



Walney 2 Offshore Transmission Assets

Ex Post Financial Cost Review

21 September 2012

Ernst & Young LLP

Private and confidential

The Office of the Gas and Electricity Markets Authority
9 Millbank
London
SW1P 3GE

21 September 2012

Dear Sir

Walney 2 Offshore Transmission Assets – Ex Post Financial Cost Review

Introduction

Further to the Contract Task Order dated 28 October 2011 (Task Order Number 62A/039) we have undertaken an Ex Post Financial Cost Review (“the Review”) in respect of the Walney 2 Offshore Transmission Assets (“the Walney 2 Transmission Assets”).

Work performed

In undertaking the Review our work comprised the review procedures as prescribed by The Office of the Gas and Electricity Markets Authority (“Ofgem”) and set out in Appendix A to this report (“the Review Procedures”). Details of the results from the Review Procedures are set out in the body of this report.

Purpose of our report and restrictions on its use

This report has been prepared solely for the benefit of Ofgem.

We understand that Ofgem will disclose this report to the developer of the Walney 2 Transmission Assets and to the preferred bidder for the Walney 2 Transmission Assets. We consent to that disclosure on the basis that Ernst & Young LLP assumes no responsibility to any user of this report other than Ofgem and any other person that chooses to rely on it does so entirely at their own risk.

Statement of independence

Ernst & Young LLP has been appointed by DONG Energy A/S and its subsidiary undertakings in the past in relation to a number of matters. In order to maintain our independence in undertaking the Review confidentiality and ring fencing procedures were put in place. We therefore do not consider that our independence is impaired in relation to the Review.

Yours faithfully

Ernst & Young LLP

The UK firm Ernst & Young LLP is a limited liability partnership registered in England and Wales with registered number OC300001 and is a member firm of Ernst & Young Global Limited. A list of members' names is available for inspection at 1 More London Place, London SE1 2AF, the firm's principal place of business and registered office.

Contents

1. Introduction and executive summary	1
2. Review procedures	7
3. Variance analysis	15
4. Project value	20
Appendix A Review Procedures	22
Appendices B, C, D, E, F redacted	24

1. Introduction and executive summary

1.1 Introduction

1.1.1 Background

Under a new regulatory regime governing the ownership and operation of offshore electricity transmission certain offshore transmission assets that were either in the course of construction or which had been constructed are to be sold by the developer/generator and purchased via a competitive tender process by an Offshore Transmission Operator.

As part of the tender process Ofgem has undertaken an exercise to calculate the economic and efficient costs of construction of the offshore transmission assets (“the Estimated Transfer Value”). The Estimated Transfer Value is the summation of the estimated costs to complete and commission the offshore transmission asset including capital costs, interest costs, developments costs and costs associated with the tender process. Potential acquirers of the offshore transmission assets are required to use the Estimated Transfer Value as the basis for their bids.

In July 2009 Ofgem and RBC Capital Markets issued a preliminary information memorandum in relation to each relevant offshore transmission asset (“the PIM”). Each PIM contained an initial view of the Estimated Transfer Value. This initial view was updated by Ofgem following the receipt of additional information from the developers and an updated Estimated Transfer Value was set out in the First Transitional Tender Information Memorandum (“the FTTIM”) issued by Ofgem and RBC Capital Markets in September 2009.

Following completion of the construction of each offshore transmission asset Ofgem will undertake a final assessment of the total costs (“the Final Transfer Value”). The developers have provided further information to enable Ofgem to undertake this assessment.

As part of the tender process Ofgem requires independent verification of the costs incurred by the developers which are to be taken into account in the assessment of the Final Transfer Value.

1.1.2 Project costs

The total estimated value of the Walney 2 Transmission Assets (also referred to as “total project value”) is £116.3 million including financing costs and transaction costs. Changes in the total project value including financing costs over time can be summarised as follows:

- ▶ Estimated Transfer Value per the PIM: £104.4 million (including financing costs of £11.2 million).
- ▶ Updated Estimated Transfer Value per the FTTIM: £105.0 million (including financing costs of £14.8 million).
- ▶ The latest estimate of total project value provided in a spreadsheet “WOW2 Annex 6 Cost Assessment Templates to OFGEM 28-05-2012.xlsx” (“the Cash Flow Schedule”): £116.3 million (including financing costs of £8.1 million and transaction costs¹ of £1.6 million)².

1.1.3 Content of this report

To substantiate the costs incurred by the developer which are to be included in the Final Transfer Value we have been instructed by Ofgem to undertake certain Review Procedures.

¹Due to the offshore tender process being in an early stage in July 2009 and September 2009 the PIM and FTTIM did not contain an estimate of transaction costs.

² The Cash Flow Schedule is set out at Appendix B as provided by the developer.

This report sets out the Review Procedures that have been undertaken and their results in the following sections:

- ▶ This section gives an overview of the relevant offshore transmission assets, an outline of the Review Procedures that we have performed and an executive summary of our findings.
- ▶ Section 2 summarises the way in which the developer has recorded the costs that it has incurred, a detailed description of the Review Procedures performed and their results.
- ▶ Section 3 sets out changes in the costs included in the Estimated Transfer Value between the PIM and the FTTIM and between the FTTIM and the Cash Flow Schedule.
- ▶ Section 4 summarises the Cash Flow Schedule in total and then by the principal asset categories and identifies amounts subject to contract which have not yet been paid by the developer (accrued amounts) and amounts not yet subject to contract or variation order (estimated amounts).

The report contains a number of appendices (appendix A to appendix F) which include supporting information including source data provided by the developer.

1.2 The Walney 2 Transmission Assets

1.2.1 Location

The Walney 2 Transmission Assets connect the Walney 2 offshore wind farm assets ('the Walney 2 Wind Farm Assets'), located off the Cumbrian coast in northwest England to the 132kV substation at Stanah, Cumbria. The substation is owned by Electricity North West Limited ('ENW').

1.2.2 History

The Walney 2 Wind Farm Assets and the Walney 2 Transmission Assets are owned by Walney (UK) Offshore Windfarms Limited ("the Developer"). Walney (UK) Offshore Windfarms Limited is owned by DONG Wind (UK) Limited (50.1%), SSE Renewables Holdings (UK) Limited (25.1%), and OPW Holdco Limited (24.8%).

