First marine work begins with horizontal directional drilling

The first marine work on the wind farm will begin in late October when contractor Visser & Smith Marine Contracting utilises a horizontal directional drilling technique to install ducts at Weybourne in preparation for the "pull-in" of the wind farm's two export cables

The 22 kilometre export cables will carry the power generated by the wind farm to landfall, where they will be connected to the onshore cable, now being installed by Carillion plc.

The horizontal drilling will go under the beach and extend approximately 320m out to sea which means the beach will remain undisturbed throughout the cable installation.

Onshore, a drilling rig and associated equipment will be set up on the planned

joining pit area behind the beach while offshore, a multi purpose vessel (MPV) will be moored to carry out the marine works. A team of divers will be used for the various underwater activities

The MPV will be around 25m in length and, for positioning during activity at the drilling exit point, will be moored with up to four anchors marked with yellow buoys

Fishermen have been advised of the operation and the MPV will be equipped with international navigational standard communication and lighting equipment to ensure a safe operation.

The work should be completed by mid-November

Newt safety assured as substation work begins

Having received a Newt Licence from Natural England - the final hurdle to start of construction - work is now well underway on the new substation at Salle near Cawston

The power generated by the wind farm will be transported to shore at Weybourne, then some 22km from there via underground cables to the new substation. located 16km north west of Norwich city centre. It will then be transported via existing cables to the National Grid.

Before work could start on the preparation of the substation site, some possible site inhabitants - Great Crested Newts - had to be safeguarded.

The Great Crested Newt is the UK's largest newt species but due to diminishing numbers it enjoys legal protection against harm and destruction of its natural habitat through the Wildlife and Countryside Act 1981 and the Habitat Regulations Act 1984.

Upon receipt of the Newt Licence, AREVA, the contractor building the substation first checked for the presence of newts and then erected specially-designed newt fencing. This fencing creates a safe corridor for the newts' natural activity whilst keeping them out of the construction area

Oct 2009	Main civil works begin
Nov 2009	Concrete foundation work underway
Feb 2010	Construction of substation building complete Building ready for
Automa 2040	cable pulling

Irne beach, where the cables will come to shore

Substation construction timetable

Autumn 2010 Substation completed

Greenbuild success

More than 500 people visited the Sheringham Shoal Offshore Wind Farm stand at this year's North Norfolk District Council's Greenbuild sustainability event at Felbrigg Hall on September 12 and 13.

Visitors were keen to learn more about the project and what it will mean for North Norfolk as well as about wind energy in general. Children coloured in wind turbines for the chance to win a prize. The project was the major sponsor of the event.



Alan Cooper appointed as new FLO

Long-time Wells-based fisherman Alan Cooper Shellfishermen's Association specifically in has been appointed as Fishing Liaison Officer (FLO) for the project.

Alan is well-known amongst North Norfolk fishermen and he will be the principal liaison between the developer and the North Norfolk Fishermen's Society and Wells District

and the construction period.

If fishermen have questions or concerns about any of the work being undertaken or planned. they can contact Alan on mobile: 07760 781956 or via fax: 01328 853701.

Wind farm funds Harbour safety boost

The NCI Coastwatch Lookout at Wells has received funds from the Sheringham Shoal developers for a major upgrade which will significantly increase the safety factor for harbour and beach users.

As part of the upgrade a window will be installed at the rear of the building to provide a view south over the harbour all the way to the guay. At the same time, 24-hour CCTV cameras will be mounted on the roof with monitors and new communications equipment inside.

The Lookout, originally built for HM Coastguard, faces north with a view only seawards and along the line of the beach. This work will enable volunteers to watch south over

to new pontoons and jetty

relation to vessel movements during surveys

the harbour, while keeping an eye on the area near the RNLI lifeboat station that will be home

Activity at the new jetty can be watched and recorded, and the communications equipment will give accurate long-range control of state-ofthe-art dredging equipment which will deepen the entrance to the harbour to give all vessels a longer tidal window.

Sheringham Shoal plant manager Einar Strømsvåg described the Lookout improvements as "mutually beneficial" and said, "we are delighted to support - and have the support of - NCI Coastwatch who are already making a valued contribution to the safety of Wells harbour and beaches".





Preconstruction surveys underway

The project is undertaking two offshore surveys in preparation for construction work, which will begin with foundation installation in early 2010.

An unexploded ordnance (UXO) the wind farm site and export cable corridor from the site to the landfall at Weybourne.

EMU Limited, using the vessel RV Discovery, will use four soft-towed and low-flying magnetometers and one high resolution sidescan sonar just above the seabed to ensure the area is clear of metallic objects that could impact the monopile foundation installation and cable-laying. The survey should be completed by the end of October with possible clearance of any objects by the end of the year. Agreements have been made with fishermen for disruption payments.

The second survey is being carried out by Brown & May Marine and involves monitoring herring spawning. This survey began in late September and will continue until late November. Fishermen have been contacted to agree a Fishing Liaison Representative gear in the survey area and if so, the survey vessel will modify its route to ensure the gear is avoided.

Sheringham wind energy visitor and education centre

The Sheringham Shoal Offshore Wind Farm will work with the management of The Mo to establish a visitor and wind energy education centre in Sheringham.

