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Offshore Transmission: Cost Assessment for the Gwynt y Môr transmission assets

Decision

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Overview:

This document sets out the cost assessment for the Gwynt y Môr offshore transmission assets and the key principles that we have applied in our cost assessment process for the second transitional tender round. The Authority has granted an offshore transmission licence to Gwynt y Môr OFTO plc, incorporated by the consortium of Balfour Beatty Investments Limited and Equitix Limited.

Gwynt y Môr OFTO plc has incorporated the assessed transfer value as set out in this report into their tender revenue stream. The appendices published alongside this report are available on the Ofgem website. They include correspondence between Ofgem and the developer as part of the cost assessment process and external consultants' reports.

Context

Ofgem and the Department of Energy and Climate Change have developed a regulatory regime for offshore electricity transmission. A key part of this regime is that an offshore electricity transmission licence will be granted to an Offshore Transmission Owner (OFTO) following a competitive tender process run by Ofgem. The transitional tender regime has been designed for projects that were under development, in construction or constructed at the time of the announcement of the regime[1].

The Electricity (Competitive Tenders for Offshore Transmission Licences) Regulations 2010 (the "Tender Regulations") provide the legal framework for the process which Ofgem run for the grant of offshore electricity transmission licences and apply to tender exercises that met the qualifying project requirements set out in the Tender Regulations by 31 March 2012. The Electricity (Competitive Tenders for Offshore Transmission Licence) Regulations 2013 ("the 2013 Tender Regulations") came into force on 22 February 2013. The 2013 Tender Regulations set out the tender process framework for granting an OFTO licence, including how Ofgem will run future tenders under both the generator build and OFTO build options. The Tender Regulations apply to the Gwynt y Môr transmission assets.

The Tender Regulations set out the requirement for the Authority 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 developing and constructing the offshore transmission assets in respect of a project. The Tender Regulations provide for an estimate, followed by an assessment of costs, in relation to offshore transmission assets.

Where the Authority has determined to grant an offshore electricity transmission licence to the successful bidder in respect of a particular project, the assessment of costs shall be used by the Authority to determine the value of the transmission assets to be transferred to the successful bidder. This value will be reflected in the revenue stream in the offshore electricity transmission licence granted to the OFTO.

This is the twelfth cost assessment report for offshore transmission published by Ofgem, and the third relating to the second transitional tender round.

[1] http://www.ofgem.gov.uk/Networks/offtrans/pdc/cdr/cons2009/Documents1/Main.pdf

Associated documents

- Kema report on benchmarking Link
- Ernst and Young report on Interest During Construction Link
- The Electricity (Competitive Tenders for Offshore Transmission Licences) Regulations 2010 Link
- Offshore Transmission: Tender Rules Link
- Interest During Construction for Transitional Tender Rounds Link
- Offshore Transmission: Guidance for Cost Assessment Link

Contents

Executive Summary

This document sets out Ofgem's assessment of the economic and efficient costs which ought to have been incurred in connection with the development and construction of the transmission assets for the Gwynt y Môr offshore transmission project ("the Project"). It also details the cost assessment process we have undertaken.

The cost assessment process involved the three key stages set out below:

- The initial calculation of costs based on the Developer's initial estimate was £305.7m ("the initial transfer value"). This was communicated to the Developer and published in the preliminary information memorandum (PIM) in November 2010.

- The indicative estimate of costs was £346.0m ("the indicative transfer value"). The estimate was calculated as a result of further information regarding the development and construction of the Project being made available by the Developer and continuing analysis by Ofgem and its advisors. This updated calculation was communicated to the Developer in October 2012. The indicative transfer value was published in the project information memorandum (IM) and was the transfer value assumed for the purpose of Invitation To Tender (ITT) stage submissions.

- The assessment of costs is £351.9m ("the assessed costs"). This compares to the Developer's final submission of £378.3m, a reduction of £26.4m. The assessment is the Authority's calculation of the costs which ought to have been incurred in connection with the development and construction of the Project. This is also the amount to be paid to the Developer by the OFTO for the transmission assets ("the final transfer value"). The key components of the initial, indicative and final transfer values (together with the Developer's submission of the latter) are given in table 1 below, followed by a summary of the further breakdown for movements between the indicative and the final transfer value.

