ofgem e-serve

Making a positive difference
for energy consumers

Henrik Scheinemann
Dong Energy West of Duddon
Sands (UK) Limited
33rd Floor, City Point
1 Ropemaker Street
London
EC2Y 9UE

Direct Dial: 020 7901 0525
Email: Roger.Morgan@ofgem.gov.uk

Date: 15 August 2013

Charles Jordan
Scottish Power Renewables
(WODS) Limited
1 Atlantic Key
Glasgow
G2 8SP

Dear Henrik and Charles

Indicative Transfer Value for the West of Duddon Sands project (the Project) and comfort on funding

Introduction

The Electricity (Competitive Tenders for Offshore Transmission Licences) Regulations 2013 ('the Tender Regulations') provide the legal framework for the process which Ofgem runs for the grant of an offshore electricity transmission licence. Regulation 6 of the Tender Regulations sets out the requirement for the Authority in respect of the Project to calculate, based on all relevant information available to it, the economic and efficient costs which ought to be, or ought to have been, incurred in connection with the development and construction of the transmission assets. This process for calculating the economic and efficient costs includes a number of stages, starting with our confirmation of the initial transfer value, progressing to the indicative transfer value (ITV), and culminating in our determination of the final transfer value for the project.

We wrote to you on 13 December 2012, confirming that the £311m forecast of costs, which you provided to us on 21 November 2012, for the development and construction (including financing) of the Project, would be taken as the initial transfer value for the Project. This value was included in the pre-qualification (PQ) document and the preliminary information memorandum for the commencement of the PQ stage for the Project. This figure was also included in the qualification to tender (QTT) document, as we were reviewing further cost information submitted by the Project Team and undertaking our analysis of the ITV at that stage.

We have now completed the review and analysis to calculate the ITV, i.e. an estimate of the economic and efficient costs that ought to be incurred in connection with the development and construction of the transmission assets for the Project. This letter sets out:

- an overview of the work that has been undertaken to inform our calculation of the ITV;
- the activities undertaken by Ofgem and our advisers to date to review and analyse the cost information, and our position on relevant cost items, which leads to our conclusion that £296.2m is the ITV for the Project;

- comfort regarding the final transfer value you will receive once the tender process in respect of the Project is completed (subject to certain conditions); and
- the next steps in the cost assessment process.

Overview of work to inform the calculation of ITV

To inform the calculation of the ITV, we have conducted a forensic accounting investigation and a technical review based on the submission made by the Project Team. As part of this work we employed financial and technical consultants. The findings of our consultants have been shared and discussed with the Project Team.

Grant Thornton (GT), our financial consultant, undertook a forensic accounting investigation to check the accuracy and completeness of the Project's initial costs; in particular, matching proposed CAPEX costs to contract documentation. GT's findings identified a number of cost items that required additional information and explanation. The costs items in question related to: the approach to managing foreign currency; the onshore substation civils costs; how shared costs have been allocated; cost items that were not substantiated; and, a number of costs that were incorrectly included in the initial submission. The forensic investigation also identified a number of cost changes since the initial transfer value submission.

Fichtner, our technical consultant, undertook a technical review paying particular attention to the cable supply and installation costs, which had been identified as an outlier during Ofgem's high level analysis to decide the initial transfer value.

We will continue to keep under review the range of outstanding issues identified in the reports provided by our advisers as we progress the cost assessment process. Where we identify further issues, we will discuss these with the Project Team.

Ofgem's decision on allocation and efficiency of costs

We focussed our review on cost items where we and our advisors considered that additional information and evidence were required to justify the position proposed by the Project Team. These items relate to the following: foreign exchange costs; onshore substation civils costs; shared cost allocation methodology; submarine cable supply and installation costs; contingency costs; costs incorrectly included in the proposed transfer value; and cost items requiring further substantiation. Our position on each of these is set out and explained below.

(1) Foreign exchange costs (FOREX)

The cost assessment process derives a transfer value in sterling. Therefore, where developer contracts involve foreign currency, we seek to understand the developer's approach to managing currency risks and ensure that the transfer value accurately reflects the sterling position.

