Preliminary Information Memorandum

Gwynt y Môr

Offshore Transmission Assets

November 2010

ofgem E-Serve

RBC Capital Markets®

SUMMARY

In June 2009 the Department of Energy and Climate Change ("**DECC**") and the GB energy regulator, the Office of Gas and Electricity Markets ("**Ofgem**") introduced a new regulatory regime for licensing offshore electricity transmission. The regime provides an opportunity for investors to acquire offshore electricity transmission assets in Great Britain ("**GB**"). The first transitional tender round commenced in July 2009 and strong competition has attracted over £4 billion of investment appetite for nine transmission links worth around £1.1 billion. Three preferred bidders have been selected to own and operate the first £800 million worth of transmission links to eight offshore wind farms. All three firms are new entrants to the sector.

Ofgem E-Serve, which is the delivery arm of Ofgem, is now launching tenders for the second round of transitional projects. These tenders will be conducted across two tranches of tender exercises. The first tranche of tender exercises (Tranche A) will commence in mid-November 2010. The second tranche of tender exercises are expected to commence in spring 2012 (Tranche B). Projects included in Tranche A are those projects which have been confirmed as qualifying projects by Ofgem E-Serve and have satisfied the necessary tender entry conditions in accordance with the Electricity (Competitive Tenders for Offshore Transmission Licences) Regulations 2010 ("**the Tender Regulations**"). Projects in Tranche B have been deemed as qualifying projects by Ofgem and have until 31 March 2012 to meet any outstanding requirements in accordance with the Tender Regulations.

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 Gwynt y Môr **("GyM")** wind farm. GyM is a qualifying project in accordance with the Tender Regulations and is being tendered in Tranche A.

The transmission assets for the GyM wind farm (referred to in this document as the ("**Transmission Assets**") are currently owned by Gwynt y Môr Offshore Wind Farm Limited (ultimately owned 60% by RWE Innogy GmbH, 30% by Stadwerke München Gmbh and 10% by Siemens AG as illustrated in Figure 4) and being constructed by RWE Npower Renewables. It is currently expected that the Transmission Assets will be completed by the end of 2012. Once completed, the Transmission Assets will be transferred to the OFTO identified as the successful bidder through the tender process via a transfer agreement.

The costs of developing and constructing the Transmission Assets, estimated on the basis of information provided to date, are £305.7 million (the "**Initial Transfer Value**"). This Initial Transfer Value includes the two offshore substation platforms ("**OSPs**"). The Initial Transfer Value will be updated as part of Ofgem's cost assessment process, as described in the Generic Preliminary Information Memorandum entitled "GB Offshore Transmission: Investment Opportunity – Tender Round 2" and as further described below. That document also provides further information on the tender process generally.

THE INVESTMENT OPPORTUNITY

Transmission Assets Overview

Location

The GyM wind farm is to be located 13 to 15 km off the north coast of Wales, as shown in Figure 1 below.

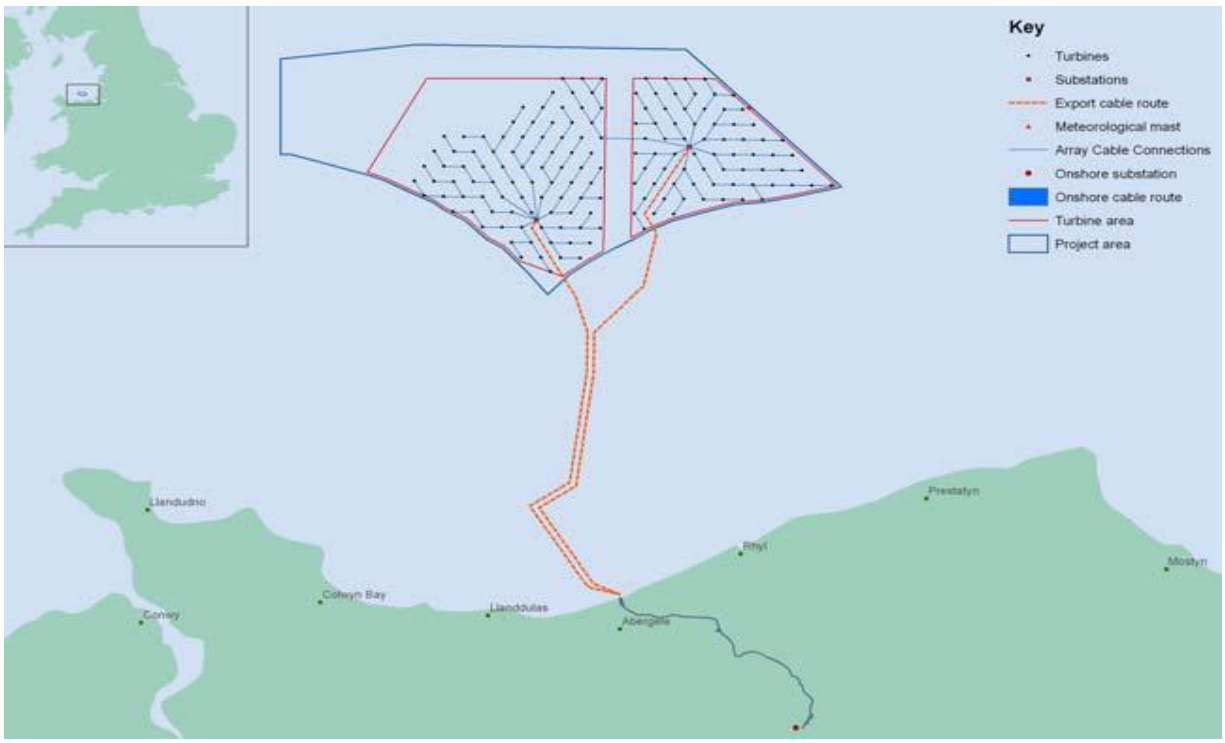
The 33kV offshore connection points will be located on the two OSPs, located within the boundaries of the GyM wind farm.