Table 1: Summary of cost components

Category	Initial Transfer Value Nov 2010 (£m)	Indicative Transfer Value Oct 2012 (£m)	Developers Proposed Transfer Value April 2014 (£m)	Final Transfer Value Nov 2014 (£m)
Capex	211.2	234.1	264.8	252.7
Development	36.5	46.7	51.5	51.5
Contingency	22.5	23.9	0	0
IDC	35.5	41.3	53.2	45.6
Transaction	-	-	8.8	2.1
Total	**305.7**	**346.0**	**378.3**	**351.9**

Capital expenditure (Capex)

The Capex component of the final transfer value increased by £18.6m since the indicative transfer value. This includes increases of:

- £20.2m for offshore substation costs, offshore cable jointing costs, installation delays and onshore substation costs; and
- These increases were offset by a reduction of £1.6m for other onshore costs.

Development costs

The Project's development costs have increased by £4.8m to £51.5m since the indicative transfer value. The increase is mainly due to project management costs and supporting offshore logistic costs related to the cable installation process and the offshore platform commissioning.

Contingency

The contingency allowed in the indicative transfer value has mostly been used in addressing additional Capex and development costs.

Interest during construction (IDC)

The IDC amount has increased by £4.3m as a result of extended construction period and an increase in Capex and development costs.

Transaction costs

The transaction costs are composed of both internal and external resource costs arising from the Developer's participation in the tender process. The transaction costs have been assessed to be £2.1m.

Capital Allowances

The Developer has confirmed that the incoming OFTO will be able to obtain the full benefit of all available capital allowances.

Final transfer value for the Gwynt y Môr transmission assets

In accordance with Regulation 4(2)(b) of the Tender Regulations, the assessed costs of the Gwynt y Môr transmission assets are £351,857,878.24. The final transfer value as determined by the Authority under Regulation 4(6) of the Tender Regulations is £351,857,878.24

1. The cost assessment process

Chapter Summary

The Tender Regulations set out the requirement for the Authority 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 developing and constructing the offshore transmission assets in respect of a project. This chapter sets out the process that we followed in carrying out the cost assessment for the Project.

Overview of the cost assessment process

1.1. The Tender Regulations provide the legal framework for the process which Ofgem follows for the grant of offshore electricity transmission licences. This process includes calculating the economic and efficient costs of developing and constructing the offshore transmission assets to be transferred to the new OFTO.

1.2. The calculation of those costs shall be:

- where the construction of the transmission assets has not reached the stage when those transmission assets are available for use for the transmission of electricity, *an estimate* of the costs which ought to be incurred in connection with the development and construction of those transmission assets; and
- where the construction of the transmission assets has reached the stage when those transmission assets are available for use for the transmission of electricity, *an assessment* of the costs which ought to have been incurred in connection with the development and construction of those transmission assets.

Cost assessment principles

1.3. The cost assessment principles and overall process we have adopted in relation to various cost categories for projects in the transitional tender rounds and the reasoning for such principles can be found in the document 'Offshore Transmission: Guidance for Cost Assessment'[2] (hereafter "the Guidance").

1.4. We intend to apply these principles in our cost assessment process for all projects in the transitional tender rounds. However, we may need to review them where appropriate in light of the analysis undertaken in respect of project specific circumstances.

[2] Offshore Transmission: Guidance for Cost Assessment, Ofgem ref 183/12, Dec 2012

1.5. The remainder of this chapter describes the key elements of the cost assessment process. Chapter 2 provides the detail as to how these have been applied to the specifics of the Project.

Data collection

1.6. To undertake cost assessments we gather and review a range of information and supporting evidence. These relate to the forecast and actual costs of developing and constructing the transmission assets that will transfer to the OFTO. Detailed cost information is provided by developers in the form of cost reporting templates, contract values, asset cost schedules and cash flows. Developers also provide supporting evidence to substantiate their cost submissions including, amongst other things, contract documentation, supplier payment lists, bank statements, invoices and receipts.