The cost template submitted by the Project Team included costs of approximately £200m which are payable in foreign currencies (either Euros or Danish Krone). We understand that the developer has taken out hedges against these contracts. However, for the purposes of the ITV submission, the costs reported were based on forward foreign exchange values at the time of preparing the cost template in June 2012, rather than using the contracted hedge values put in place when the currency exposure was identified. To reflect the true likely cost based on the latter, a provision was included within the cost template for the additional costs that are expected to be incurred to compensate for these exchange rate differences. This provision amounts to £11.3m. No evidence had been provided by the Project Team to support this proposed rate.

In the absence of evidence supporting the proposed £11.3m provision, we have calculated what we consider to be a more appropriate amount, based on the differences between the

The Office of Gas and Electricity Markets
9 Millbank London SW1P 3GE **Tel** 020 7901 7000 **Fax** 020 7901 7066 **www.ofgem.gov.uk**

average hedge rates for the project and spot rates reported in the ITV cost submission. Our analysis suggests that the extra provision required would need to be 3.3 per cent[1] on £160m of Euro contracts and 6.1 per cent[2] on £40m of Danish Kroner contracts. This amounts to £7.7m.

Ofgem's position for the ITV

We have included a £7.7m provision in the ITV as a more robust estimate of the likely foreign currency exposure for capex contracts by the time of determining the FTV. This is £3.6m less than the £11.3m provision for the ITV by the Project Team.

(2) Onshore substation civils costs

GT reviewed and reconciled the submitted costs with the Morrison Utility Services contract of £15.5m for onshore substation civil works and the installation of the 2.7km land cable. In parallel, Fichtner's technical assessment concluded that the civil costs are acceptable. Fichtner's analysis compared standard materials costs with those submitted in the cost template and noted that the costs for works associated with onshore substation preliminaries, site fencing and the Gas Insulated Switchgear building are higher than normally expected. Fichtner also considered the project's site clearance costs to be low.

After the review of the £15.5m civil costs, the Project Team submitted a further cost of £4.2m for additional works required under the Morrison Utility Services contract. The Project Team explained that these additional works have arisen due to both adverse weather in the Summer of 2012 and the presence of Great Crested Newts on the cable route. These issues have caused delays and have had a knock-on effect on the electrical plant design, onshore substation design and the civils contractor.

We understand that the £4.2m is an estimate which remains subject to negociation.

Ofgem's position for the ITV

We have incorporated all of the onshore substation costs submitted in the ITV based on Fichtner's advice. We have not yet assessed the efficiency of the additional £4.2m cost submitted later in the process, since the scope and final costs are still being discussed with the contractor. However, for the purposes of the ITV we have included this additional cost as the increases are related to events that appear to have been outside the control of the developer. We intend to revisit this issue to understand the final contract position before we take a view on the efficient cost for the final transfer value.

(3) Shared cost allocation methodology

Offshore projects incur costs on services during development and construction that are shared between transmission and generation. We require developers to submit details of the metrics used to split these shared costs (including the supporting methodologies) and then we review the suitability of those metrics. Where no suitable metric is supplied or can be agreed, our default position is to use the direct equipment cost of the transmission assets as a proportion of the direct equipment costs for the project as a whole.

The cost submission for the ITV included four different rates to allocate project common costs to the transmission assets, namely: resources, consultants and travel costs at 35.96 per cent; SCADA equipment at 25.88 per cent; electrical resources at 64.66 per cent; and, insurance costs at 16.40 per cent.

GT reviewed the calculations used to derive the allocation rates and concluded that the allocation rates for SCADA equipment and insurance costs were reasonable. GT queried whether the "resources, consultancy and travel costs" (allocated at 35.96 per cent) double-

[1] This is the difference between the average hedge rate of €1.178/£ and the spot rate of €1.217/£
[2] This is the difference between the average hedge rate of DKK8.531/£ and the spot rate of DKK9.052/£

The Office of Gas and Electricity Markets
9 Millbank London SW1P 3GE **Tel** 020 7901 7000 **Fax** 020 7901 7066 **www.ofgem.gov.uk**

counted elements of the electrical resources. Following further discussion, the Project Team proposed that a single metric of 35.96 per cent will be applied to both the "electrical resources" and the "resources, consultants and travel costs" categories. GT has reviewed this approach and confirmed that there is no longer a concern over double-counting; this has resulted in a reduction of £580,770 from the ITV submission[3].

