Dimensions:** | Anchor Handling Tug: 51.8m × 15m |
| **Call Sign:** | 9V9845 |
| **MMSI:** | 566804000 |
| **Onshore Representative:** | d.sprangers@shl.com |

**Fig.10** Smit Seraya

| PRESIDENT HUBERT | |
|---|---|
| **General Description and Dimensions:** | Anchor Handling Tug: 60m × 15m |
| **Call Sign:** | ORLD |
| **MMSI:** | 20506700 |
| **Onshore Representative:** | d.sprangers@shl.com |

**Fig.11** Smit Seraya

## 4. Activity Description

**Jacket Installation Process.**

Once piling is complete at one or a number of locations, the HLV will prepare for the installation of the jacket substructures into the pre-installed piles.

The Pre-Installed piles have been installed at wind turbine locations and the jacket substructure is now to be installed at that location.

Prior to jacket substructure installation, pile cleaning is undertaken to ensure there is no soil remaining on the inside surface of the pile after soil plug removal. The inside of the pile needs to be clean so that the grout bonds between the jacket stab in and the internal pile wall. Inside pile cleaning will be performed by means of a combination of steel brushes and high pressure water jets.

The jacket substructures will then be delivered to sites by cargo barge in a vertical secured position which will be moored alongside the HLV.

The HLV will then lift the jacket from the cargo barge onto the deck of the HLV.

The jacket is then lifted from the HLV and the HLV then lowers the jacket so that the connection between the seabed piles and the jacket legs is made before grouting is conducted.

**Jackets are to be transported in the vertical position secured on a cargo barge ready for installation.**

**Fig.12**

**Sequential jacket installation procedure for a vertically mounted jacket substructure**

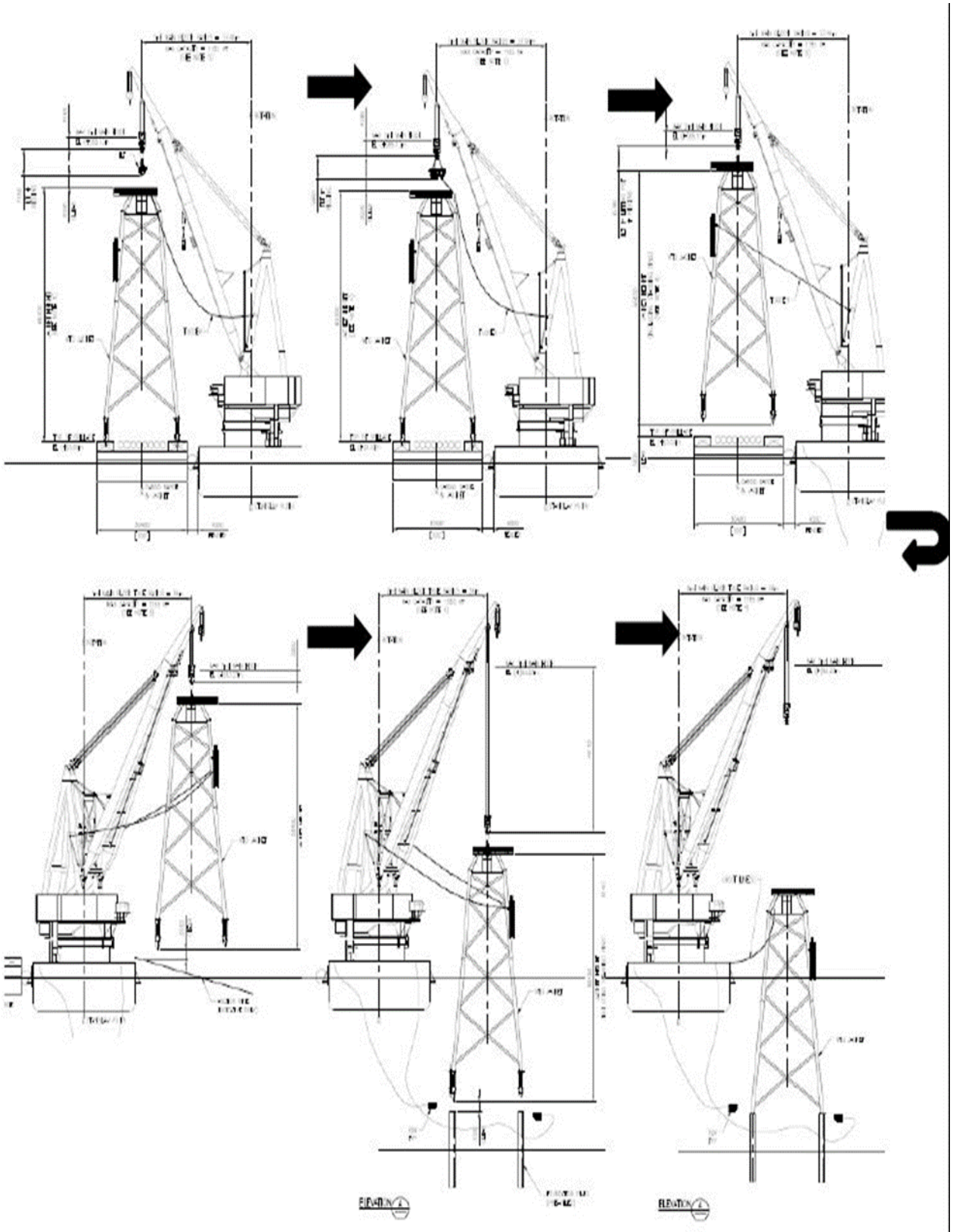

**Fig.13**

## 5. 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 continued watch on VHF Ch. 70 / 16 when navigating the area.

## 6. Dedicated Guard Vessel

At present the Guard Vessels in place at Beatrice Offshore Windfarm Development Site are Pleiades BF155 & Opportune WK171 to be replaced by Moremma PD135 on 11th August 2017. Currently Guard Vessels rotate every 21 days with two permanently on location and can be contacted on VHF Ch 16. Updates on Guard Vessels on location will be promulgated within the Weekly Notice of Operations.

## 7. 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.

## 8. 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 https://www.beatricewind.com/