

n artist's impression of the proposed pontoons at Buxtons Bi

Wells Harbour proposal

Early-July 2009

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Wells Harbour Commissioners propose to construct an outer jetty at Wells Harbour to provide facilities for the vessel transfer of personnel and equipment during the construction, operation and maintenance of the Sheringham Shoal Offshore Wind Farm.

The proposed scheme entails the deepening and maintenance of the existing channel and jetty area to provide considerably improved vessel access, as entry to the Harbour is currently restricted by tides, and the construction and operation of a commercial jetty to provide safe mooring facilities.

The proposed outer jetty would be located in a sheltered area known as Buxtons Bight, which has been selected to avoid increased vessel movements within the inner channel and at the existing main guay. It also reduces the effect

of the vessels' wash on the sensitive saltmarsh banks

Timetable of works

Application and Environmental Statement (ES) submitted to Marine and Fisheries Agency (MFA) Public consultation period starts (42 days). Public consultation period ends MFA licence expected to be issued subject to approval of the Environmental Statement. Capital dredging due to start in outer jetty area, followed by access channel and main channel. Jetty foundations and services to be installed. Piling for pontoons and jetty starts Pontoons and jetty to be installed. All capital dredging completed. Outer jetty and pontoons to be fully operational. Long-term maintenance dredging to start as require

Negotiations with fishermen

A meeting was held in early June between representatives of the North Norfolk Fishermen's Society and Wells District Shellfishermen's Association and Scira Offshore Energy Limited at the office of North Norfolk MP, Norman Lamb. This meeting resolved a number of outstanding issues including payment for previous surveys and

agreement to improve cooperation.

Future agreements to be negotiated relate to a survey for unexploded ordnances covering the wind turbine site and 200m wide cable corridor, planned for August this year, and to the offshore construction period starting in April 2010.

Charlie Ward takes project role

Charlie Ward has recently been appointed as Project Manager for the Channel Deepening and Outer Jetty Project at Wells Harbour.

Charlie will work closely with the Wells Harbour Commissioners and Harbour Master Robert Smith, and is responsible for the procurement of all equipment required for the channel deepening and new jetty as well as overseeing the work through to completion around the end March of 2010.

Charlie has considerable experience of the North Norfolk coast and is best known for his local boat building company, which he has been operating for more than 40 years. Charlie was also a Harbour Commissioner for eight years, only recently standing down to take up his new role.

For information about this project, please contact Charlie on email: charlieward.tradboats@ googlemail.com or telephone: 01263 740377.



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Project supports Greenbuild 2009

This year's North Norfolk District Council's Greenbuild 2009 will be supported by the Sheringham Shoal project, which has become a major sponsor of the event.

This annual event features exhibitors, speakers and activities and is designed to encourage Norfolk residents to reduce their contribution to the effects of climate change. Its message of sustainability and energy efficiency is very much in line with the wind farm's operations

potential opportunities.

High interest in public and supplier events

Three public and supplier events were held during April and May to give local people the opportunity to find out more about the wind farm, and enable local suppliers to register an interest in working with the major contractors.

More than 230 people, representing a wide cross-section of the community, attended an event in Wells-next-the-Sea to meet with the project team, contractors, Wells Harbour representatives and Royal Haskoning. The response to the wind farm - one of North Norfolk's biggest ever projects - and the Wells Harbour dredging and new jetty scheme was overwhelmingly supportive.

timetable



The wind farm will also participate with a stand, enabling local people to find out more about the construction timetable, ongoing operation and maintenance activities, local benefits and

Greenbuild 2009 will take place once again at Felbrigg Park over the weekend of September 12 and 13, from 10.30am to 4pm each day.

A presentation was held at stately Blickling Hall for landowners and their agents to provide an update on the archaeological works, the installation methods to be used and the

Lastly there was an Onshore Works Public Information Day in Aylsham to enable people living and working along the cable route to meet with the wind farm team and onshore contractors Carillion and Areva. More than 60 people from retirees and job seekers to potential suppliers and school children visited.



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Stop Press:

The Sheringham Shoal Suppliers' Directory has been published and will shortly be delivered to the seven main contractors. It contains details of more than 130 local businesses, and it will provide those contractors with a quick and easy supply reference guide.

An update is planned for Spring 2010, and any business wishing to be included in that edition should contact info@nnbf.org

Rejuvenation of Plumstead pond

Sheringham Shoal Offshore Wind Farm has agreed to help fund the Plumstead Parish Council's project to rejuvenate the overgrown and neglected village pond and upgrade the adjoining land.

Parish Council Chairman David Ramsbotham says the project will provide a haven for wildlife and a tranquil and environmentally friendly area for villagers and others to enjoy.

The Plumstead project consists of dredging the pond, clearing scrub, providing native water plants and shrubs and planting the meadow with wildflowers. Gates, fencing, notice boards and other sundry items will also be erected

The work is due to start in September/ October this year and will be organise and managed by the Parish Council who will use external contractors.

This project was selected to offset some of the disruption the local community will experience as the wind farm's onshore cable route passes directly through Plumstea

Questions from the community

Why can the turbine mechanism not be geared to allow the blades to still turn (albeit more slowly) in high winds?