GT's work confirmed that the allocation methodologies have been applied correctly, however we are concerned that those common costs allocated at 35.96 per cent are higher than an efficient level consistent with the maturity of the market and experiences accumulated through similar projects. For earlier projects (transitional tender round 1), the market was relatively immature and our view at the time, based on input from our advisors, was that project common costs would be below 15 per cent of the total transmission asset costs. Our expectation is that as the market matures and in light of experiences from projects completed we should see a reduction in common costs levels. We note that the Project is just below the 15 per cent threshold and so does not seem to be reflecting the levels of cost reduction we would have expected.

Ofgem's position for the ITV

In determining the ITV, we have accepted the submission on shared costs, but have incorporated the reduction of £580,770 from the ITV as a result of the discussions on allocation rates.

However, the developer will need to provide a more robust justification for the level of these shared costs if they are to be included in the final transfer value.

(4) Submarine cable supply and installation costs

At the initial transfer value stage in the cost assessment process, we undertook a benchmarking review and compared the Project costs with those of other transitional projects. We wrote to you to explain that the export cable supply and installation unit costs looked to be expensive relative to other transitional tender round projects.

This initial analysis considered how the cable supply and installation compared with other transitional round projects, on a £ per km basis. The supply cost of £68m equates to a unit cost of £829K/km, compared against the average cost from other comparable projects of £470K/km. The installation unit cost for the Project is £697K/km, which is higher than the average outturn cost of £440K/km.

The Project Team provided a justification for these cost levels as follows:

- Both the cable supply and installation contracts were competitively procured at a time when market demand had increased and competition amongst manufacturers and installers had not followed suit, effectively creating a 'sellers' market.

- The world-wide growth in demand for commodities, in particular copper, has resulted in an increase in export cable prices relative to earlier projects. The copper price peaked in July 2011 and the cable price was contractually linked to the high copper prices.

It is also noted that the developer has procured 1000mm^2 170kV cables whereas cables used in other transitional projects range from 300mm^2 to 800mm^2.

In terms of the cable supply costs, we have reviewed our original modelling to provide an uplift for both the increased unit cost for copper at which the cable was procured and the extra proportion of copper in the cable. This still leaves a significant gap between the cable costs submitted and our estimate based on the data we have acquired from the other transitional projects. We are also reviewing whether alternative benchmarks may explain

[3] This removal is split equally between the "project common costs" and "offshore substation" works packages

The Office of Gas and Electricity Markets
9 Millbank London SW1P 3GE **Tel** 020 7901 7000 **Fax** 020 7901 7066 **www.ofgem.gov.uk**

some of the differences, for example the use of £/MWkm rather than £/km.

In terms of the cable installation costs, we understand that the use of 1000mm^2 cables reduces the number of export cables required and therefore should result in benefit of lower installation costs. We have modelled the transmission system costs of using an alternative configuration using 3 x 630mm^2 132kV cables, to determine the benefit of the approach in this case. The Project's costs in this case still seem expensive in comparison with this alternative configuration. The Project Team has explained that the higher installation costs covered the scope for the installer to absorb a number of the key installation risks, which, in other projects, would have required additional payment by the developer through variation orders during the course of the installation. We understand that under the Project's installation contract the installer would cover installation risks arising from seabed/soil conditions (noting that additional geotechnical and geophysical surveys have already been undertaken), and that there is a contract option to reduce cable plough speeds.

To supplement our own internal analysis for this ITV stage, we asked Fichtner to examine the cable supply and installation costs and the associated contracts. They completed their analysis with their own data set, which was based on public domain data information and overall a much smaller data set compared with our own internal benchmark data. In view of their limited data set Fichtner were only able to conclude that the export cable supply costs were high, rather than an outlier. Based on their analysis of the installation costs and considering that the installation contract passed on a number of risks to the installer, Fichtner deemed that in this case the installation costs were reasonable.

Ofgem's position for the ITV

The cable supply and installation costs submitted for this ITV stage are above benchmarked costs for other projects with comparible features. The issue of whether these costs are deemed economic and efficient will largely depend on the subsequent additional costs that might be incurred as the Project progresses. For the purposes of the ITV we have included the cable supply and installation costs as submitted, based on our understanding that measures have been taken, in particular, to reduce cable installation risks for the developer.

(5) Contingency costs

The cost template submitted for the ITV included contingency provisions of £33.5m, spread across the different works packages. GT noted that these contingency provisions had not been updated since they were originally determined in June 2012, and included allowances for contingent events that had passed or are no longer expected to arise.