The Transmission Assets will connect to the onshore transmission system at a new 400kV substation at St. Asaph, Denbighshire, approximately 11km inland. The onshore transmission licensee is National Grid Electricity Transmission ("**NGET"**).

The Transmission Assets are located inside UK territorial waters.

Figure 1 below shows the location of the GyM wind farm and Transmission Assets.

Figure 1: Location of the Gwynt y Môr Wind Farm and Transmission Assets

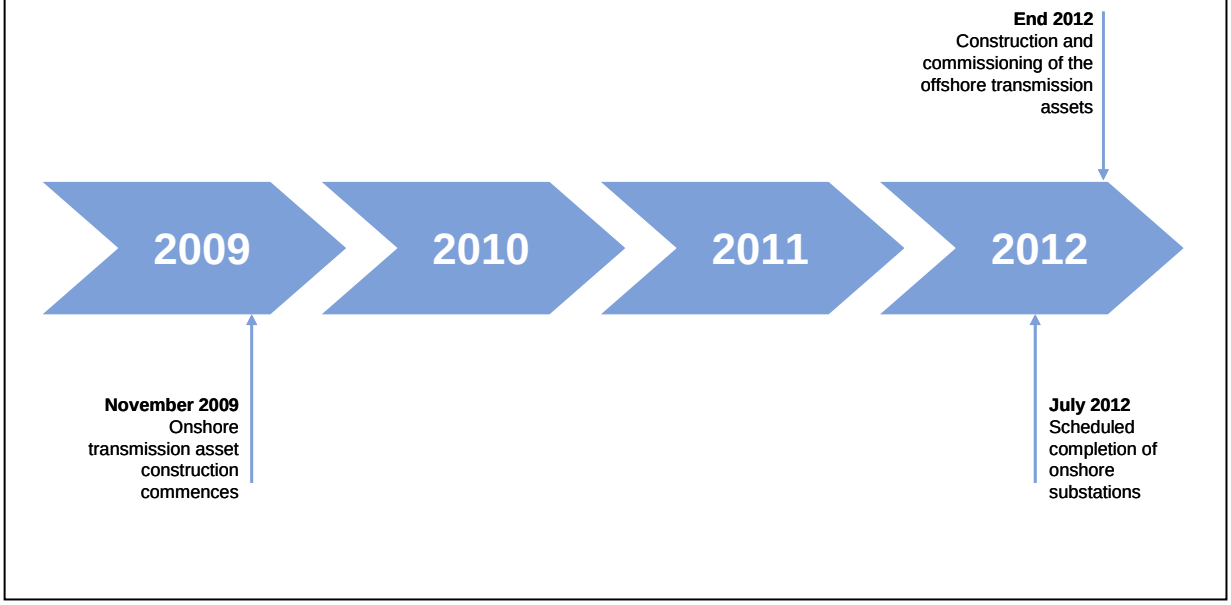


Source: British Crown and SeaZone Solutions Limited

Timeline

Construction of the onshore elements of the Transmission Assets commenced in November 2009, to be followed by the offshore elements in April 2012. Construction of the 400kV onshore substation at the onshore connection point by NGET is scheduled for completion by end of July 2012. Construction and commissioning of the offshore transmission assets is scheduled to complete by the end of 2012, ahead of first generation from the commissioned generation assets. The GyM wind farm is scheduled to be fully operational by November 2014.