The Sheringham Shoal Visitor and Education Centre will be located in The Mo, the iconic building on Sheringham's east promenade, which is undergoing a £1 million refurbishment to become the new home to the Sheringham Museum and the town's enviable collection of lifeboats

"The Mo provides a history of a town where life has traditionally revolved around the sea " said David Brown. Chairman of the Board of Directors of the Sheringham Museum. "However as offshore wind energy looks set to play a major role in North Norfolk's future, it is natural for us to look forward as well by providing a location to tell the story of wind energy in general, and the Sheringham



Shoal Wind Farm in particular as well." The Sheringham Museum is scheduled to open to the public in time for Easter 2010,

What percentage of time will be

turbines be available to produce

The availability of the turbines will depend

on how the turbines are operated and

maintained. Experience from the wind

experience from offshore operation and

maintenance of hydro power plants, we

hope to improve this measure for the

How will the new jetty at Buxton's

The operation and maintenance base

with all employees reporting to work

will be located on the outskirts of Wells,

there. They will then change and travel to

awaiting vessels at the new jetty in a mini-

bus which will drop them off and leave.

It will return in the afternoon to collect

the workers at the end of the day. This

Sheringham Shoal Wind Farm.

Bight affect the parking?

industry has shown an availability of

around 95%. By using the partners'

and the formal opening of Sheringham Offshore Wind Farm Shoal Visitor and Education Centre is planned to take place during May 2010.

Questions from the community

vears

energy?

Will the wind farm be visible from the North Norfolk coastline?

The wind farm, which is 11 to 14 miles offshore, will be visible on the horizon from key viewpoint locations along the North Norfolk coastal edge for about 60% of the time - but only when atmospheric conditions are clear. To get an idea of what the wind farm will look like from the nearest point to land it is most accurate to compare it with an existing wind farm. The distance from Sheringham town to the wind farm is the same as the distance from Hunstanton to the Lynn & Inner Dowsing Wind Farms so will have similar visibility. To see a computer-generated visulisation, please visit www.scira.co.uk.

What is the payback time for the wind farm?

The payback time of the initial investment in the wind farm will be approximately 10 years. An additional year of operation is needed to cover the cost of the refurbishment investment, that is, the cost of the installation of new turbines

when they need replacing after around 20 will minimise the need for any additional parking spaces.

How do I apply for a job with the wind farm?

People wishing to register an interest in working with the operation and maintenance base out of Wells can send their CV to info@scira.co.uk or, specifically for wind turbine technician roles, to Nia Ogara at Siemens, wind. recruitment.swp.gb@siemens.com.

To apply for work with key contractors during the construction period, CVs should be sent to:

- Siemens, wind.recruitment.swp.gb@ siemens.com

- MT Hojgaard, Frida Persson, fpe@mth. dk

- Visser & Smith Marine Contracting (Seabed Power), Jan van der Velde, j.vd. velde@seabedpower.com

If you have a question for the next edition of the Newsletter, please email it to: 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

F: +44 (0) 20 3204 3600 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 and Scira will be the operator of the wind farm when



StatoilHydro

Sheringham Shoal Offshore Wind Farm

Onshore works continue to plan

The installation of the 22 kilometre onshore electricity cable is now well underway with the bulk of the duct installation by open trench works almost completed by contractor Carillion plc.

More than 18 kilometres of ducts have now been installed in preparation for the cable installation.

according to the schedule This technique will be used at a total of 14 locations along the route including the Poppy Line Railway, Kelling Heath Holiday Park and the River Bure



Initial dredging work begins at Wells

Initial dredging work that will deepen the main channel from the Lifeboat House to the open sea has begun in Wells following approval from the Marine and Fisheries Agency (MFA).

The MFA granted 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.

Parts of the main channel will be deepened to one metre at low tide (neaps) to allow boats in and out of the harbour for longer time periods. Wells Harbour Commissioners are using a dredger - an excavator mounted on a barge - with GPS tracking to ensure the work is precise. Sand and gravel is moved aside but not taken away.

The initial improvement work will employ two people and take six months from now until

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extended periods.

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The major horizontal directional drilling work, installing ducts underneath roads and key landmarks, is ongoing and continuing

Onshore cable installation timetable

Ongoing to Jan 2010

Ongoing to March 2010

Oct 2009 to Aug 2010 Aug to Nov 2010

Fabrication of onshore

Cable installation onshore Final testing Mitigation comp

March 2010 and then the depth of the channel will be maintained with regular dredging.

The aim is to allow the safe use of Wells Harbour by workboats servicing Sheringham Shoal and other offshore wind farms likely to be constructed in the future. It will also open the harbour to yachts and fishing boats for

The "*Kari Hege*'

The dredger carrying out the work at Wells Harbour has been named the "Kari Hege" after Sheringham Shoal's stakeholder manager, Kari Hege Mørk.

Kari Hege has been instrumental in bringing this project to fruition and the Wells Harbour Master, and Commissioners, felt the name was an appropriate and well-deserved tribute

Wind energy visitor and education centre at Sheringham Questions from the Community Contact details and more information