The Project Team agreed to revisit contingency provisions across all work packages and provided a detailed breakdown of how contingencies will be applied to work packages. Following this review the Project Team made a £7.7m reduction to the contingency provisions so that the amount proposed for the ITV is £25.8m. The major changes relative to the original submission were reductions totalling £10.6m from the offshore substation and submarine cable works packages, and the introduction of new contingency items to the submarine cable package of £2.9m.

We have sought additional clarity on how the revised contingency amount has been allocated, in particular the contingencies set aside for the export cable and project common costs. Ofgem's understanding of the justification for the comparatively higher levels of cable costs submitted is that risks have been passed through to the contractors. Accordingly, the submission of further cable costs through use of contingency would cast significant doubt on whether the premium paid to offset these risks was economic and efficient. Part of this cable contingency relates to £3.4m for rock dumping, and is in addition to an inclusion of £4.4m for rock dumping under the cable supply and installation works package. We do not consider that this contingency is justified; the actual amount included for rock dumping is more than the sum incurred by both the Walney 1 and Walney

The Office of Gas and Electricity Markets
9 Millbank London SW1P 3GE **Tel** 020 7901 7000 **Fax** 020 7901 7066 **www.ofgem.gov.uk**

2 projects, which followed a very similar route. We also note that the cable installation contract includes options to slow down plough speeds to achieve the required depth of burial, so we would expect the requirement for rock dumping to be reduced.

In reviewing the justification for the project common cost contingency, we have removed a £500K item relating to transaction related costs. These costs are treated as pass-through and therefore do not need to be included in contingency at this stage of the cost assessment process.

Ofgem's position for the ITV

We have removed the sum of £3.4m for rock dumping from the cable cost contingency as there has been insufficient justification to support this amount. In addition, we have reduced the project common cost contingency by £500K, as this related to a transaction cost that would be treated as a pass-through item if it materialised. Therefore, we have included a contingency amount of £21.9m in the ITV.

We do not expect all of this contingency provision to be used and will continue to monitor the use of contingency as construction progresses.

(6) Costs incorrectly included

GT's review identified a number of costs which they believed were incorrectly included in the proposed ITV. We discussed these matters with the Project Team and sought substantiation for these costs.

A subsequent review undertaken by the Project Team confirmed that £3.8m should be excluded from the ITV. These related to public relations costs (£1.2m), costs for offshore substation equipment that would not be transferring to the OFTO (£1m), the removal of fuel costs (£1m), an unidentified cost item for the onshore substation (£0.5m) and removal of inaccurate costs for seabed testing (£0.1m).

Ofgem's position for the ITV

We have identified £3.8m costs to be incorrectly included in the submission, and removed them from the ITV.

(7) Costs requiring substantiation

The forensic accounting review identified a number of cost items such as rock dumping, increased consultancy costs and pre-financial investment decision activities (net value of £6.1m) where GT were unable to trace supporting information. GT suggested that in the absence of further evidence these costs should be removed from the ITV. The Project Team were asked to provide supporting information to substantiate these costs.

We have discussed with the Project Team the substantiations for all of the cost items which our advisers highlighted in their review. We are satisfied that the Project Team has been able to provide the appropriate supporting evidence for these, including updated costs where appropriate. The net impact on the ITV is an increase of £0.7m.

Ofgem's position for the ITV

We note that the Project Team has provided supporting information and has substantiated these costs. We recognise that a proportion of these costs are estimates and are still under review with contractors. We intend to keep such costs under review to ensure that accurate outturn positions are reflected in the project's final transfer value.

The Office of Gas and Electricity Markets
9 Millbank London SW1P 3GE **Tel** 020 7901 7000 **Fax** 020 7901 7066 **www.ofgem.gov.uk**

Indicative transfer value for the West of Duddon Sands project

Table 1 sets out the main movements from the initial transfer value costs (which was communicated to you in December 2012) and the ITV costs following Ofgem's allocation and efficiency decisions outlined above. This table is intended as a summary rather than being a comprehensive account of the movements that have occurred during the discussions between the Project Team and Ofgem.