1.7. The data collection to inform the cost assessment for all projects in the transitional tender rounds commenced in December 2008 and continues during the assessment process. Throughout this period we have worked closely with developers, gathering information relating to the following cost categories in the development and construction of the transmission assets:

- Capital expenditure;
- Development costs;
- Contingency provisions;
- Interest during construction; and
- Transaction costs.

Process stages for cost assessment

1.8. The cost assessment process involves the key stages set out below.

Initial transfer value

1.9. The initial transfer value is based on cost submissions by the Developer. This value is made available to bidders at the Pre-Qualification (PQ) stage of the tender process. The letter we send to developers at this time indicates that the calculation might be updated as a result of any further information provided by the developer and our continuing analysis.

Indicative transfer value

1.10. We provide the indicative transfer value for the commencement of the ITT stage of the tender process. This value is used as an assumption underlying the tender revenue stream (TRS) bids submitted by bidders at the ITT stage. The letter we send to developers confirming the indicative transfer value indicates that the calculation might be updated as a result of any further information provided by the Developers and our continuing analysis. For all

transitional projects other than Barrow, this letter provides comfort (subject to certain matters) that the minimum transfer value the Developer will receive for the transmission assets once their project is complete is 75% of the indicative transfer value.

Assessed costs

1.11. Once the transmission assets are complete or are close to completion and the Developer indicates that they have documentation to support an assessment, we commence an exercise to determine the assessed costs.

1.12. Following this assessment exercise, Ofgem sends the Developer a draft cost assessment report setting out the amount of the assessed costs. This gives the Developer the opportunity to correct factual errors and propose redaction of commercially sensitive information.

1.13. The draft report is also sent to the preferred bidder, to allow it to incorporate the assessed costs into their estimate of the TRS payable to the OFTO. This TRS amount, incorporating the assessed costs, is published in a consultation pursuant to section 8A of the Electricity Act 1989, by which the Authority proposes modification to the standard conditions of the licence on a project specific basis ("the section 8A consultation")

1.14. The draft cost assessment report is published alongside the section 8A consultation. The report remains in draft form until conclusion of the section 8A consultation and the Authority has determined to grant an offshore transmission licence to the successful bidder.

Final transfer value

1.15. The assessed costs are used by the Authority to determine the final transfer value, which is confirmed once the Authority has determined to grant an offshore transmission licence to the successful bidder. After licence grant the final cost assessment report and supporting appendices is published on the Ofgem website.

1.16. Ofgem normally finalises the assessment of costs prior to commencement of the section 8A consultation, with the section 8A TRS accounting for 100% of the final transfer value.

Cost assessment analysis

1.17. We apply two tests when calculating the estimate and assessment of costs:

Test 1 - Assessing the accuracy and allocation of Developers' cost submissions

1.18. As a first test, we check the accuracy of the data provided by the Developer and the appropriateness of cost allocations, in particular, between the offshore generation and transmission assets. Throughout the cost assessment process Developers provide cost information to us on an ongoing basis. Where we identify discrepancies in how the Developer has allocated these costs we check with Developers to identify ways to address such discrepancies and make adjustments accordingly.

1.19. To support the cost assessment process we undertake a forensic accounting investigation. The scope of this investigation is shared with the Developer in advance. This investigation is based on the costs that the Developer provides to us and applies to a sample of contract costs. The actual sample for each project varies due to the different contracting strategies adopted by the Developer and the specific needs of the project, but generally focuses on the most expensive contract and/or contracts which materially increase in cost.

1.20. The forensic accounting investigation scrutinises the cost allocations provided by Developers. This may indicate the need for amendments to the Developer's submissions to reflect, for example:

- the actual costs incurred (e.g. in respect of exchange rates on foreign currency payments); and
- more relevant metrics for the allocation of shared service costs.

1.21. Where amendments in our opinion are required and in the absence of further evidence from the Developer to substantiate the original allocation, we incorporate changes identified from the forensic accounting investigation.

Test 2 - Assessing if Developer's incurred costs are economic and efficient

1.22. Under the second test, we seek to assess, through appropriate analysis, whether the costs have been economically and efficiently incurred by the Developer. Where possible, we apply benchmarking based on industry wide cost indices or data from other projects in the transitional tender rounds. This analysis includes benchmarking across the projects and analysis in relation to funding interest rates. We consider such approaches to be an important tool in assisting us in determining what the economic and efficient costs should be.