Figure 2: Timeline



Transmission Network Design

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

Table 1 – Gwynt y Môr Network Design Features

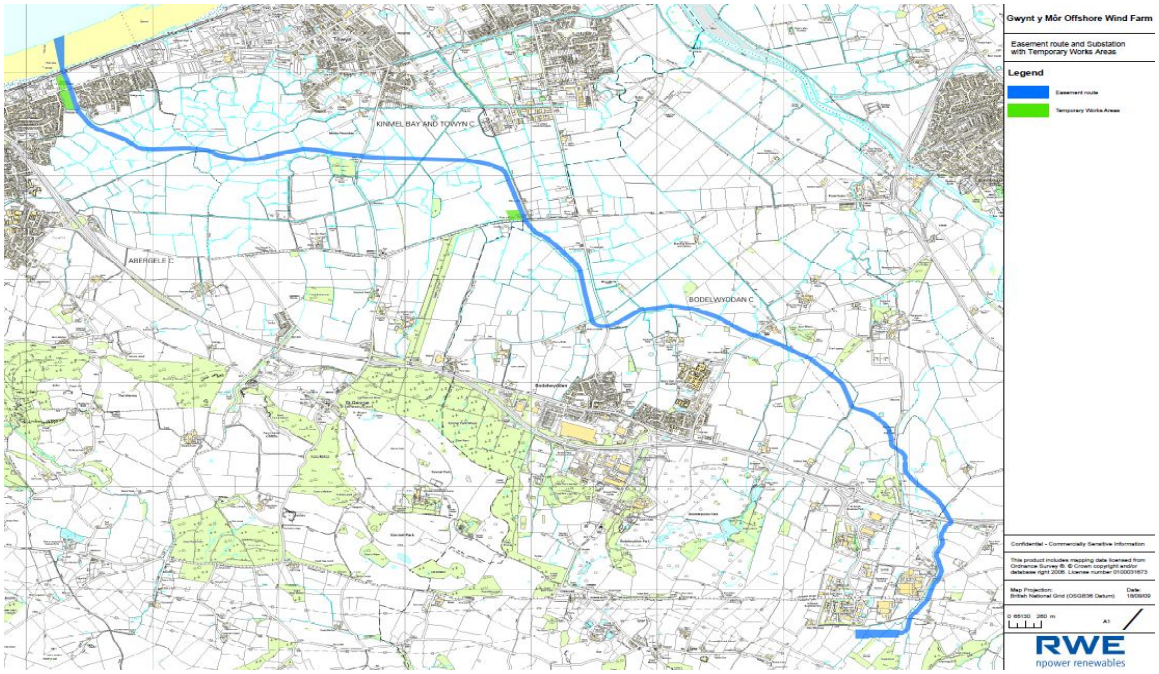
Key Features	
Expected minimum designated service life	Main transmission components expected to be 25-40 years
Capacity ratings	149 MVA for each of the four export cables

In August 2007, GyM signed both a Connection and Use of System Code (**"CUSC"**) bilateral agreement and a CUSC construction agreement with NGET for a grid connection at St. Asaph. This was with a Transmission Entry Capacity ("**TEC"**) of 735MW; in August 2010 a variation was signed to reduce the TEC to 574MW, to reflect the final generation capacity. The project now has an offshore connection agreement.

Description of Transmission Assets

Figure 3 below shows the proposed route for the onshore cable.

Figure 3: Route of Gwynt y Môr Onshore Transmission Cable



Source: RWE Npower Renewables Ltd.

An overview of the assets that RWE Npower Renewables currently proposes to transfer to the OFTO and which were used to derive the Initial Transfer Value of the Transmission Assets, is set out in Table 2 below. Table 4 provides a more detailed list of equipment proposed for transfer.