Key events in the history of the Walney 2 Wind Farm Assets and the Walney 2 Transmission Assets are as follows:

- ▶ 2004: Walney (UK) Offshore Windfarms Limited was incorporated under the then name of DONG Walney (UK) Limited. All of the share capital was owned by DONG Wind (UK) Limited, a wholly owned subsidiary of DONG Energy A/S.
- ▶ 2009: SSE Renewables Holdings (UK) Limited acquired 25.1% of the share capital of DONG Walney (UK) Limited from DONG Wind (UK) Limited. SSE Renewables Holdings (UK) Limited is a wholly owned subsidiary of Scottish and Southern Energy plc.
- ▶ 2009: DONG Walney (UK) Limited was renamed Walney (UK) Offshore Windfarms Limited.
- ▶ 2010: OPW Holdco Limited acquired 24.8% of the share capital of Walney (UK) Offshore Windfarms Limited from DONG Wind (UK) Limited. OPW Holdco Limited is a subsidiary of OPW Topco Limited which is owned Stichting Depositary PGGM Infrastructure Funds (60%) and Ampere Project Holding BV (40%).
- ▶ 2010: Construction of the Walney 2 Wind Farm Assets and Walney 2 Transmission Assets commenced.

- ▶ 2011: Construction of the Walney 2 Wind Farm Assets and Walney 2 Transmission Assets was substantially completed by December 2011. Commissioning of the Walney 2 Wind Farm Assets and Walney 2 Transmission Assets commenced in August 2011 and generation commenced in November 2011.
- ▶ 2012: Commissioning of the Walney 2 Wind Farm Assets and Walney 2 Transmission Assets is expected to be completed in June 2012.

1.2.3 Project assets

The Walney 2 Transmission Assets, as set out in the PIM, comprise:

- ▶ An offshore substation.
- ▶ A subsea cable approximately 43.7 km in length.
- ▶ Three onshore cables each approximately 5 km in length.
- ▶ An onshore substation.
- ▶ Spares.

1.3 Scope of the Review Procedures

1.3.1 Principles

The Review Procedures have been performed on the cash expenditure that has been incurred by the Developer in constructing the Walney 2 Transmission Assets, in accordance with the cost assessment principles determined by Ofgem.

Taxation and non-cash items including depreciation are not included in the Cash Flow Schedule and are therefore not within the scope of the Review Procedures.

Financing costs (also referred to as ‘interest during construction’) and transaction costs are included within this report in the calculation of total project value. The calculation of financing costs and transaction costs has been subject to a separate review by Ofgem and is not within the scope of the Review Procedures.

1.3.2 Procedures

The Review Procedures that we have undertaken are set out in Appendix A to this report.

The Developer has provided the Cash Flow Schedule³ setting out the latest estimate of total capital and development costs (also referred to as project common costs) which it has incurred in respect of the Walney 2 Transmission Assets.

The objective of the Review Procedures is to substantiate the costs included by the Developer in the Cash Flow Schedule by tracing a sample of costs to the Developer’s accounting systems and to source documentation e.g. purchase invoices and bank statements.

The Review Procedures do not constitute an assessment as to whether the costs of construction were incurred in an economic and efficient manner. As a generality Ofgem’s expectation is that developers will procure in an economic and efficient manner in order to seek to obtain a return on investment in a competitive generation market.

³ The Cash Flow Schedule is set out at Appendix B.

1.3.3 Information

Based on the Cash Flow Schedule prepared by the Developer, Ofgem has selected a sample of costs upon which we have undertaken the Review Procedures⁴.

In order to perform the Review Procedures we visited the Developer's premises and were provided with information and explanations as described in sections 2 to 4 of this report.

Our work is based on the Cash Flow Schedule, which was originally prepared as at 31 January 2012. The Developer has however, following discussions with Ofgem, subsequently deducted an amount of £ [REDACTED] from the Cash Flow Schedule in respect of the cost of SCADA equipment⁵. We understand that the SCADA equipment relates to the Walney 2 Wind Farm Assets and not the Walney 2 Transmission Assets and therefore the proposed project value does not include the amount of £ [REDACTED]. We performed the Review Procedures during our visit to the Developer's premises between 12 March 2012 and 13 March 2012 and have not updated our report for other events or circumstances that have occurred since the final date of our visit or that are not reflected in the Cash Flow Schedule.

1.4 Executive summary

The costs included in relation to the construction of the Walney 2 Transmission Assets, as set out in the Cash Flow Schedule, can be summarised as follows:

Cost category	Directly incurred cost	Indirectly incurred cost	Total cost	Sample tested
Project common costs	£ [REDACTED]	£ [REDACTED]	£ [REDACTED]	-
Offshore substation	£ [REDACTED]	£ [REDACTED]	£ [REDACTED]	£ [REDACTED]
Submarine cable	£ [REDACTED]	£ [REDACTED]	£ [REDACTED]	£ [REDACTED]
Land cable	£ [REDACTED]	£ [REDACTED]	£ [REDACTED]	£ [REDACTED]
Onshore substation	£ [REDACTED]	£ [REDACTED]	£ [REDACTED]	£ [REDACTED]
Connection contract costs	£ [REDACTED]	£ [REDACTED]	£ [REDACTED]	-
Total Direct and Indirect Costs	£ [REDACTED]	£ [REDACTED]	£ [REDACTED]	£ [REDACTED]
Interest during construction	£ [REDACTED]	-	£ [REDACTED]	-
Transaction costs	£ [REDACTED]	£ [REDACTED]	£ [REDACTED]	-
Total capital costs	£ [REDACTED]	£ [REDACTED]	£ [REDACTED]	£ [REDACTED]

We performed the Review Procedures set out in Appendix A on a sample of the costs incurred by the Developer, as selected by Ofgem. That sample represents 58% of the total direct and indirect costs that could be verified.

The following exceptions were noted in the results of the Review Procedures:

- The Cash Flow Schedule includes estimated amounts of £ [REDACTED] in respect of one of the contracts selected for testing by Ofgem (Visser & Smit). The estimated amounts represent payments the Developer will need to make in the future in respect of rock dumping costs. As the estimated amounts of £ [REDACTED] are not yet subject to contract and variation orders, and therefore purchase invoices, these amounts have not been agreed to purchase invoices, accounting ledgers or the Developer's bank statements.

⁴ The sample of costs selected for testing by Ofgem relates to four contracts: Balfour Beatty Utility Solutions ("BBUS"), Bladt Industries A/S ("Bladt"), Prysmian Powerlink Sri ("Prysmian") and Visser & Smit Marine Contracting ("Visser & Smit").