1.23. To inform the cost estimate exercise to derive the indicative transfer value we undertake a benchmarking exercise using comparable costs across all projects in the transitional tender rounds to identify any cost outliers across the main cost categories. Any cost outliers we identify through the benchmarking exercise are subject to further review. This exercise examines individual cost categories including:

- total cost of transmission assets as a percentage of overall project cost;
- total cost of transmission assets per MW kilometre;
- cost of offshore substation per MW;
- cost of offshore substation (platform and electrical) per installed MW;
- cost of submarine cable supply and installation per kilometre;
- cost of transformer per MVA;
- cost of reactive equipment per kilometre of cable; and
- development cost as a percentage of total transmission assets costs.

1.24. This benchmarking exercise informs our communication to the Developer in our letter which sets out the indicative transfer value.

1.25. We also consider the procurement processes adopted by the Developer to obtain economic and efficient transmission asset costs. We note the differing procurement approaches taken by Developers for projects in the transitional tender rounds. We will keep the efficiency of Developer procurement and contract management approaches under close review for future cost assessments.

1.26. When undertaking the assessment of costs to derive the final transfer value, where Capex or development costs have increased since the indicative transfer value, Developers are asked to provide supporting documentation to justify these increases. Depending on the nature of the increase, we may undertake a technical investigation which focuses on, for example, a particular cost increase in a contract or multiple increases across several contracts.

2. Gwynt y Môr Cost Assessment

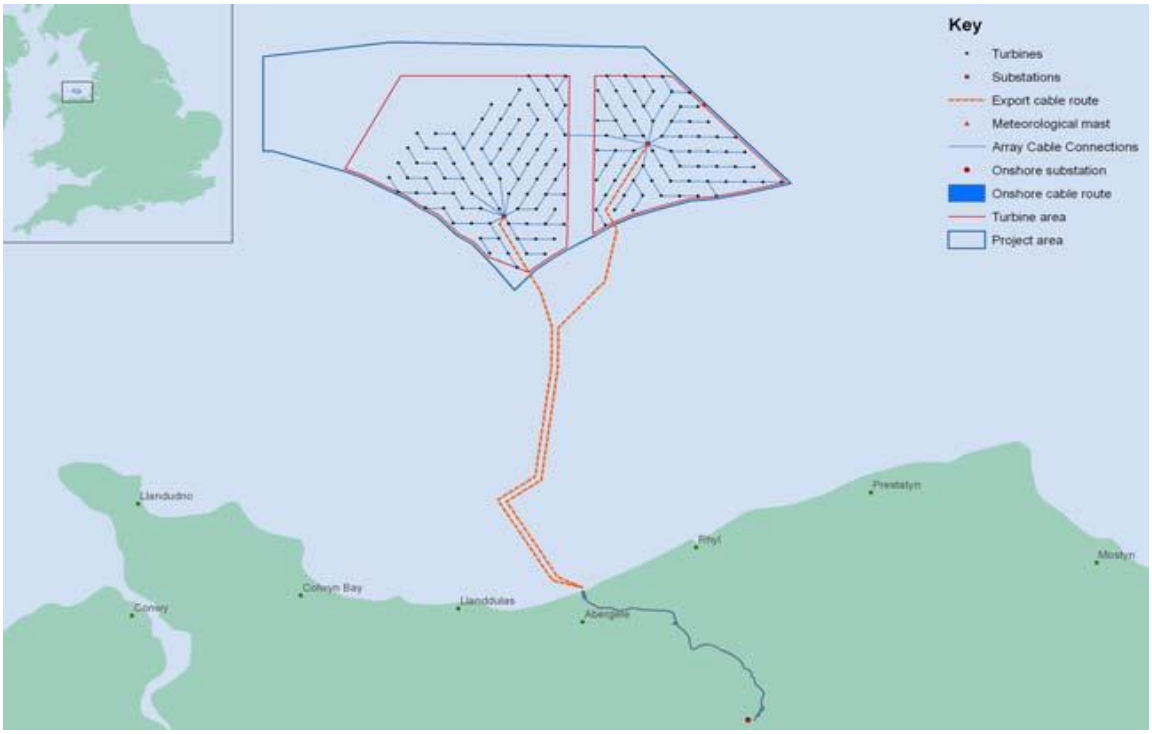
Chapter Summary

This chapter summarises how we have undertaken our cost assessment for the Gwynt y Môr transmission assets from the initial transfer value to the final transfer value, with an emphasis on the difference between the indicative and final transfer value. It provides a breakdown of the key cost categories that we have considered and highlights the decisions that we have made.