Table 2 – Asset summary

Asset	Description
OSPs	The function of the two OSPs is to house the necessary equipment for connection and switching of the wind turbine arrays. Main apparatus proposed to be transferred includes four 132/33kV transformers together with associated 132kV switchgear.
Subsea cable	The subsea cables connect the OSPs to the shore where they are joined to the onshore cables in a transition pit. The platform-to-shore connections will consist of four 132kV cables, two cables from the Eastern Substation (each 22.4km in length) and two cables from the Western Substation (each 19.0km in length), giving a total cable length of 82.8km (subject to final route engineering).
Onshore cable	The onshore cables link the subsea cables to the onshore substation. The onshore connections will consist of 4 underground 132kV circuits, each 11km in length.
Onshore substation	The onshore substation houses the necessary equipment for connecting the onshore cable to the transmission or distribution network. It also accommodates associated reactive compensation equipment. Main apparatus proposed to be transferred includes 400kV, 132kV and 13.9kV switchgear and cables, 400/132/13.9kV transformers and reactive compensation/harmonic filtering equipment.
Spares	Currently, no spares have been put forward to be transferred to the OFTO.

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 Initial Transfer Value.

Table 3 – Proposed boundary points offshore and onshore

Boundary Point	Location
Offshore	Located at the incoming transformer 33kV circuit breaker cable terminations on the two OSPs; i.e. the entire 33kV switchboard will be owned by the wind farm with the 33kV cable connections to the transformer, and upstream assets, owned by the OFTO.
Onshore	Located between the 400kV busbar disconnectors and the 400kV OFTO circuit breaker; i.e. the 400kV busbars and busbar disconnectors will all be owned by NGET.

Redundancy

GyM has four export cables and four offshore transformers, two onshore transformers and two 400kV connection points; hence if a fault occurs on one of the export cables, or associated transformers, then the electrical energy can be re-routed. However, the total energy exported will be constrained by the rating of the remaining export cables or transformer.

Contractual Arrangements

RWE Npower Renewables has adopted a multi contract strategy for the delivery of the GyM wind farm. This is consistent with RWE Npower Renewables' preferred contracting strategy for power generation assets, including offshore wind farms. This strategy is based on the strength of RWE Npower Renewables' in-house engineering and management expertise and many years' experience in the design and construction of multi-contract power projects.

Table 4 sets out the main contracts, current contract status and assets proposed for transfer.

Table 4 – Key Contracts and Assets

Services and main equipment list	Contract	Contractor
OSP - construction: 2 x offshore substation jacket foundations OSP Topside Installation	- OSP Jacket Foundation Design & Supply - OSP Jacket Foundation Installation - OSP Topside Installation	- Burntisland Fabrications Limited (BiFab) - RWE AG's Seabreeze installation vessel - TBC
OSP – topside mechanical and electrical equipment: 4 x 132/33kV transformers 4 x 132kV Switchgear 4 x 33/0.4kV earthing/auxiliary transformers	Electrical System	Main Contractor: Siemens Transmission and Distribution Ltd Subcontracts: awarded
Offshore cable: 2 x 22.4km 132kV 3 core cables 2 x 19.0km 132kV 3 core cables	- 132kV Export Subsea Cable Supply - 132kV Export Subsea Cable Install	- Main Contractor: NKT cables GmbH - TBC
Onshore cables: 4 x 11km 132kV circuits and fibres for communications and temperature monitoring	132kV Export Onshore Cable Supply & Install	Prysmian Cables & Systems Ltd
Onshore Substation: 2 x 400/132/13.9kV transformers 400, 132 & 13.9kV Power Cables 132kV GIS Switchgear Reactive Compensation Harmonic Filtering	Electrical System	Main Contractor: Siemens Transmission and Distribution Ltd Subcontracts: awarded
2 x 400kV GIS circuit breaker bays	National Grid Unlicensed Works	National Grid