⁵ We understand that the SCADA equipment is part of the offshore substation.

- The Cash Flow Schedule includes accrued amounts of £ [REDACTED] in respect of the four contracts selected for testing by Ofgem which, although agreed to contract or variation orders, have not been invoiced as at 13 March 2012⁶ and have not yet therefore been agreed to purchase invoices, accounting ledgers or the Developer's bank statements.

In addition, in undertaking the Review Procedures we noted the following:

- The Cash Flow Schedule includes an amount of £ [REDACTED] that relates to the Prysmian contract⁷. As this amount relates to both land and submarine cable, the Developer has split the costs between 'submarine cable' (£ [REDACTED]) and 'land cable' (£ [REDACTED]) based upon the respective lengths of each cable.
- The Cash Flow Schedule includes a foreign exchange hedging loss of £ [REDACTED]⁸. The amount of £ [REDACTED] represents an allocation of total net hedging losses incurred by the Developer in respect of hedging contracts entered into between 2009 and 2011 relating to the Walney 1 and the Walney 2 projects. The Developer has allocated a proportion of total net hedging losses in respect of Euro to Sterling hedging contracts entered into between 2009 and 2011, and a proportion of total net hedging losses in respect of Danish Kroner (DKK) to Sterling hedging contracts entered into between 2010 and 2011. We understand however that whilst the Developer incurred net hedging losses in respect of DKK to Sterling contracts in 2009, a proportion of these losses is not included in the Cash Flow Schedule. We are informed that this is because the majority of costs incurred in DKK in 2009 related to the Walney 1 Wind Farm Assets and Walney 2 Wind Farm Assets.
- The Cash Flow Schedule includes an amount of £ [REDACTED] in respect of the Developer's own staff costs. We understand that the amount of £ [REDACTED]⁹ is the cost of time spent by the Developer's staff in relation to:
 - The design and installation of the Walney 2 Transmission Assets.
 - Project managing the construction of the Walney 2 Wind Farm Assets and the Walney 2 Transmission Assets.
 - The ongoing transfer of the Walney 2 Transmission Assets to an Offshore Transmission Operator.

Furthermore, we understand that included within the total amount of £ [REDACTED] is an amount of £ [REDACTED] in respect of profit margin charged on all staff costs recorded in 2012. We are informed that the profit margin was charged to reflect the external market rate of the Developer's staff.

- The total value of the Walney 2 Transmission Assets per the Cash Flow Schedule, excluding financing costs and transaction costs has increased by £ [REDACTED] in comparison to the total value per the FTTIM. We understand that the main reason for this increase is additional variation orders agreed in respect of the installation of the submarine cable between the date of the FTTIM and the Cash Flow Schedule.

Of the total direct and indirect costs included in the Cash Flow Schedule provided by the Developer, £ [REDACTED] (£ [REDACTED] + £ [REDACTED]), or [REDACTED] % is represented by estimated

⁶ The final day of our visit to the Developer's premises.

⁷ The amount of £ [REDACTED] relates to the supply of land and submarine cable only. The total value of the Prysmian contract is £ [REDACTED] (£ [REDACTED] + £ [REDACTED]) as set out at section 2.3.2 which includes a further amount of £ [REDACTED] that relates to the installation of the submarine cable.

⁸ An analysis of the foreign exchange hedging loss of £ [REDACTED], allocated by asset category is set out at section 2.5.

⁹ An analysis of the amount of £ [REDACTED] and the basis used by the Developer to allocate a proportion of project management costs to the Walney 2 Transmission Assets is set out at sections 2.4.2 and 2.2.2 respectively

amounts and accrued amounts as at 31 January 2012 respectively; these amounts are expected to be paid once the contractors have submitted their final statements of account.

2. Review procedures

2.1 Introduction

In order to substantiate the costs included in the Cash Flow Schedule we have performed the Review Procedures detailed in Appendix A in relation to a sample of cost items selected by Ofgem.

This section of the report contains:

- ▶ An overview of the way in which the Developer has prepared the Cash Flow Schedule from its underlying accounting systems.
- ▶ The results of the Review Procedures in relation to:
 - ▶ Directly incurred costs: Costs incurred by the Developer in relation to third party suppliers which were incurred in the construction of the Walney 2 Transmission Assets.
 - ▶ Indirectly incurred costs: Project management costs incurred by the Developer, a proportion of which has been allocated to the Walney 2 Transmission Assets in the Cash Flow Schedule.

2.2 Preparation of the final Cash Flow Schedule

2.2.1 Accounting records

The Cash Flow Schedule was prepared by the Developer's project accountant based upon the accounting records of Walney (UK) Windfarms Offshore Limited.

The main components of the process for compiling the final Cash Flow Schedule were:

- ▶ The Developer and contractors entered into contracts for the provision of construction work.
- ▶ A separate general ledger account code structure was set up in SAP¹⁰ to record the costs of:
 - ▶ Constructing the Walney 2 Transmission Assets.
 - ▶ Constructing the Walney 2 Wind Farm Assets.
 - ▶ Project managing the Walney 2 Transmission Assets and the Walney 2 Wind Farm Assets.
- ▶ A purchase order for the full value of each contract/variation order was created within SAP.
- ▶ The contractor periodically issued applications for payment based on contract milestones, which were approved by the project engineer and project manager, prior to an invoice being issued by the contractor.
- ▶ Invoices were automatically matched against the relevant purchase order, coded to the relevant SAP codes and paid.
- ▶ Staff costs were posted in SAP on a monthly basis as set out in section 2.4.2.

¹⁰ The DONG group maintains its accounting records in a system called SAP.

- ▶ Accruals were calculated each quarter using a SAP report which showed the total value of purchase orders created less invoices allocated against the purchase orders at that date, effectively calculating costs which were committed to, but not invoiced. The report was sense checked and further amended for amounts not subject to purchase orders and accruals relating to indirectly incurred costs.
- ▶ Each quarter, a report was generated from SAP which showed actual costs compared to budget for the whole of the Walney 2 Transmission Assets. This report was discussed and agreed with lead engineers before being presented to the project manager for approval.

The accounting records maintained in SAP explicitly separate amounts relating to the Walney 2 Transmission Assets and the Walney 2 Wind Farm Assets via the general ledger account code structure. However, certain costs were allocated between the Walney 2 Transmission Assets and the Walney 2 Wind Farm Assets as set out below.