Gwynt y Môr Transmission Assets

2.1. The Gwynt y Môr Wind Farm is located 13 to 15km off the north coast of Wales and covers an area of approximately 79km^2, extending from Penrhyn Bay in the West to Prestatyn in the East, as shown in Figure 1 below.

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



2.2. Gwynt y Môr Offshore Wind Farm is owned and financed under an unincorporated joint venture ("GyM UJV") structure by three owners, namely RWE Innogy GmbH (60%), Stadtwerke Munchen GmbH (30%) and Siemens AG (10%). The Transmission Assets for the Gwynt y Môr Wind Farm project are currently jointly owned by the participants in the GyM UJV. RWE Innogy UK Limited is carrying out

day to day management activities of the construction project on behalf of the GyM UJV participants.

2.3. The Gwynt y Môr transmission assets connect to the Gwynt y Môr Wind Farm at two offshore platforms. The transmission assets that are transferring to the OFTO comprise of:

- two offshore platforms and associated substations;
- four subsea export cables with a total length of approximately 82.8km;
- four 132kV onshore cables with a total length of 44km; and
- an onshore substation at St Asaph.

2.4. The boundary points for the Gwynt y Môr transmission system are defined below:

- Offshore: Located at the incoming 33kV circuit breaker cable termination on the two offshore substations; and
- Onshore: Located between the 400kV busbar disconnectors and the 400kV OFTO circuit breaker.

2.5. The spares included in the transmission assets that are transferring to the OFTO are:

- 1 spare onshore transformer and 1 spare offshore transformer;
- 1554m of subsea cable;
- 100m of onshore cable, 1km fibre cable
- Various joints (transition, straight and cable repair joints);
- Gas Insulated Switchgear (GIS) terminations; and
- Associated miscellaneous spares.

Gwynt y Môr cost assessment process overview

2.6. Since November 2010, we have worked with the Developer and our advisers to reach an assessment of the costs which ought to have been incurred in connection with the development and construction of the transmission assets. Set out below is an outline of the steps taken in the cost assessment process for the Project.

- October 2010: Developer Information Request (DIR) sent to the Developer.
- October 2010: Developer submitted DIR.
- November 2010: Ofgem analysis of the Developer information and benchmarking.
- November 2010: Initial Transfer Value (£305.7m) published.
- November 2010 - October 2012: Further information received from the Developer and analysed by Ofgem.
- October 2012: Indicative Transfer Value (£346.0m) published.

- November 2012 - April 2014: Cost reporting updates performed with the Developer over the course of construction of the Project.
- January 2014: Forensic and technical investigations undertaken.
- June 2014: Closure on issues raised by forensic and technical consultants.
- November 2014: Draft cost assessment report released to the Developer for comment and the preferred bidder for information.
- December 2014: Draft cost assessment report published alongside the section 8A consultation.
- February 2015: The Authority determines the final transfer value when it determines to grant the licence to the successful bidder. The final cost assessment report is published after licence grant.

Summary of Indicative Transfer Value determination

2.7. The initial transfer value calculated in November 2010 was £305.7m. This value was based on information received from the Developer at an early stage in the construction and development of the Project. A number of the Developer's contracts were in the process of being finalised at the initial transfer value stage and these were considered in greater detail when the indicative transfer value was set.

2.8. The indicative transfer value of £346.0m was established in October 2012, comprising estimated Capex, development and contingency costs of £304.7m and IDC of £41.3m. Our estimate was supported by our forensic accounting advisor, Grant Thornton ("GT"), and our technical advisor, DNV GL Energy ("DNV GL").

Process for determining the assessed costs

Accuracy and Allocation

2.9. The Project was constructed on a multi contract basis. A forensic accounting investigation was undertaken by GT to ensure that the costs reported to us by the Developer were accurate, in that they represented the actual costs incurred by the Developer during the development and construction of the Project.

