

Gunfleet Sands – Project Briefing Note Number 3

Date: 30th April 2008

Subject: **Gunfleet Sands Offshore Wind Farm – Ground breaking ceremony**

DONG Energy is delighted to announce that they have commenced the construction of the main onshore export power line for the Gunfleet Sands Offshore Wind Farm. The wind farm will be constructed 7km off the Essex coast in the Northern Thames Estuary.

Frits Kristoffersen, Project Manager for the Gunfleet Sands project, said at the groundbreaking ceremony today, *"We are delighted to have started construction on this vital and important renewable energy project. The help and support we have had locally is very encouraging, we are working very closely with Tendring District Council and the local community. This current phase of the construction will cover the onshore works and will include cable laying and electrical works at the Cooks Green substation. We will be starting the offshore construction later this year in September. This is our 3^d offshore windfarm in Great Britain and when completed will consist of 48 offshore wind turbines generating up to 172MW of clean energy and preventing the release of thousands of tonnes of polluting carbon dioxide gas."*

The Gunfleet Sands project, will generate enough clean renewable energy, for approximately 120,000 households or approximately 20% of the households in Essex, The project will make a considerable contribution to the domestic UK target of reducing CO₂ emissions by 20% below 1990 levels by 2010.

Councillor Peter Balbirnie, Chairman of Tendring District Council performed the groundbreaking ceremony near the Holland Bridge said *'It is vitally important that we work in partnership with commerce and industry to bring regeneration to our local area, and I am delighted we are playing our part in the renewable energy revolution'.*

DONG Energy and the Gunfleet Sands team are committed to consulting with local people throughout the construction and operation of the Gunfleet Sands offshore wind farm, and will continue to communicate with communities in the local Essex area as the construction proceeds.

Prior to onshore construction commencing a successful one day public exhibition was held in mid February at The Public Hall in Holland on Sea, over 350 local residents attended together with a team of experts and senior members from the project answered questions and explained the construction process.

- **Peter Sills, Communication Manager, Gunfleet Sands project is available for media interview, please contact in the first instance on 07976 437467**
- **For further project information and high resolution photographs and maps, please contact peter@sillson.com for ftp server access details (24hr download available)**

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Additional information:

Who is DONG Energy?

DONG Energy is one of the leading energy groups in the Nordic region. Our headquarters are in Denmark. Our business is based on procuring, producing, distributing, trading and selling energy and related products in Northern Europe. We employ approx. 5,000 people and generated DKK 41.6 billion in revenue in 2007.

Renewable Energy

Renewable energy is an integral part of the UK Government's aim of reducing CO₂ emissions by 60% by 2050. To help combat climate change, the Government has set a target of 15% of electricity supply from renewable energy by 2015. In March 2007 the 27 nations of the European Union agreed to a legally binding target of 20% of all energy to be supplied from renewable sources by 2020. Increasing the amount of energy generated from renewable sources also increases the diversity and hence the security of supply.

The Gunfleet Sands project

The Gunfleet Sands project is located approximately 7km south-east of Clacton-on-Sea, Essex. The project consists of two phases, Gunfleet Sands 1 with 30 turbines and Gunfleet Sands 2 with 18 turbines. The capacity of each turbine is 3.6MW, giving a total capacity of the Gunfleet Sands project of 172MW. The rotor diameter of the turbines is 107m, with a maximum height of 129m from blade tip to sea level.

The total area of the phase 1 development is 10km² and 7.5km² for phase 2. The turbines will be positioned with a spacing of 435m x 890m.

The turbines will be mounted on top of a monopile foundation. The monopiles will be in the region of 5m diameter, with an overall length of up to 50m and a seabed penetration of up to 40m. The use of rock for scour protection is being considered.

All consents and licenses to build the both phase of the project have been achieved.

When both phases of the project are constructed, approximately 120,000 homes (75,000 from phase 1 and 45,000 from phase 2) or more than 20% of the households in Essex can be provided with clean electricity in the years to come. The project makes a considerable contribution to the domestic UK target of reducing CO₂ emissions by 20% below 1990 levels by 2010.

Onshore Construction Works

The electricity export cable from the offshore windfarm will come ashore at Holland Haven. The map shows the cable route from the landfall at Holland Haven to the existing Clacton substation at Cooks Green. Horizontal Directional Drilling will be required to install the cable under the seawall at Holland Haven, (between the radar mast and Clacton Sailing Club), under Holland Bridge, Fan Bridge and under the Clacton to Colchester railway line, where directional drilling is used, ducts are installed before the cable is pulled through. The directional drilling will take up to four weeks at each site with one week for preparation of the site, two weeks for the drilling and one week for reinstatement of the site.

After directional drilling work has been completed, the onshore cables will be installed. Three separate power cables and a smaller communications cable will be laid, using a combination of open trenching and installation in ducts.

Preliminary investigation works at Holland Bridge and the railway crossing commenced in the last week of February 2008 and directional drilling work commenced under the sea wall at Holland Haven during April 2008.

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Between Holland Haven and Holland Bridge along the road sections, the cables will be installed in ducts. An open trench will be excavated along the road (or in the verge where permitted) allowing the ducts to be installed in relatively short sections (15-25m lengths). Once the cable ducts have been laid and any additional areas of open trench required have been excavated, the cables will be pulled through the ducted section in approximately 400m lengths.

A separate 430m section of the communications cable will also be installed from the landfall to the nearby radar facility. A smaller trench will be excavated across the amenity area parallel to the footpath overlooking the foreshore.

From Holland Bridge to the Clacton substation at Cooks Green the cable route passes through agricultural land. Along this section the cables will be installed in a similar manner, in lengths of between 400m and 800m. Cable installation will take place once all directional drilling is complete, ducts are installed and any areas of open trench have been excavated.

After cable installation is completed, all the individual cable sections will be joined together and the full cable system tested. When the testing is finished, final reinstatement of the site will then take place.

Construction vehicles will use existing roads and temporary access roads along the cable route where possible. There will be little disruption to local traffic along the majority of the cable route which passes mostly through private land. The only section where traffic is likely to be affected is for a short distance along Frinton Road and along the access road to Holland Haven car park where excavation will take place in the road or verge. Traffic lights will be in operation in these locations during construction, which is presently expected to commence in April/May along Frinton Road and just after summer in the Holland Haven country park area.

Gunfleet Sands project programme

- March 2004 - Consents awarded for Gunfleet Sands 1
- January - December 2007 - Procurement of turbines, foundations and electrical infrastructure
- March 2008 - Consent for Gunfleet Sands 2
- March 2008 - Commencement of onshore construction works
- September - October 2008 - Commencement of offshore construction covering foundations and cabling
- Spring 2009 - Turbine installation
- Autumn 2009 - Project commissioning