

## Burbo Bank Extension Offshore Wind Farm

**Developer: DONG energy**

**Site Size:**

Covering an area of approximately 40 km<sup>2</sup>

**Site Location:**

The proposed project would be located west of the operational Burbo Bank offshore wind farm in Liverpool Bay; around 7 km north of the North Wirral coast, 8.5 km from Crosby beach, and 12.2 km from the Point of Ayr on the Welsh coast. The swell is predominantly westerly. There are no surf spots that will suffer a significant change due to this project.

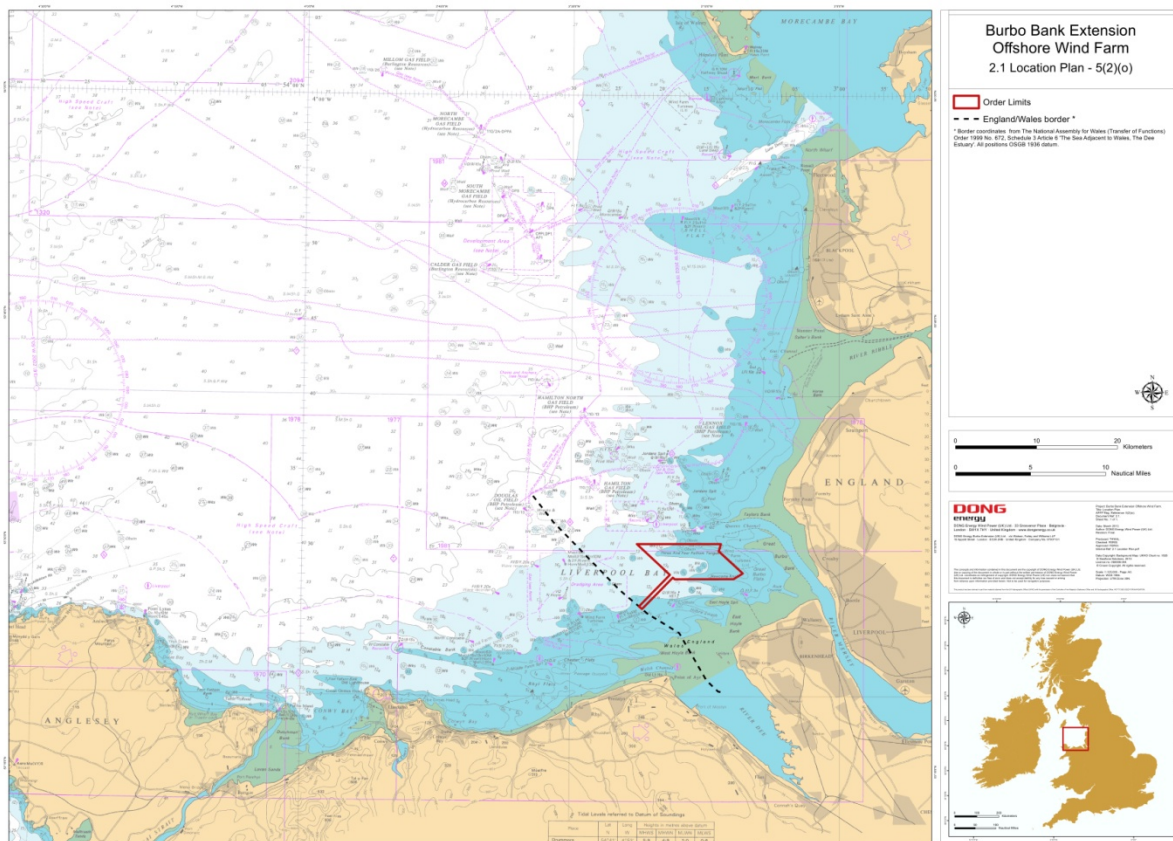


Image: ©Dong Energy Wind Power (UK) LTD

**Technology:**

The project is comprised of 69 wind turbine generators and associated infrastructure, with an installed capacity of up to 258MW. An individual turbine will have an output of approximately 3.6WM. This is enough energy to meet the average needs of up to 170,000 homes. Foundations for the turbines will be one of three types (yet to be confirmed):

### Single Steel Monopile

This consists of a single steel tubular foundation that is inserted into the seabed. It also includes a transition piece with boat landing features and ancillary components. The diameter of each monopile is 8 m and reaches an embedment of 50m. Monopile foundations require little seabed preparation. Any that does occur will comprise of seabed levelling, debris removal (through dredging) or an application of a filter layer of stone where necessary. The seabed area take per foundation is 50.3m<sup>2</sup>(potential spoil per foundation is 2513 m<sup>3</sup>).

### Gravity Base

The gravity base foundations would be 'flat-based' and made of reinforced concrete. It would have a seabed diameter of 35m and a base slab thickness of 6m. The bases require a significant amount of seabed preparation. The area must be dredged of loose sand and clay, seabed levelled to 6 m below seabed level and gravel placed to provide a stable platform. The seabed area take per foundation is 962m<sup>2</sup>(potential spoil per foundation is 13000m<sup>3</sup> in shallow water and 2500m<sup>3</sup> in deeper water).

### Jacket Foundation (Pin Piles)

Each would consist of 4 legs; each set 35 metres apart on the seabed. The leg diameter is 3m and would have a embedment depth of 60 m. Minimal seabed preparation is required, any that does occur will be debris removal or seabed levelling (most likely by dredging). The seabed area take per foundation is 200m<sup>2</sup>(potential spoil per foundation is 12000m<sup>3</sup>).