Table 1: Summary of cost movements

Project Cost changes	**Initial Transfer Value at PQ (Dec 12)**	**Indicative transfer value (Aug 13)**	**Change from initial transfer value to indicative transfer value**	**Rationale for movement between initial transfer value and indicative transfer value**
Project common costs	£42.1m	£40.8m	-£1.3m	Increase of: • £0.7m for the inclusion of pre financial investment decision costs. Offset by reductions of: • £0.3m in applying allocation rate of 35.96 per cent to electrical resources component of project common costs. • £0.5m for transaction costs provision. • £1.2m for the public relations and communications costs.
Offshore substation	£54.9m	£48.4m	-£6.5m	Increase of: • £0.2m for pre financial investment decision consultancy costs related to the offshore substation. Offset by reductions of: • £5.3m for removal of offshore substation contingency. • £0.1m for the removal of cost difference in the costs for seabed testing. • £1.0m for the removal of the costs for the 36kV switchgear and MV cables and terminations which will not be transferring to the OFTO. • £0.3m in applying allocation rate of 35.96 per cent to electrical resources component of offshore substation costs.
Submarine cable supply and installation	£127.9m	£121.0m	-£6.9m	Increase of: • £2.9 for cable burial contingency. Offset by reductions of: • £5.4m of submarine cable supply contingency. • £1m for removal of fuel costs for the installation of the export cable. • £3.4m for rock dumping contingency
Land cable supply and installation	£4.9m	£4.9m		
Reactive Substation	£2.2m	£2.2m		

The Office of Gas and Electricity Markets
9 Millbank London SW1P 3GE **Tel** 020 7901 7000 **Fax** 020 7901 7066 **www.ofgem.gov.uk**

Project Cost changes	Initial Transfer Value at PQ (Dec 12)	Indicative transfer value (Aug 13)	Change from initial transfer value to indicative transfer value	Rationale for movement between initial transfer value and indicative transfer value
Onshore Substation	£43.3m	£46.8m	£3.5m	Increase of: • £4.2m for additional works required under the Morrison's contract for onshore substation civil works and installation of the land cable. Offset by reduction of: • £0.5m for an unidentified item included in the onshore substation costs and no explanation given.
Connection contract costs	£4.4m	£4.4m		
Financing costs	£11.3m	£7.7m	-£3.6m	Reduction of £3.6m for revision of FOREX provision to account for foreign exchange movements.
IDC	£18m	£18m		
Transaction costs	£2m	£2m		
Total project costs (including IDC)	**£311.0m**	**£296.2m**	**-£14.8m**	

Comfort on final transfer value

Ofgem's intention at this time is to provide you with comfort on the final transfer value for the Project.

The final transfer value will be the greater of:

- the Authority's determination of the final transfer value; and
- 75 per cent of the ITV.

As set out above, our analysis at this time has determined the ITV to be £296.2 million. Based on this, we can confirm that, subject to the conditions set out below, you will receive no less than £222.2 million, which is 75 per cent of the ITV.

This comfort on final transfer value is conditional on the following:

- Specification of assets being transferred – that the specification of the assets being transferred to the successful bidder is exactly as specified in the information memorandum;
- Project completion date – that there are no significant delays to the completion and transfer of the transmission assets is completed in a timely manner;
- Cash flow information –that historic cash flow data we used for the purpose of calculating interest during construction is validated as part of our assessment of costs;
- Capital allowances **–** that the purchaser will obtain the full benefit of all available capital allowances. If this is not the case we will reduce the assessment of costs for an amount that reflects the value of the tax benefit retained by the developer; and
- Further relevant information – that no further relevant information comes to light to support an ITV of less than £296.2 million, including as a result of a future technical review and forensic investigation.

The Office of Gas and Electricity Markets
9 Millbank London SW1P 3GE **Tel** 020 7901 7000 **Fax** 020 7901 7066 **www.ofgem.gov.uk**

If any of the above are not satisfied then we may determine that you will receive less than £222.2 million upon transfer of the assets to the successful bidder.

Next steps

The cost assessment process will now proceed to establish the final transfer value, based on further updates on costs to be provided by you as the project progresses.

If you have any questions regarding this letter, please contact Roger Morgan on 020 7901 0525 (or roger.morgan@ofgem.gov.uk) in the first instance.

Yours sincerely

Min Zhu
Associate Director, Offshore Transmission

The Office of Gas and Electricity Markets
9 Millbank London SW1P 3GE **Tel** 020 7901 7000 **Fax** 020 7901 7066 **www.ofgem.gov.uk**