2.2.2 Allocation of costs

Certain costs in the Cash Flow Schedule have been allocated between the Walney 2 Transmission Assets and the Walney 2 Wind Farm Assets by the Developer. This allocation has been performed on the following basis:

- ▶ The Developer has allocated █% of landowner and compensation costs to the Walney 2 Transmission Assets based on management estimate. We understand that the majority of such costs relate to the cost of leasing land in respect of the construction of onshore assets.
- ▶ The Developer has allocated █% of onshore site costs to the Walney 2 Transmission Assets based on an estimate of the number of its own staff who used the onshore site facilities. We are informed that the majority of the Developer's staff who used the onshore site facilities during the construction of the Walney 2 project coded their time to the Walney 2 Wind Farm Assets. We understand that onsite site costs relate to costs such as legal, travel, operational and legislative (e.g. health and safety) costs.
- ▶ The Developer has allocated █% of insurance costs to the Walney 2 Transmission Assets using a calculation based on the proportion of the total estimated costs of the Walney 2 Transmission Assets in comparison to the total estimated costs of both the Walney 2 Transmission Assets and the Walney 2 Wind Farm Assets¹¹.
- ▶ The Developer has allocated █% of the supply and installation costs in respect of the foundations for the wind turbine generators and offshore substation to the Walney 2 Transmission Assets. We understand that the allocation is based on the number of offshore foundations as a proportion of total number of foundations.
- ▶ The Developer has allocated █% of transport costs incurred between the start of construction and August 2011 and █% of transport costs incurred between September 2011 and January 2012 to the Walney 2 Transmission Assets. This allocation is based on management estimate. We understand that from August 2011 the majority of transport costs relate to transporting employees between the Cumbrian coast and the Walney 2 Wind Farm Assets in respect of the commissioning of the Walney 2 Wind Farm Assets.
- ▶ Project management costs have been allocated to the Walney 2 Transmission Assets using a proportion of █% of the total project management costs incurred by the Developer in respect of the entire Walney 2 project. In January 2012, the Developer performed a review of all staff costs charged to SAP relating to the Walney 2 project and

¹¹ █% is calculated as the total value of direct and indirect costs relating to the Walney 2 Transmission Assets (£ █ million) as a percentage of the total cost of the Walney 2 Transmission Assets and Walney 2 Wind Farm Assets (£ █ million).

as part of the review costs were analysed between transmission, generation and indirect costs. We have reviewed the analysis prepared by the Developer and note that costs described as relating to the Walney 2 Transmission Assets represented 29.2% of the total value.

2.3 Directly incurred costs

2.3.1 Work performed

The sample of directly incurred costs selected by Ofgem in relation to the Walney 2 Transmission Assets is set out in section 2.3.2. below.

The work performed in relation to these costs is set out in steps 1 to 6 of section 2 of the Review Procedures set out in Appendix A.

2.3.2 Results

The results of the Review Procedures are summarised below and set out in detail at Appendix C to Appendix F.

Contractor	Total per Cash Flow Schedule	Estimated amounts	Total per the Cash Flow Schedule excluding estimated amounts ¹²	Accrued amounts	Total value per the Cash Flow Schedule excluding estimated and accrued amounts ¹³
BBUS	£ [REDACTED]	-	£ [REDACTED]	£ [REDACTED]	£ [REDACTED]
Bladt	£ [REDACTED]	-	£ [REDACTED]	£ [REDACTED]	£ [REDACTED]
Prysmian	£ [REDACTED]	-	£ [REDACTED]	£ [REDACTED]	£ [REDACTED]
Visser & Smit	£ [REDACTED]	£ [REDACTED]	£ [REDACTED]	£ [REDACTED]	£ [REDACTED]
Total	£ [REDACTED]	£ [REDACTED]	£ [REDACTED]	£ [REDACTED]	£ [REDACTED]

The following exceptions were noted in the results of the Review Procedures:

- The Cash Flow Schedule includes estimated amounts of £ [REDACTED] in respect of one of the contracts selected for testing by Ofgem (Visser & Smit). The estimated amounts represent payments the Developer will need to make in the future in respect of rock dumping costs. As the estimated amounts of £ [REDACTED] are not yet subject to contract and variation orders, and therefore purchase invoices, these amounts have not been agreed to purchase invoices, accounting ledgers or the Developer's bank statements.
- The Cash Flow Schedule includes accrued amounts of £ [REDACTED] in respect of the four contracts selected for testing by Ofgem which, although agreed to contract or variation orders, have not been invoiced as at 13 March 2012¹⁴ and have not yet therefore been agreed to purchase invoices, accounting ledgers or the Developer's bank statements.

In addition, in undertaking the Review Procedures we noted the following:

- The Cash Flow Schedule includes an amount of £ [REDACTED] that relates to the Prysmian contract¹⁵. As this amount relates to both land and submarine cable, the Developer has

¹² All amounts agreed to contracts or variation orders.

¹³ All amounts agreed to purchase invoices, accounting ledgers and the Developer's bank statements.

¹⁴ The final day of our visit to the Developer's premises.

¹⁵ The amount of £ [REDACTED] relates to the supply of land and submarine cable only. The total value of the Prysmian contract is £ [REDACTED] (£ [REDACTED] + £ [REDACTED]) as set out at section 2.3.2 which includes a further amount of £ [REDACTED] that relates to the installation of the submarine cable.

split the costs between 'submarine cable' (£ [REDACTED]) and 'land cable' (£ [REDACTED]) based upon the respective lengths of each cable.

- ▶ The Cash Flow Schedule includes a foreign exchange hedging loss of £ [REDACTED]¹⁶. The amount of £ [REDACTED] represents an allocation of total net hedging losses incurred by the Developer in respect of hedging contracts entered into between 2009 and 2011 relating to the Walney 1 and the Walney 2 projects. The Developer has allocated a proportion of total net hedging losses in respect of Euro to Sterling hedging contracts entered into between 2009 and 2011, and a proportion of total net hedging losses in respect of Danish Kroner (DKK) to Sterling hedging contracts entered into between 2010 and 2011. We understand however that whilst the Developer incurred net hedging losses in respect of DKK to Sterling contracts in 2009, a proportion of these losses is not included in the Cash Flow Schedule. We are informed that this is because the majority of costs incurred in DKK in 2009 related to the Walney 1 Wind Farm Assets and Walney 2 Wind Farm Assets.

