

NOTICE TO MARINERS

Issue date: 31/03/2020

1. Deployment of Directional Wave rider Buoy

Please be advised that Moray Offshore Windfarm (East) Limited (Moray East) are planning to deploy a directional wave rider buoy within the bounds of Moray East Offshore Windfarm. Deployment circa week commencing 13th April 2020.

Figure 1. Directional wave rider buoy location

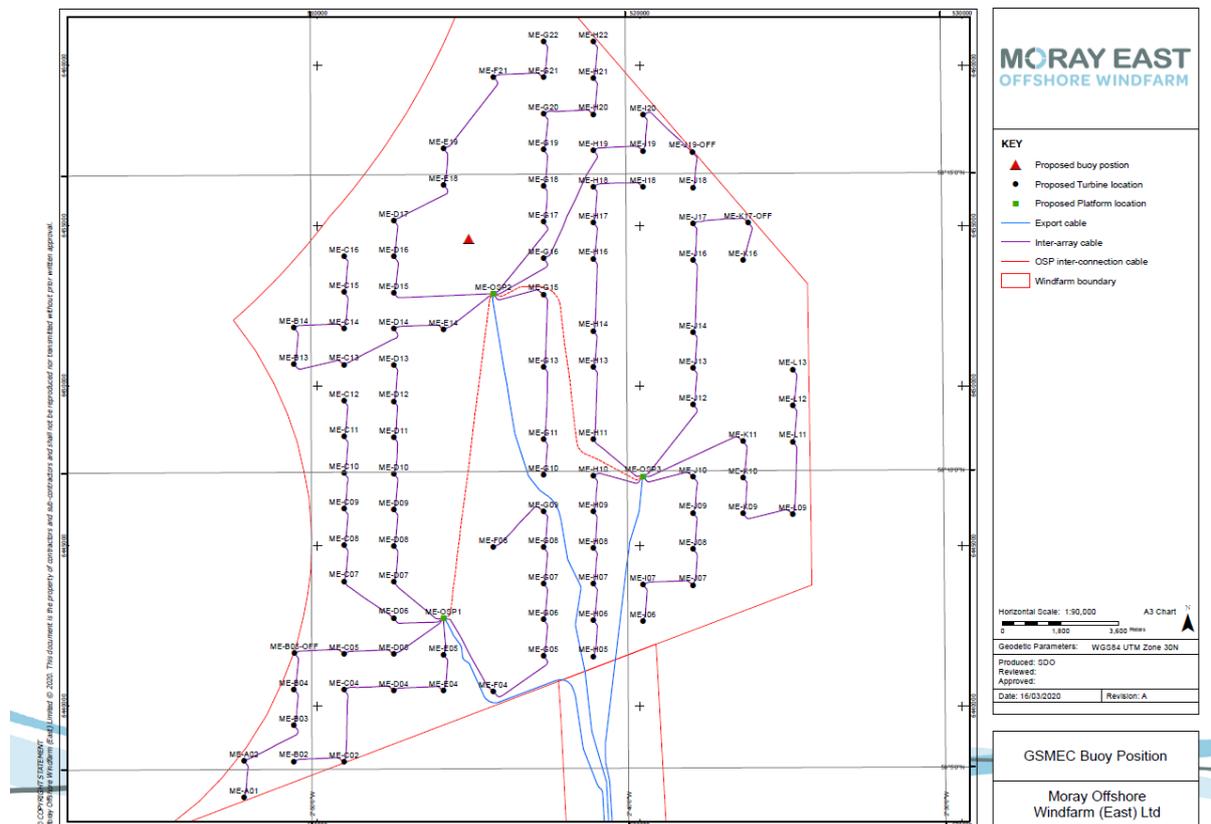


Figure 2. Directional Wave rider Specifications



Directional Waverider MkIII

Datawell - Oceanographic Instruments

The Directional Waverider DWR-MkIII: Over three years of continuous operation

The Directional Waverider hardly needs any introduction: it is the world's standard for measuring wave height and wave direction. Its success is due to the proprietary well-proven and accurate Datawell stabilized platform sensor, enabling wave height measurements by a single accelerometer. For the wave direction, direct pitch and roll measurements are performed needing no integration. In combination with horizontal accelerometers and a compass this forms the complete sensor unit, the heart of the instrument.

The highlights:

- **Real time** measurement of wave height with half-hourly heave and directional spectra updates.
- **HF link up to 50 km** over sea. The proprietary Datawell HF link module is easy replaceable if a different transmission frequency is required.
- **LED flashlight** integrated in the top of the antenna increasing the buoy's visibility.
- **GPS receiver** for buoy positioning has now become a standard feature of the DWR-MkIII, and facilitates its retrieval.
- **Integrated datalogger** based on the latest flash card technology.
- A **water temperature sensor** in the mooring eye providing sea surface temperature
- **High capacity primary cells** operating reliably and safely under all wave conditions and weather circumstances for **up to three years** without replacement.
- Built-in **energy meter** reports an accurate estimation of the remaining operating life.
- **Intelligent Test Box** enables sequential discharge of individual battery strings

The DWR-MkIII comes standard with the Datawell HF link for ranges up to 50 Km over sea. For larger ranges the HF link can be combined or replaced with Iridium or Argos satellite communication. For near shore applications, a GSM link is also available. The MkIII can be supplied in a 70 cm hull offering easier handling and a 90 cm hull.



Optional features:

- **HF link:** 25.5 MHz-35.5 MHz
- **Iridium:** global, two-way satellite link
- **Iridium SBD:** global, two-way satellite link
- **Argos:** global one-way satellite link
- **GSM:** near shore data link via SMS or Internet
- **Solar Power System:** solar panel combined with primary cells for extending operational life by at least 100%
- **Power Switch** On/Off
- **Hull painting:** yellow (no anti-fouling)
- **Radar reflectors** to increase visibility in busy waters

DWR-MkIII with optional solar panels, power switch and painted hull

2. Buoy Laying Vessel Details

MV Apollo	
General Description and Dimensions:	Offshore Heavy Lift DP2 jack up vessel LOA: 89 m, Beam: 45 m, Draught: 15 m
Call Sign:	LXBP
MMSI:	253586000
On Board Contact:	Mob: +32 470 783 880
Offshore Manager / Party Chief:	Vessel Master
E-mail:	captain.apollo@ships.deme-group.com
Onshore Representative:	Edward Maycock



3. General Safety Advice

Please be aware that by virtue of its mode of operation the Apollo will be Restricted in her Ability to Manoeuvre (RAM) as defined under COLREGs (International Regulations for Preventing Collisions at Sea 1972, Rule 3). Masters of vessels are therefore requested to maintain their vessels and gears at a minimum safe distance from the vessel of **500 metres** when it is undertaking work and showing the appropriate shapes and lights in accordance with COLREGs Rule 18.

Further updates, final Buoy position and Weekly notice of operations can be accessed in the Moray East Website

<http://www.morayoffshore.com/moray-east/the-project/notices-to-mariners/>

4. **Contact details**

CONTACT DETAILS	
Marine Coordination Centre 24/7 Gary Smailes – Lead Marine Coordinator Email: garysmailes.morayeast@morayeast.com Tel : +44 7918750025/01346 511838	For fisheries related matters Alex Winrow-Giffin – Brown and May Marine Ltd. Email: alex@brownmay.com Tel : +44 1379 872148 / +44 7760 160039