

Preliminary Information Memorandum

Sheringham Shoal Offshore Transmission Assets

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RBC Capital Markets®

SUMMARY

In April 2009 Ofgem distributed a teaser document, "UK Offshore Transmission – Investment Opportunity", to investors outlining the opportunity to acquire offshore electricity transmission assets in Great Britain ("**GB**") under a new regulatory regime governing the ownership and operation of offshore electricity transmission. This regime is being developed jointly by the UK Government, through the Department of Energy and Climate Change ("**DECC**") and the GB energy regulator, the Office of Gas and Electricity Markets ("**Ofgem**").

This document is a summary of information provided by the developer and outlines specifically the opportunity for investors to acquire the transmission assets and to become the licensed Offshore Transmission Owner ("**OFTO**") of the Sheringham Shoal offshore wind project (the "**Sheringham Shoal Wind Farm**"). Sheringham Shoal Wind Farm will consist of 88 Siemens 3.6MW wind turbine generators.

The transmission assets for the Sheringham Shoal Wind Farm (referred to in this document as the "**Sheringham Shoal Transmission Assets**") are currently owned and being constructed by Scira Offshore Energy Limited ("**Scira**"), a joint venture owned (50/50) by StatoilHydro and Statkraft. StatoilHydro is responsible for the development phase of the Sheringham Shoal project and has contracted construction and installation of the Sheringham Shoal Transmission Assets to various third party contractors, as set out later in this document.

It is currently expected that construction of the Sheringham Shoal Transmission Assets will be fully completed in Q1 2011. Once completed, the Sheringham Shoal Transmission Assets will be transferred to the OFTO identified as the successful bidder through the tender process via a sale and purchase agreement.

The preliminary transfer value estimated by Ofgem on the basis of information provided to date (the "**Estimated Transfer Value**") of the Sheringham Shoal Transmission Assets is £186.8 million. This Estimated Transfer Value includes the two offshore substation platforms ("**OSPs**"). The Estimated Transfer Value is subject to adjustment, as described in the document entitled "Generic Preliminary Information Memorandum" and as further described below.

THE INVESTMENT OPPORTUNITY

1. Transmission Assets Overview

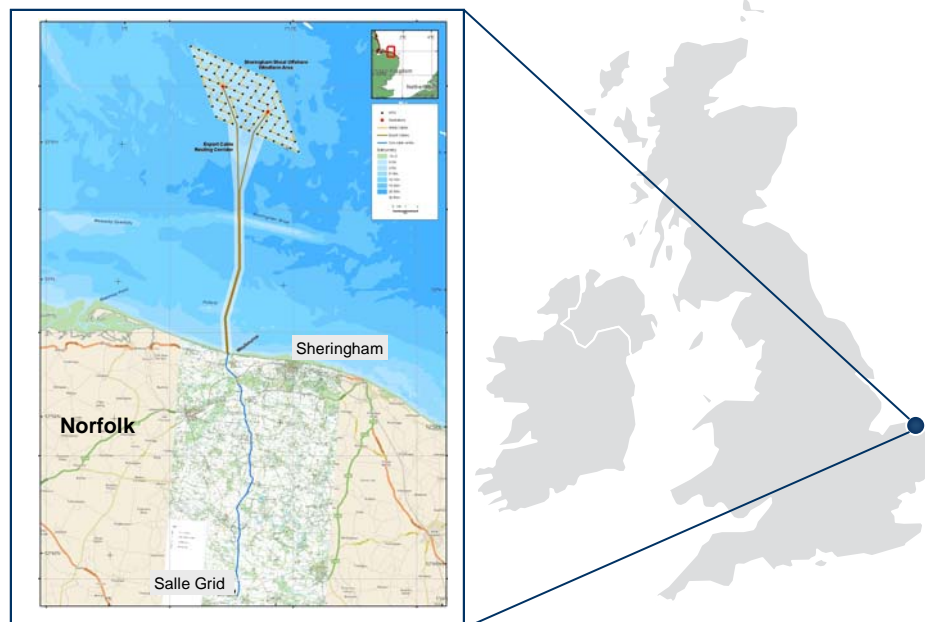
Location

The Sheringham Shoal Wind Farm is to be located approximately 20 km north of Sheringham off the Norfolk coast in the East of England. The offshore connection points will be located on the two OSPs located within the boundaries of the Sheringham Shoal Wind Farm, as illustrated in Figure 1 below.

The Sheringham Shoal Transmission Assets will connect to the distribution network at the substation at Salle, Norfolk, approximately 21.5km inland. The onshore distribution licensee is EDF Energy Networks ("EDF Energy").

The Sheringham Shoal Transmission Assets are located entirely within UK territorial waters.

Figure 1: Location of Sheringham Shoal Wind Farm and Route of Transmission Cable



Source: Scira

Timeline

Construction of the offshore aspects of the Sheringham Shoal Wind Farm is expected to commence in Q2 2010, with work on the offshore transmission assets having started in June 2009. The current expected date of delivery of the onshore connection is August 2010. Construction of the transmission assets is expected to be completed in Q1 2011, with the wind farm being fully operational by early 2012.

Transmission Network Design

Table 1 summarises the key transmission network design features of the Sheringham Shoal Transmission Assets:

Table 1 – Sheringham Shoal Network Design Features

Key Features	
Expected minimum designated service life	20 years
Capacity ratings	158MW (176MVA) per cable

The transmission entry capacity into the onshore transmission network is 315MW. The Articles of Agreement with EDF Energy, signed in June 2007, gives Scira the right to export a maximum of 332MVA to the regional network at Salle and from there on to the transmission system connection at Norwich.