2.4 Indirectly incurred costs

2.4.1 Work performed

The sample selected by Ofgem did not include any indirectly incurred costs in relation to the Walney 2 Transmission Assets. However, we discussed the basis of inclusion of indirectly incurred costs with the Developer.

2.4.2 Results

The Cash Flow Schedule includes an amount of £ [REDACTED] in respect of the cost of time spent by the Developer's staff working on the Walney 2 Transmission Assets. We understand that the time spent by the Developer's staff related to:

- ▶ The design and installation of the Walney 2 Transmission Assets.
- ▶ Project managing the construction of the Walney 2 Wind Farm Assets and the Walney 2 Transmission Assets.
- ▶ The ongoing transfer of the Walney 2 Transmission Assets to an Offshore Transmission Operator.

We understand that the time spent by the Developer's staff working on the Walney 2 Transmission Assets and Walney 2 Wind Farm Assets was recorded against specific project codes created within SAP. The project codes created by the Developer include codes where costs relate:

- ▶ Directly to the Walney 2 Transmission Assets: these costs are allocated in full to the Walney 2 Transmission Assets within the Cash Flow Schedule.
- ▶ Directly to the Walney 2 Wind Farm Assets: these costs are not allocated to the Walney 2 Transmission Assets.
- ▶ To project management in respect of both the Walney 2 Transmission Assets and the Walney 2 Wind Farm Assets. The Developer has allocated [REDACTED] % of these costs to the Walney 2 Transmission Assets on the basis set out in section 2.2.2.

The staff costs within the project codes were built up as follows:

- ▶ For staff time recorded in SAP prior to 2012:

¹⁶ An analysis of the foreign exchange hedging loss of £ [REDACTED], allocated by asset category is set out at section 2.5.

- ▶ The initial staff cost was calculated on the basis of hours multiplied by a predetermined rate. We understand that the initial rate covers wage related costs (e.g. salary, pension, holiday etc.).
- ▶ The initial staff cost was adjusted by the Developer on a monthly basis to account for production and non-production overhead costs. (e.g. Managerial costs, HR, IT, marketing etc.). We are informed that the adjustment was calculated by the Developer as [REDACTED] % of initial staff costs.
- ▶ For staff time recorded in SAP in 2012:
 - ▶ The initial staff cost was calculated by the Developer on the basis of hours multiplied by a predetermined rate. We understand that the initial rate covers wage related costs (e.g. salary, pension, holiday etc.).
 - ▶ The initial staff cost was adjusted by the Developer on a monthly basis to account for both production and non-production overhead costs (e.g. Managerial costs, HR, IT, marketing etc.) and in respect of a profit margin.
 - ▶ We are informed that the adjustment in respect of the production and non-production overhead costs was [REDACTED] % of initial staff costs, and the adjustment in respect of profit margin was [REDACTED] % of initial staff costs. We understand that the Developer has undertaken an exercise to update staff costs to reflect the external market rate of its own staff time recorded in 2012.

An analysis of the total internal staff costs allocated to the Walney 2 Transmission Assets is set out below:

Internal staff costs relating to:	Amount recorded in SAP	Amount accrued ¹⁷	Total amount of staff costs	Percentage allocated to the Walney 2 Transmission Assets	Amount included within the Cash Flow Schedule
Design and installation of the Walney 2 Transmission Assets: the time spent by the Developer's staff that is coded directly to the Walney 2 Transmission Assets.	£ [REDACTED]	£ [REDACTED]	£ [REDACTED]	[REDACTED] %	£ [REDACTED]
Project management: the time spent by the Developer's staff that is coded to project management codes.	£ [REDACTED]	£ [REDACTED]	£ [REDACTED]	[REDACTED] %	£ [REDACTED]
Total indirect costs included within total direct and indirect costs					£ [REDACTED]
Ongoing transfer of the Walney 2 Transmission Assets to an Offshore Transmission Operator: the time spent by the Developer's staff that is coded directly to the Walney 2 Transmission Assets.	£ [REDACTED]	£ [REDACTED]	£ [REDACTED]	[REDACTED] %	£ [REDACTED]
Total indirect costs included within the Cash Flow Schedule					£ [REDACTED]

2.5 Hedging losses

The Cash Flow Schedule includes foreign exchange hedging losses of £ [REDACTED]. The hedging losses represents an allocation of the total net hedging gains and losses incurred by the Developer in relation to Euro to Sterling and DKK to Sterling hedging contracts entered into between 2009 and 2011.

¹⁷ The Developer has accrued for the cost of time it expects staff to spend completing the Walney 2 project.

We are informed that hedging contracts were entered into in respect of Walney (UK) Offshore Wind Farms Limited, the company that initially owned both the Walney 1 project and the Walney 2 project and therefore the hedging contracts covered forecast contract commitments in respect of both the Walney 1 project and the Walney 2 project. As the hedging contracts related to both the Walney 1 project and the Walney 2 project the Developer is unable to allocate foreign exchange gains and losses on individual hedging contracts to specific Walney 2 contracts.

A summary of the total hedging gains and losses in respect of Walney 1 and Walney 2 ("total hedging gains and losses") between 2009 to 2011 and the amount allocated to the Walney 2 Transmission Assets is set out below:

		Total hedging (gains) / losses (DKK) ¹⁸	Total hedging (gains) / losses (£)	Hedging (gains) / losses allocated to the Walney 2 Transmission Assets (£)
2009	Euro: Sterling	DKK [REDACTED]	£ [REDACTED]	£ [REDACTED]
2009	DKK: Sterling	DKK [REDACTED]	£ [REDACTED]	-
2009	Total	DKK [REDACTED]	£ [REDACTED]	
2010 and 2011	Euro: Sterling	DKK [REDACTED]	£ [REDACTED]	(£ [REDACTED])
2010 and 2011	DKK: Sterling	DKK [REDACTED]	£ [REDACTED]	(£ [REDACTED]) ¹⁹
2010 and 2011	NOK: Sterling	DKK [REDACTED]	£ [REDACTED]	-
2010 and 2011	Total	DKK [REDACTED]	£ [REDACTED]	
Total hedging gains/losses allocated to the Walney 2 Transmission Assets				£ [REDACTED]

The Developer has provided us with spreadsheet information supporting the calculation of the total hedging gains and losses. The spreadsheet information includes details of the individual hedging contracts entered into by the Developer. We have not reviewed source documentation for the hedging contracts as part of the Review Procedures.