Consents and property rights

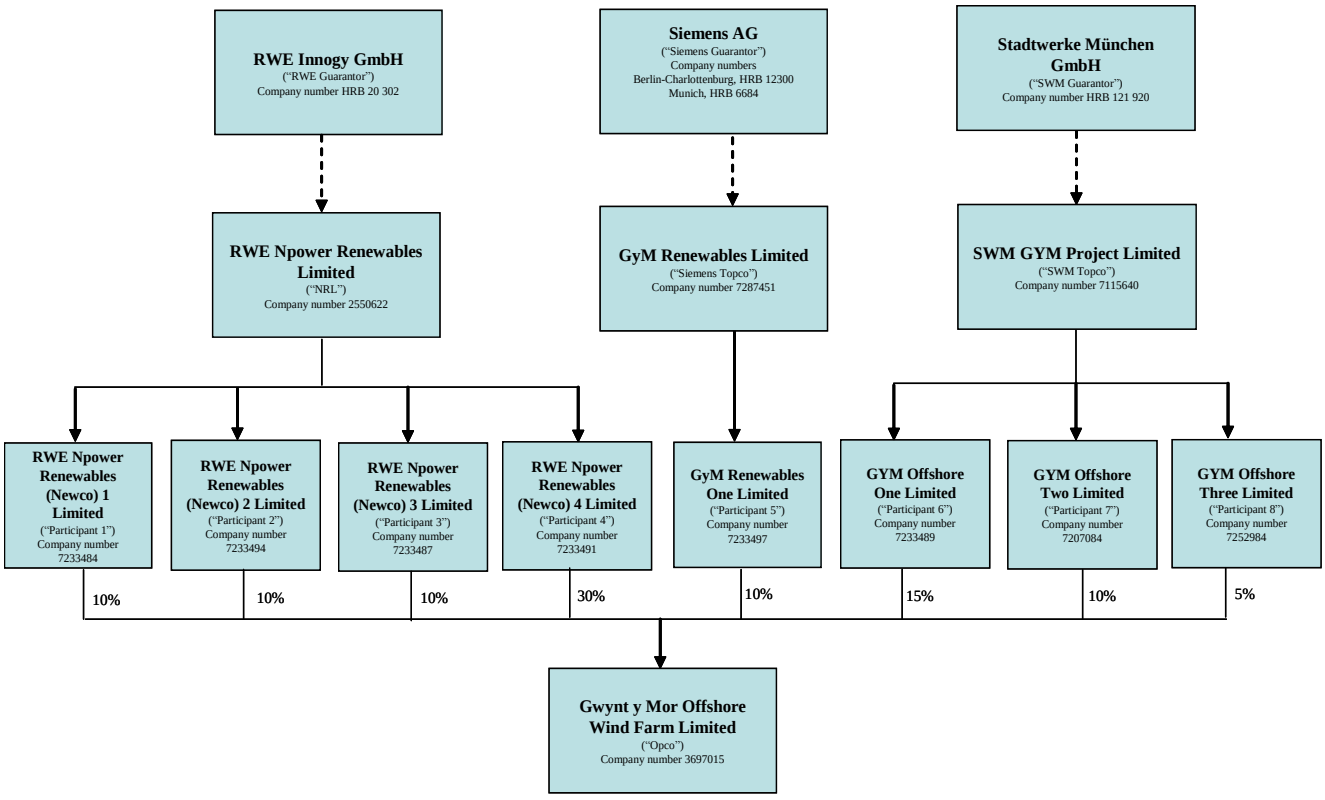
All necessary offshore consents and licences are in place for the construction of the Transmission Assets. These include Electricity Act (1989) Section 36 and Coastal Protection Act (1949) consents and a Food and Environment Protection Act (1985) licence. In addition to this, all necessary property rights for the onshore cable route have been agreed and secured. Negotiations are currently underway with The Crown Estate to secure the Lease which will be split into two agreements to reflect OFTO arrangements (one for the transmission assets and one for the generation assets). The project currently holds an Agreement for Lease.

Ownership Structure

GyM wind farm is owned and financed by three shareholders under an Unincorporated Joint Venture (UJV), namely RWE Innogy (60%), Stadtwerke Munchen (30%) and Siemens (10%). All three shareholders are financing the project on their respective balance sheets. The project will be engineered, procured, constructed, operated and maintained by RWE Npower Renewables Ltd, a wholly owned subsidiary of RWE Innogy.

An overview of the ownership structure of the GyM wind farm and the Transmission Assets is illustrated in Figure 4 below:

Figure 4: Ownership Structure of Gwynt y Môr Offshore Wind Farm



Initial Transfer Value

Ofgem E-Serve will calculate the economic and efficient costs which ought to be, or ought to have been, incurred in connection with developing and constructing the Transmission Assets. The assessment of these costs will be used to determine the transfer value.

For the purpose of commencing the tender process, applicants should assume an Initial Transfer Value of £305.7 million for the Transmission Assets summarised in Table 2 and 4 above. This value has been provided from RWE Npower Renewables' cost forecasts, assuming the boundary points summarised in Table 3. Ofgem E-Serve has not yet reviewed this cost forecast information. Ofgem E-Serve will be undertaking a detailed review of the information as part of its calculation of the estimate of the economic and efficient costs and will provide this estimate as the indicative transfer value at the Qualification to Tender stage.

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 Transmission Assets, to support the launch of the Pre-Qualification stage of the tender process.

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

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