The proposed design envelope for the turbines is;

Parameter	Unit	Minimum	Maximum
Rotor Diameter	m	112	200
Hub (Nacelle) Height above MHWS	m	79	123
Blade tip height above MHWS	m	141	223
Total Sweep Area	m <sup>2</sup>	4902	31416
Turbine Separation	m	700	1960

*MHWS – Mean High Water Spring*

### Export Cables

A maximum of 2 offshore cables will take electricity to the coast. One of those cables may be replaced by a smaller optical fibre optic running parallel to a single export cable. Offshore and intertidal cables will be buried 1-3m under the seabed. It is anticipated that simultaneous ploughing, pre-trenching (by plough), or a combination of the two will be the primary burial method. Where burial is not possible or there is a high risk of exposure or damage, the cable may be protected with flexible concrete mattresses or buried beneath stones (rock dumped). The onshore cable will run south westerly from the landfall between Rhyl and Prestatyn to the onshore substation. At the landfall point, up to two buried concrete transition joint bays will be required to house the joint between the multi-core offshore export cable(s), and the single core onshore. All onshore cables from the landfall to the onshore substation will be installed underground.

### Development Stage

Burbo Bank Extension is currently in the Examination stage. The deadline for close of examination is 26/03/2014.

## Timeline

Scoping Report submitted: 07/06/2010

Scoping Opinion published from IPC: 19/08/2010

Community consultation period: 05/2011 – 06/2012

Application Submitted: 22/03/2013

Application Accepted: 19/04/2013

Registration of Interested parties begins: 13/05/2013

Registration of interested parties closes: 24/06/2013

Preliminary Meeting: 26/09/2013

Examination begins: 26/09/2013

Examination Ends: 26/03/2014

Construction: Expected to begin in 2014

If you have a legal interest in land affected by the project and have not already registered to become an interested party, then you can make a request to the Examining Authority to become an interested party under s102A of the Planning Act 2008 (as amended).

## Contact Details

- DONG Energy Power (UK) Ltd.  
33 Grosvenor Place  
Belgravia, London  
SW1X 7HY  
Web: <http://www.dongenergy.com/burbobankextension/>  
Tel: +44 (0)207 811 5200
- Project Manager: Ferdinando Giammichele  
Tel: +44 (0)20 7881 5256  
[burbobankextension@dongenergy.co.uk](mailto:burbobankextension@dongenergy.co.uk)
- Stakeholder Manager: Emily Marshall  
Tel: + 44 (0)207 811 5235  
[burbobankextension@dongenergy.co.uk](mailto:burbobankextension@dongenergy.co.uk)
- Consents Project Manager: Stuart Livesey  
[burbobankextension@dongenergy.co.uk](mailto:burbobankextension@dongenergy.co.uk)
- Commercial Management Assistant - Alexander Bakovljević  
[burbobankextension@dongenergy.co.uk](mailto:burbobankextension@dongenergy.co.uk)

## Regulator Details

- **Planning Inspectorate Case Team:**

[BurboBank@infrastructure.gsi.gov.uk](mailto:BurboBank@infrastructure.gsi.gov.uk)

Tel: 0303 444 5000

### Consultees:

#### Department of Energy and Climate Change (DECC)

3 Whitehall Place

London

SW1A 2AW

[correspondence@decc.gsi.gov.uk](mailto:correspondence@decc.gsi.gov.uk)

Tel: 0300 060 4000

#### Marine Consents Unit of the Welsh Government

Welsh Government

Cathays Park

Cardiff

CF10 3NQ

English: 0300 0603300

Welsh: 0300 0604400

#### English Heritage

English Heritage

3rd floor Canada House

3 Chepstow Street

Manchester

M1 5FW

Tel: +44 (0) 870 333 1181

[northwest@english-heritage.org.uk](mailto:northwest@english-heritage.org.uk)

#### Trinity House

London

Tower Hill

London

EC3N 4DH

[enquiries@thls.org](mailto:enquiries@thls.org)

#### The Maritime and Coastguard Agency

Liverpool Marine Office

Hall Road West Crosby Liverpool

L23 8SY

Tel: 0151 931 6600

#### The Marine Management Agency (MMO)

Lancaster House

Hampshire Court

Newcastle upon Tyne

NE4 7YH

Tel: 0300 123 1032

[info@marinemanagement.org.uk](mailto:info@marinemanagement.org.uk)

#### Cefas/Defra

Nobel House

17 Smith Square

London

SW1P 3JR

Tel: 08459 33 55 77

[defra.helpline@defra.gsi.gov.uk](mailto:defra.helpline@defra.gsi.gov.uk)

#### Denbighshire County Council

Tel: 01824 706101

#### Natural England

Natural England

Northminster House

Peterborough

PE1 1UA

Tel: 0845 600 3078

[enquiries@naturalengland.org.uk](mailto:enquiries@naturalengland.org.uk)

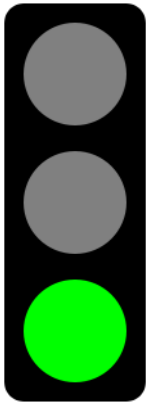
**Countryside Council for Wales**

Natural Resources Wales  
Tŷ Cambria  
29 Newport Road  
Cardiff  
CF24 0TP  
Tel: 0300 065 3000  
[enquiries@naturalresourceswales.gov.uk](mailto:enquiries@naturalresourceswales.gov.uk)

**JNCC**

Joint Nature Conservation Committee  
Monkstone House  
City Road  
Peterborough  
PE1 1JY  
Tel: 01733 562626  
[comment@jncc.gov.uk](mailto:comment@jncc.gov.uk)

**SAS Traffic Light System**



Green – Surfers Against Sewage have no objections to this development. Burbo Bank Extension is not located close to any surf beaches. The design of the turbines, foundations and export cable route will have no significant effect on the coast line.