In summary the approach adopted by the Developer is as follows:

Hedging contracts entered into in 2009

- ▶ The Developer identified all hedging contracts entered into in respect of Walney 1 and Walney 2 and calculated a total net hedging loss of DKK [REDACTED] million (equivalent to £ [REDACTED] million).
- ▶ The total net hedging losses were divided between Euro to Sterling hedges (DKK [REDACTED] million) and DKK to Sterling hedges (DKK [REDACTED] million).
- ▶ In order to allocate the total Euro to Sterling net hedging losses of DKK [REDACTED] million (equivalent to £ [REDACTED] million) to the Walney 2 Transmission Assets the Developer identified the total value of forecast contract commitments from 2009 relating to Walney 1 and Walney 2 which were denominated in Euros (€ [REDACTED] million). Of the forecast contract commitments the Developer has identified € [REDACTED] million of contracts which are attributable to the Walney 2 Transmission Assets ([REDACTED]%).

¹⁸ We understand that all gains and losses relating to hedging contracts are denominated in DONG's central treasury system in DKK.

¹⁹ Although the total gains and loss relating to DKK to Sterling hedging contracts entered into in 2010 and 2011 amount to a net loss of £ [REDACTED], we understand the actual amount allocated to the Walney 2 Transmission Assets is a gain of £ [REDACTED] as the Developer has allocated the gains or losses on a contract by contract basis.

- ▶ Applying the percentage of [REDACTED] % to the Euro to Sterling net hedging losses of £ [REDACTED] million results in an allocation of £ [REDACTED] to the Walney 2 Transmission Assets.
- ▶ The Developer has not allocated any of the total net hedging loss of DKK [REDACTED] million (equivalent to £ [REDACTED] million) relating to DKK to Sterling hedges to the Walney 2 Transmission Assets. We are informed that the Developer has not allocated any of the total net hedging losses of DKK [REDACTED] million to the Walney 2 Transmission Assets as the majority of costs incurred in DKK in 2009 related to the Walney 1 Wind Farm Assets and Walney 2 Wind Farm Assets.

Hedging contracts entered into in 2010 and 2011

- ▶ The Developer identified all hedging contracts entered into in respect of Walney 1 and Walney 2 and calculated a total net hedging loss of DKK [REDACTED] million (equivalent to £ [REDACTED] million).
- ▶ The total DKK gains and losses were divided between Euro to Sterling hedges (a gain of DKK [REDACTED] million), DKK to Sterling hedges (a loss of DKK [REDACTED] million) and NOK to Sterling hedges (a gain of DKK [REDACTED] million)²⁰.
- ▶ The Developer allocated a proportion of the gain or loss for each hedging contract to the Walney 2 Transmission Assets by:
 - ▶ Identifying all forecast contract commitments relating to Walney 1 and Walney 2 that were recorded in the SAP system at the date the hedging contract was entered into and had an expected payment date equal to the maturity date of the hedging contract ("the relevant forecast contract commitments").
 - ▶ Calculating the value of the relevant forecast contract commitments that related to the Walney 2 Transmission Assets as a percentage of all relevant forecast contract commitments that related to Walney 1 and Walney 2.
 - ▶ Applying the percentage to the gain or loss of the hedging contract.
- ▶ In allocating a proportion of each hedging contract to the Walney 2 Transmission Assets the Developer has allocated [REDACTED] % of the DKK 7.3 million gain relating to Euro to Sterling Hedges equivalent to £ [REDACTED] and [REDACTED] % of the DKK [REDACTED] million loss equivalent to a gain £ [REDACTED].

We note that three of the sample contracts which were subject to the Review Procedures were denominated in Euros and that, in total, these three contracts had a total value of € [REDACTED] (equivalent to £ [REDACTED] million), which represents [REDACTED] % of the total direct and indirect costs of the Walney 2 Transmission Assets.

The information provided by the Developer shows that the Euro to Sterling hedging contracts were entered into between September 2009 and July 2011 with maturity dates ranging from January 2010 to December 2011. Payments made under the sample of contracts subject to the Review Procedures took place from mid-2009 to the date of the Cash Flow Schedule. The periods covered by the hedging contracts are therefore consistent with the timing of payments made under the contracts subject to the Review Procedures.

We have reviewed the movements in the exchange rate in the period covered by the hedging contracts for reasonableness:

For the Euro to Sterling hedging contracts entered into in 2009:

²⁰ We are informed that the NOK to Sterling hedging contracts do not relate to the Walney 2 Transmission Assets.

- The Euro to Sterling average month end exchange rate at the dates the hedging contracts were entered into (September 2009 to November 2009) was approximately € [REDACTED]: £1.
- Over the course of 2010 and 2011 the Euro weakened against Sterling, the average month end exchange rate for 2010 was € [REDACTED]: £1.

Accordingly the Sterling equivalent value of the Euro contracts would have decreased and therefore we would expect that the hedging contracts would result in losses over the period.

For the Euro to Sterling hedging contracts entered into in 2010 and 2011:

- The Euro to Sterling average month end exchange rate at the dates the hedging contracts were entered into (January 2010 to June 2011) was approximately € [REDACTED]: £1.
- Over the course of 2010 and 2011 the Euro strengthened against Sterling, the average month end exchange rate for 2010 and 2011 was € [REDACTED]: £1.

Accordingly the Sterling equivalent value of the Euro contracts would have marginally increased and therefore we would expect that the hedging contracts would result in gains over the period.

For the DKK to Sterling hedging contracts entered into in 2010 and 2011:

- The DKK to Sterling average month end exchange rate at the dates the hedging contracts were entered into (January 2010 to July 2011) was approximately DKK [REDACTED]: £1.
- Over the course of 2010 and 2011 the DKK weakened against Sterling, the average month end exchange rate for 2010 and 2011 was DKK [REDACTED]: £1.

Accordingly the Sterling equivalent value of the DKK contracts would have decreased and therefore we would expect that the hedging contracts would result in overall losses over the period.