Wind turbines are developed to produce the maximum energy yield at minimum cost. Theoretically, it is possible to have a wind turbine that always produces power: a very high tower and a very small rotor that rotates in even the faintest breeze.

However, the energy yield would be very small for such a turbine. Similarly, a very strong turbine with a very large rotor would allow maximum power production during a year's worst storm, but it would be standing still during the rest of the year.

The optimum is in-between these two extremes: a wind turbine that generates quite some power during most of the year, a lot during strong winds, and nothing during the worst storms to keep the turbine affordable.

When the wind turbines restart during an increase in wind speed how are they synchronised with the grid before the circuit breaker/s concerned close?

The 88 wind turbines to be used on the wind farm are Siemens 3.6 MW. The electrical concept is the reliable a-synchronous, squirrel cage generator without slip rings. The generator is grid connected through a full power electronic convertor (AC-DC-AC) and operates at variable speed, fully decoupled from the system frequency.

The sequence described above is called the cut-in sequence (wind speed



increases to 3-5 m/s) and is managed by the wind turbine controller, where the power electronics allow the complete control of the active and reactive output of the turbine. This controller automatically synchronises the turbine with the arid.

What is metres per second in miles per hour and why not use the latter?

One metre per second (m/s) is equal to 2.2 miles per hour. The metric measurement is standard for the wind energy industry globally.

If you have a question you would like answered in the next Newsletter, please email info@scira.co.uk

Contact details and more information

Scira Offshore Energy Limited Statoil UK Ltd One Kingdom Street London W2 6BD W: www.scira.co.uk

T: +44 (0) 207 7667777 F: +44 (0) 207 7667862 E: info@scira.co.uk Contact: Sue Vincent, Public Relations and Communications Manager

The Sheringham Shoal Offshore Wind Farm is owned equally by StatoilHydro and Statkraft through the joint venture company, Scira Offshore Energy Limited. StatoilHydro is the operator for the project during the development phase.



New appointments

The project has appointed Einar Strømsvåg to head up the long-term Sheringham Shoal Operations and Maintenance activities that will run out of Wellsnext-the-Sea.

Einar comes from a position as Senior Vice President Manufacturing within StatoilHydro's oil and gas business and has held Managing Director and senior management

roles with other Norwegian companies and internationally. Einar will be responsible for all local operations related to the wind farm postconstruction

Also recently appointed is Elly Kristine Bjerknes as Project Manager for facilities. She is responsible for the project execution phase for facilities including design,

completion. Elly has more than 20 years experience in technical and project management positions within Norsk Hydro and StatoilHydro.



-inar Strøm:



Elly Kristine Bjerkne

fabrication, installation and

Sheringham Shoal Offshore Wind Farm



shore work started

After nearly five years of planning, public consultation and stakeholder negotiation, work on the £1 billion Sheringham Shoal Offshore Wind Farm project has finally commenced.

Drive down to the beach in the tiny North Norfolk village of Weybourne, or along the A149 coastal road between Kelling and Sheringham, and a team from onshore contractors Carillion plc will be seen at work. They are starting to create a fenced corridor along which the cables transporting the power generated by the wind farm will be buried.

Starting from the cliff top at Weybourne Hope, the onshore cable will run 22 kilometres



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While the start of onshore work is an important project milestone, the project team is also focussed on ensuring that disruption and inconvenience to those people living and working along the cable route is minimised.

For any concerns or queries about the cable route works, please contact Carillion Project Manager. Danny Jones on email: danny. jones@carillionplc.com or via telephone: 0161 855 6000.

Historic agreement signed

An historic agreement has been signed by the Wells Harbour Commissioners and the developer of the Sheringham Shoal Offshore Wind Farm, Scira Offshore Energy Limited.

The agreement confirms that Scira will use Wells Harbour as its operational base for the wind farm for up to 50 years. In line with this agreement, a new commercial jetty with pontoons will be constructed and the harbour entrance channel deepened to enable vessel access for an extended tidal window.

The document was signed by Wells Harbour Commissioners' Chairman, Charles Ebrill and General Manager, Rune Rønvik

StatoilHydro

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Marine Works Application submitted for Wells Harbour

The Marine Works Application required for the Wells Harbour Channel Deepening and Outer Jetty project was submitted to the Marine and Fisheries Agency (MFA) under the Marine Works Regulations 2007 in early June. The application is for a licence under Part II of the Food and Environmental Protection Act 1985 and consent under Section 34 of the Coast Protection Act 1949 for placement of dredged material and construction of the jetty.

The application should take between 10 to 12 weeks to process during which there is a period of consultation with statutory consultees, undertaken by the MFA, and a statutory 42-day period of public consultation.

Members of the public are able to view the Environmental Statement relating to the application in person at the Wells Harbour office and also online at www.mfa.gov.uk. Advertisements notifying people of the consultation period have appeared in the Dereham and Fakenham Times. The public consultation period will end on August 19.

Anyone with queries about this application should contact Chris Adnitt of Roval Haskoning on email: c.adnitt@ royalhaskoning.com or telephone: 01733 336576.

Queries about Wells Harbour should be directed to Harbour Master Robert Smith on email: harbouroffice@ wellsharbour.co.uk or telephone: 01328 711646

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