Estimated export rights required at the proposed offshore connection point will be 316.8MW with the connection delivery expected by August 2010.

Description of Transmission Assets

Figure 1 above shows the proposed route of the onshore and offshore cable route for the Sheringham Shoal Transmission Assets.

An overview of the assets that Scira currently propose to transfer to the OFTO and which were used by Ofgem to derive the Estimated Transfer Value of the Sheringham Shoal Transmission Assets, is set out in Table 2 below. Table 4 provides a more detailed list of equipment currently proposed for transfer.

Table 2 – Asset summary

Asset	Description
OSPs	The OSPs' purpose is to house the necessary equipment for connection and switching of the wind turbine arrays. Main apparatus proposed to be transferred includes 4 132/33kV transformers together with two sets each of associated 132 kV and 33kV switchgear.
Subsea cables	A single subsea cable connects each the OSP to the shore where they are joined to the onshore cables in a jointing chamber. Each subsea connection will consist of a 3 core 145kV cable, 22.4km in length. The cables will each have a rating of 167 MVA (158MW).
Onshore cables	Two onshore cables link the subsea connections to the onshore substation. The connections will consist of two underground single core 145 kV cables, each 21.5 km in length. The cables will each have a rating of 167MVA (158MW).
Onshore substation	The onshore substation houses the necessary equipment for connecting the onshore cable to the transmission or distribution network. Main apparatus proposed to be transferred includes 2 sets of 132kV GIS switchgear and reactive compensation equipment as necessary.
Spares	The current spares available for transfer consist of 500m of 145kV subsea cable, 500m of landfall cable and 2.4km of onshore cable.

Table 3 below sets out the current offshore and onshore boundary points proposed by the developer. These have been used for the purposes of calculating the Estimated Transfer Value.

Table 3 – Proposed boundary points offshore and onshore

Boundary Point	Location
Offshore	Located at the termination point for the 33kV infield WTG string submarine cables into the offshore substation 33kV GIS switchgear.
Onshore	Located at the cable sealing ends on the outgoing sides of the EDF Energy metering circuit breakers.

Redundancy

Electrical redundancy for the Sheringham Shoal Transmission Assets will be provided by two transformers on each OSP. A single subsea cable connects each OSP to the mainland.

Contractual arrangements

Scira has adopted a multi-contract strategy for the delivery of Sheringham Shoal. Table 4 sets out the main contracts, current contract status and main assets proposed for transfer.

Table 4 – Key Contracts and Assets

Services and Main Equipment List	Contract	Contractor
OSP – construction: (Foundation)2 x offshore substation structures	Supply Installation	MT Højgård Master Marine ASA
OSP – mechanical and electrical equipment : 4 x 132/33kV transformers 4 x 33/0.4kV earthing and auxiliary transformers 4 x 33kV GIS switchgear sets 4 x 132kV GIS switchgear sets	Supply and installation	Areva T&D UK Ltd
Subsea cables: 2 x 22.4km 145kV 3 core cables	Supply Installation	Nexans Norway AS Visser and Smit Marine Contracting BV
Onshore cables: 2 x 21.5km ducted 145kV cables (each comprises 3 single core cables)	Supply and installation	Carillion Utility Services Ltd
Onshore substation: 2 x 132kV GIS switchgear sets 2 x 30-60MVAR shunt reactors	Supply and installation	Areva T&D UK Ltd

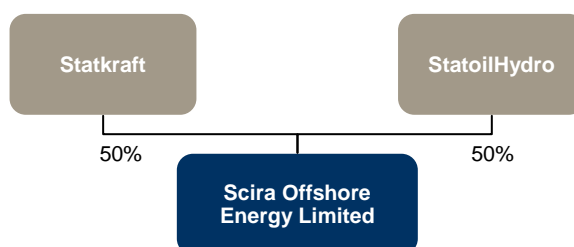
Consents and property rights

All necessary offshore consents and licences are in place for the construction of the Sheringham Shoal Transmission Assets. These include an option on a Crown Estate lease, Electricity Act (1989) Section 36 and Coastal Protection Act (1949) consent and a Food and Environment Protection Act (1985) licence. In addition to this, all necessary property rights for the onshore cable route have been agreed and secured.

Ownership Structure

An overview of the ownership structure of the Sheringham Shoal Wind Farm and the Sheringham Shoal Transmission Assets is illustrated in Figure 2 below:

Figure 2: Ownership Structure



2. Preliminary view of Estimated Transfer Value

Ofgem, with input from its external advisers, has undertaken an exercise to determine the Estimated Transfer Value for the Sheringham Shoal Transmission Assets summarised in Table 2 and 4 above, assuming the boundary points summarised in Table 3. The Estimated Transfer Value is intended to allow Scira to recover its economic and efficient costs of developing the Sheringham Shoal Transmission Assets and, as such, may be subject to adjustment based on new or more detailed information becoming available to Ofgem, and upon final completion of the Sheringham Shoal Transmission Assets.

For the purpose of commencing the tender process, Ofgem has established an Estimated Transfer Value of £186.8 million for the Sheringham Shoal Transmission Assets.

CONTACT DETAILS

The information in this document is provided for information purposes only. It is designed to provide prospective OFTOs, lenders and advisers with certain high-level information related to the Sheringham Shoal Transmission Assets, to support the launch of the initial, pre-qualification ("PQ") phase of the first tender process.

All enquiries or communications, including requests for additional information, should be sent to tendercoordinator@ofgem.gov.uk.

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