In order to determine how the total net hedging loss of £ [REDACTED] should be allocated across the individual asset categories in the Cash Flow Schedule, the Developer performed a review of all purchase orders relating to the Walney 2 Transmission Assets posted in foreign currency in 2009 (the date hedging contracts were first entered into). As part of the review purchase orders in foreign currency were analysed between offshore substation, submarine cable and land cable²¹. On the basis of this review the Developer has allocated the foreign exchange hedging loss to the following asset categories:

Asset category	Basis of allocation	Amount allocated
Offshore substation	[REDACTED] %	£ [REDACTED]
Submarine cable	[REDACTED] %	£ [REDACTED]
Land cable	[REDACTED] %	£ [REDACTED]
Total		£ [REDACTED]

²¹ Contracts in foreign currency relate to as offshore substation, submarine cable and land cable only.

3. Variance analysis

3.1 Introduction

The total project value as set out on the Cash Flow Schedule is £116.3 million including financing costs and transaction costs. Changes in the total project value including financing costs over time can be summarised as follows:

- ▶ Per the PIM: £104.4 million (including financing costs of £11.2 million).
- ▶ Per the FTTIM: £105.0 million (including financing costs of £14.8 million).
- ▶ Per the Cash Flow Schedule: £116.3 million (including financing costs of £8.1 million and transaction costs of £1.6 million).

This section contains the results of the Review Procedures described in Appendix A.

3.2 Reconciliation between the PIM and the FTTIM

The reconciliation between the PIM and the FTTIM can be summarised as follows:

	£m
Estimated Transfer Value per the PIM	104.4
Add:	
Increase in financing costs	3.6
Less:	
Decrease in capital costs due to revision of contract prices	(3.0)
Estimated Transfer Value per the FTTIM	105.0

As stated in section 1.3.1, the calculation of financing costs has been subject to a separate review by Ofgem and is not within the scope of the Review Procedures.

3.3 Comparison of project value per the FTTIM to the Cash Flow Schedule

The table below sets out a comparison of the total costs included in the FTTIM and the final Cash Flow Schedule:

Cost category	Total cost (FTTIM)	Total cost	
		(Cash Flow Schedule)	Variance
Project common costs	£ [REDACTED]	£ [REDACTED]	£([REDACTED])
Offshore Substation	£ [REDACTED]	£ [REDACTED]	£ [REDACTED]
Submarine cable	£ [REDACTED]	£ [REDACTED]	£ [REDACTED]
Land cable	£ [REDACTED]	£ [REDACTED]	£ [REDACTED]
Onshore substation	£ [REDACTED]	£ [REDACTED]	£ [REDACTED]
Connection contract costs	-	£ [REDACTED]	£ [REDACTED]
Contingency	£ [REDACTED]	-	£([REDACTED])
Total direct and indirect costs	£ [REDACTED]	£ [REDACTED]	£ [REDACTED]
Interest during construction	£ [REDACTED]	£ [REDACTED]	£([REDACTED])
Transaction costs	-	£ [REDACTED]	£ [REDACTED]
Total project value	£ [REDACTED]	£ [REDACTED]	£ [REDACTED]

The Developer has attributed the increase in direct and indirect costs between the FTTIM and the Cash Flow Schedule to the following reasons:

Total direct and indirect costs per FTTIM	£ [REDACTED]
Increase in project management, design and installation costs	£ [REDACTED]
Release of contingency included within the FTTIM	£([REDACTED])
Foreign currency hedging loss	£ [REDACTED]
Variation orders and estimated amounts in respect of the installation of the submarine cable	£ [REDACTED]
Variation orders and estimated amounts in respect of revisions to contract scope	£ [REDACTED]
Total direct and indirect costs per FTTIM per Cash Flow Schedule	£ [REDACTED]

Further details of each variance are set out below:

Increase in project management, design and installation costs

The Developer included an amount of £ [REDACTED] in the FTTIM in respect of the estimated cost of its own staff time:

- ▶ Project managing the Walney 2 Transmission Assets.
- ▶ Designing and installing the Walney 2 Transmission Assets.

We understand that between the date of the FTTIM and the Cash Flow Schedule, the Developer subcontracted some of the work that was initially estimated to be completed by the Developer's staff to third party consultants²². The Developer has included an amount of £ [REDACTED] in the Cash Flow Schedule in respect of the actual cost of the work performed by its own staff and external consultants, resulting in a variance of £ [REDACTED].

We are informed that the reason for the increase is due to a higher number of hours coded to the Walney 2 project, as set out below:

	Total cost	Total number of hours	Average rate ²³
FTTIM	£ [REDACTED]	[REDACTED]	£ [REDACTED]
Cash Flow Schedule	£ [REDACTED]	[REDACTED]	£ [REDACTED]

The Developer has attributed the increase in the number of hours related to project management to the following:

- ▶ Engaging with [REDACTED] separate contractors instead of one principal contractor.
- ▶ Increased scope in relation to the offshore substation, the onshore substation, the land cable and delays in the installation of the submarine cable.
- ▶ Underestimating the amount of hours required to complete the Walney 2 project.
- ▶ Time spent preparing documentation required to be retained as part of the ongoing transfer of the Walney 2 Transmission Assets to an Offshore Transmission Operator.

Release of contingency included within the FTTIM

The Developer included a provision for contingency within the FTTIM which we understand was based on management estimate. The Developer has now released the provision for contingency as the construction of the Walney 2 Transmission Assets is substantially completed, resulting in a variance of £ [REDACTED].

We understand that the Developer has included specific estimated amounts within the Cash Flow Schedule in respect of future payments that it believes it will need to make in respect of the Walney 2 Transmission Assets (see below).

Foreign currency hedging loss

As set out in section 2.5 the Developer has included an amount of £ [REDACTED] in the Cash Flow Schedule in respect of foreign exchange hedging losses on Euro to Sterling and DKK to Sterling hedging contracts. As the Developer did not predict the hedging gain or loss in September 2009, there was no corresponding amount included within the FTTIM, resulting in a variance of £ [REDACTED].

²² The Developer has coded the cost of external consultants (relating to project management and design and installation of the Walney 2 Transmission Assets) to separate codes within SAP and is therefore able to separately identify the cost of the external consultants from other contractors engaged to the Walney 2 Transmission Assets.

²³ The average rate has been calculated as the total cost divided by the number of hours recorded in SAP.

Variation orders and estimated amount in respect of the installation of the submarine cable

The Developer has included an amount of £ [REDACTED] within the Cash Flow Schedule in respect of the installation of the submarine cable. The Developer included an amount of £ [REDACTED] within the FTTIM resulting in a variance of £ [REDACTED].

