## Hornsea Offshore Wind Farm (Zone 4) - Project Two

**Developer:SMart Wind Limited** 

#### Site Size:

Covering an area of approximately 407km<sup>2</sup>.

#### Site Location:

The Hornsea Zone is adjacent to the River Humber, 200km South of Newcastle and 75km north of The Wash. The East Riding of Yorkshire coast lies 31km to the west of the Zone's boundary and the Zone's eastern boundary is 1 km from the median line between UK and Netherlands waters. Project One is located 89km off the Yorkshire coast at its closet point. Swell in the area is prominently north north-easterly. Several surf beaches between Hornsea (120km) and Cromer (100km) could be affected.

## Technology:

Project Two, will have a combined capacity of up to 1800 MW. Depending on the rated capacity of the turbines selected (between 5 and 15 MW each), the estimated number of wind turbines will be between 80 and 360. They will have a maximum lower blade tip height of 31m, a maximum upper blade tip height of 325m, a maximum rotor diameter of 250m and a maximum hub height of 200m. The spacing between the turbines will be between 6 – 12 rotor diameters.

Three foundation types for the Wind Turbine Generators (WTG) are being considered as more information is need before a final decision can be made. It is possible that more than one type will be used across the project. The proposed foundations are:

- Steel Monopiles comprised of a large diameter steel of concrete tube driven vertically into the seabed. It will rely on the surrounding seabed to provide lateral resistance to horizontal forces, such as wind and waves. The maximum diameter will be 10m with a seabed penetration maximum of 50m.
- Steel jackets/space frame structure a steel lattice construction compromising tubular steel members and welded joints which is fixed to the seabed using piles at the corners of the bases. There will be 3-4 piles per jacket with maximum leg spacing of 40m.
- Concrete gravity base foundation uses a wide area base which is significantly heavy to
  resist horizontal forces of winds and currents. The maximum external diameter will be 60m.
   Some seabed levelling to a maximum of depth of 5m may be required.

The specific design of the high-voltage, direct current (HVDC) export equipment has not yet been finalised and may comprise up to four submarine cables. Cables will be installed below the seabed utilising ploughing or trenching/jetting rock-cutting. Where cable burial is not possible, placement of some sort of cable protection (rocks, frond mattresses or grout bags) may be deployed. The landfall site used will be the same as Project One. Horizontal Directional Drilling (HDD) will be used for

installing the cables across the intertidal area. This method will allow the cables to be installed under the sea defences and sensitive dune habitats without impacting them

## **Development Stage:**

This application is currently in the pre-application stage. An application is expected in the third quarter of 2014

Timeline:

Scoping Report Submitted: 10/2012

Scoping Opinion Published from the IPC: 11/2012

Community Consultation Period: 31/01/2013-13/03/2013

01/04/23013 - 31/09/2013

Application Submitted: Expected Q3 2014

The best time to influence this project is now. Once the SOCC (Statement of Community Consultation) has been published, there will be a number of events where information will be provided and your views and concerns can be discussed. Once the application had been submitted and accepted, you can continue to have your say by registering to the Planning Inspectorate as an interested party.

#### Contact Details:

 SMart Wind Limited 11th Floor 140 London Wall London EC2Y 5DN

• SMart Wind Limited - tel. 02077765500 or 08002851295

### Regulator Details:

 Planning Inspectorate case team: enquiries@infrastructure.gsi.gov.uk 0303 444 5000

#### Consultees:

• British Marine Federation

Marine House, Thorpe Lea Road, Egham, Surrey TW20 8BF

Tel: 01784 473377 info@britishmarine.co.uk

Cefas/Defra C/O Cefas Pakefield Road Lowestoft Suffolk NR33 0HT

Tel: 01502 524228

#### • Department of Energy and

Climate Change 3 Whitehall Place

London SW1A 2AW

Tel: 0300 060 4000

correspondence@decc.gsi.gov.uk

#### • DONG Wind (UK) Limited

DONG E&P (UK) Ltd.

DONG Energy Power (UK) Ltd. 33 Grosvenor Place - Belgravia

London SW1X 7HY Tel: +44 (0) 20 7811 520

## English Heritage

37 Tanner Row

York

**YO1 6WP** 

Tel: 01904 601901

yorkshire@english-heritage.org.uk

#### • Environment Agency

National Customer Contact Centre

PO Box 54 Rotherham S60 1BY

Tel: 03708 506 506 enquiries@environment-

agency.gov.uk

#### JNCC

Joint Nature Conservation Committee

Monkstone House

City Road Peterborough

PE1 1JY

Tel: 01733 562626 comment@jncc.gov.uk

## • Maritime and Coastguard Agency

Maritime and Coastguard Agency

Spring Place

105 Commercial Road

Southampton

Hants SO15 1EG

Tel: 02380 329100

# • The Marine Management Agency

(MMO)

Lancaster House Hampshire Court Newcastle upon Tyne NE4 7YH

Tel: 0300 123 1032

info@marinemanagement.org.uk

#### • Natural England

Natural England Northminster House Peterborough

PE1 1UA

Tel: 0845 600 3078

enquiries@naturalengland.org.uk

#### Trinity House

London Tower Hill London EC3N 4DH enquiries@thls.org

## • East Riding of Yorkshire Council

East Riding of Yorkshire Council

County Hall

Beverley

East Riding of Yorkshire

HU17 9BA

Tel: (01482) 393939

customer.services@eastriding.gov.uk

#### North Yorkshire County Council

North Yorkshire County Council

County Hall Northallerton North Yorkshire DL7 8AD

Tel: 01609 780780

### <u>customer.services@northyorks.gov.uk</u>

 Lincolnshire County Council Lincolnshire County Council Freepost DC867 Lincoln
LN1 1BR
Tel: 01522 552222
customer\_services@lincolnshire.gov.u
k

## SAS Traffic Light System:



Amber - Surfers Against Sewage have some concerns about the proposed development. The proximity to Hornsea One and Triton Knoll could have a combined effect reducing the wave height and affecting wave direction and refraction. These problems would be aggravated by the use of Gravity Base foundations.