As a result of delays and events that the Developer was not aware of at the date of the FTTIM, it has entered into several variation orders with Prysmian, Visser & Smit and other contractor, Nexans. The Developer has also included estimated amounts within the Cash Flow Schedule in respect of future payments relating to the installation of the submarine cable. An analysis of the largest variation orders and estimated amounts is set out below:

Delays attributable to weather	£ [REDACTED]
Additional time and trenching equipment required due to soil conditions	£ [REDACTED]
Additional time spent as a result of a slower speed of installation due to soil conditions	£ [REDACTED]
Use of jetting equipment required to bury the submarine cable	£ [REDACTED]
Additional surveys required	£ [REDACTED]
Estimated amounts (including £ [REDACTED] relating to Visser & Smit)	£ [REDACTED]
Other net variation orders	£ [REDACTED]
Total	£ [REDACTED]

Variation orders and estimated amounts in respect of revisions to contract scope

We are informed the Developer has entered into variation orders due to a revision to the scope in initial contracts and has also included estimated amounts in respect of future payments it believes it will make in respect of the Walney 2 Transmission Assets.

An analysis of the largest variation orders and estimated amounts is set out below:

BBUS: Additional drilling costs in relation to drilling through sea defences	£ [REDACTED]
Powerteam: Onshore substation concrete sealing	£ [REDACTED]
Bladt: Offshore substation structure change	£ [REDACTED]
ENW: Onshore substation additional feeder bay	£ [REDACTED]
Other net variation orders	£ [REDACTED]
Estimated amounts	£ [REDACTED]
Total	£ [REDACTED]

The Developer has incorporated the additional variation orders and estimated amounts as at the date of the Cash Flow Schedule resulting in a variance of £ [REDACTED].

Interest during construction

As stated in section 1.3.1, the calculation of financing costs is not within the scope of the Review Procedures.

Transaction costs

As stated in section 1.3.1, the calculation of transaction costs is not within the scope of the Review Procedures.

4. Project value

4.1 Total project value

The total value of the Walney 2 Transmission Assets calculated by the Developer is £ [REDACTED]. The total project value for the Walney 2 Transmission Assets is made up of the following costs:

Asset category	Total cost
Project common costs	£ [REDACTED]
Offshore substation	£ [REDACTED]
Submarine cable	£ [REDACTED]
Land cable	£ [REDACTED]
Onshore substation	£ [REDACTED]
Connection contract costs	£ [REDACTED]
Total Direct and Indirect Costs	£ [REDACTED]
Interest during construction	£ [REDACTED]
Transaction costs	£ [REDACTED]
Total Project Value	£ [REDACTED]

4.2 Payments made by the Developer

Total direct and indirect costs comprise amounts which have been invoiced and amounts yet to be invoiced and paid. Excluding financing costs and transaction costs these amounts can be summarised as follows:

	Settled amounts	Estimated amounts	Accrued amounts	Total project value
Direct costs (section 2.3)	£ [REDACTED]	£ [REDACTED]	£ [REDACTED]	£ [REDACTED]
Indirect costs (section 2.4)	£ [REDACTED]	-	£ [REDACTED] ²⁴	£ [REDACTED]
Total direct and indirect costs	£ [REDACTED]	£ [REDACTED]	£ [REDACTED]	£ [REDACTED]

The above table shows that of the total direct and indirect costs included in the Cash Flow Schedule provided by the Developer, £ [REDACTED] (£ [REDACTED] + £ [REDACTED]), or [REDACTED] % is represented by estimated amounts and accrued amounts as at 31 January 2012 respectively; these amounts are expected to be paid once the contractors have submitted their final statements of account.

²⁴ Accrued indirect costs are calculated as £ [REDACTED] (section 2.4.2) + (£ [REDACTED] (section 2.4.2) x [REDACTED] %) = £ [REDACTED].

An analysis of the estimated amounts included within the Cash Flow Schedule is set out below:

Contractor	Relating to	Estimated amounts
Visser & Smit	Rock dumping costs (Appendix F)	£ [REDACTED]
HBC	Diving costs	£ [REDACTED]
Fugro	Seabed analysis costs	£ [REDACTED]
Powerteam	Additional onshore substation costs	£ [REDACTED]
Various	Site transfer vessels	£ [REDACTED]
Other amounts		£ [REDACTED]
Total		£ [REDACTED]

Appendix A Review Procedures

1. Background Work

1. Ascertain the processes and policies undertaken by the developer for making payments to suppliers for all direct costs incurred for the project.
2. Ascertain the processes and policies and metrics used by the developer by which shared costs (e.g. overheads and other indirect costs which may be split between transmission and generation) have been allocated to the project.

2. Review Work – Directly Incurred Costs

1. For a selected sample contract trace expenditure from the cash flow schedule to the relevant contract or other source record.
2. From the contract trace to an invoice(s) or journal.
3. From the transaction selected in (2) trace through the purchasing systems (from Purchase Day Book or equivalent to Purchase ledger or equivalent)
4. For same transaction trace through to the payment system (from the purchase ledger through to the general / nominal ledger). Confirmation includes verification of the payment summary with the supplier and ensuring calculations are arithmetically correct and free from error.
5. For the same transaction trace the payments made from the general ledger through such that the payment can be agreed to a debit entry on the bank account (debit entry being from the companies perspective and for avoidance of doubt represents a cash expense i.e. cash outlay from the business).
6. Prepare a report detailing the contractual payments made or due their cause (main contract or variations or claims, and the extent to which the contract provide warranties or ongoing support and the work undertaken with an appendix for copies of the support documentation on the selected contract and allocation.
7. Compare total costs at Project Close with Project Value at August 2009. Obtain supporting information and explanations for variances between the two dates.

3. Review Work – Indirectly Incurred Costs

1. For a sample of transactions trace from the asset schedule to journal entries made on the accounting system
2. Confirm the amount allocated has been determined as prescribed in the cost allocation methodology the Developer has indicated using

appropriate metrics in respect of the allocation of such costs between transmission and generation.

3. Confirmation includes ensuring calculations are arithmetically correct and free from error.
4. Prepare a report detailing the work undertaken with an appendix for copies of the support documentation on the selected contract and allocation.
5. Compare total costs at Project Close with Project Value at August 2009. Obtain supporting information and explanations for variances between the two dates.

Appendices B, C, D, E, F redacted