2.10. This investigation considered the main contracts in respect of the transmission assets for the following: (1) the offshore cable supply; (2) the offshore cable installation; (3) the onshore and offshore electrical package; and (4) offshore platform topside manufacture and enabling works. In addition to the contract analysis we asked GT to conduct a review of the project management support services and parent company guarantee (PCG) costs.

2.11. We also checked that the costs were allocated to the correct asset category, in particular between generation assets and transmission assets. To assess whether the costs were allocated correctly we took into consideration the following:

- metrics used when allocating costs between generation and transmission;
- the Developer's submissions using our cost reporting template;
- the findings of the forensic accounting investigation; and
- cash flow payments related to the transmission assets.

Efficiency

2.12. After costs had been appropriately identified and allocated, we performed an assessment of whether these costs had been incurred economically and efficiently. We took into consideration the following:

- the findings of the forensic accounting investigations by GT; and
- the findings of a technical investigation by DNV GL.

Summary of assessment

2.13. Following completion of the construction and development of the transmission assets, the Developer submitted costs amounting to a proposed final transfer value of £378.3m. The assessment of the economic and efficient costs which have been or ought to have been incurred, in connection with developing and constructing the transmission assets, has established a final transfer value of £351.9m. Table 2 below provides a breakdown of the cost categories for the Project at each stage and change between the indicative transfer value and the final transfer value.

Table 2: Summary of cost categories

Category	Initial Transfer Value: Nov 2010 (£m)	Indicative Transfer Value: Oct 2012 (£m)	Final Transfer Value: Nov 2014 (£m)	Reasons for change between Indicative Transfer Value and Final Transfer Value
Capex	211.2	234.1	252.7	Includes increases of: £20.2m for offshore substation costs, offshore cable jointing, installation delays and onshore substation costs Offset by decrease of: £1.6m for other onshore costs
Development	36.5	46.7	51.5	Increase of: £4.8m in development costs mainly due to increased project management costs and supporting offshore logistics costs related to the cable installation process and offshore platform commissioning
Contingency	22.5	23.9	0	Contingency in the indicative transfer value was mostly used to in addressing additional Capex and development costs
IDC	35.5	41.3	45.6	IDC increase as result of an extended construction period and an increase in Capex and development costs.
Transaction	-	-	2.1	Transaction costs have been added and are assessed at the end of the cost assessment process.
Total	**305.7**	**346.0**	**351.9**	

2.14. The issues we have considered in setting the final transfer value are detailed below.

Capex

2.15. The Capex element of the final transfer value is £252.7m. Overall the Capex has increased by £18.6m from the indicative transfer value to the final transfer value. The majority of the Capex increase is in offshore substation commissioning and spare transformer, submarine cable installation and onshore substation.

Accuracy and allocation of Capex costs

2.16. GT undertook a forensic investigation of the highest value Capex contracts. These accounted for 56% of the total Capex costs submitted by the Developer at the time the investigation was undertaken. The Capex contracts investigated were:

- NKT – offshore cable supply;
- Siemens Transmission and Distribution Limited ("Siemens") – onshore and offshore substations; and
- Global Marine and Visser & Smit – offshore cable installation.

2.17. For the majority of Capex costs incurred on the Project, it was clear whether they should be allocated to the transmission or the generation assets in their entirety. For costs shared between generation and transmission assets, the Developer allocated certain proportions to the transmission assets using cost drivers, which differ depending on the nature of the work undertaken. The metrics used by the Developer applied have been reviewed by GT who confirmed that these are a reasonable means to allocate shared costs and are in line with other Offshore Transmission projects. Only those costs related to the transmission assets were allowed in the indicative and final transfer values. In conducting our own analysis of these costs there were a number of items that were identified which we have discussed with the Developer. These items are set out below.

Offshore substation

2.18. In its final cost submission the Developer removed £2.99m from offshore substation. This is to reflect final cost positions for the foundation design, jacket and topside installation. It also included a £29k reallocation of geotechnical survey costs to the generation assets.

Ofgem's view

2.19. We agree that the Developer was correct to remove these costs from the final cost submission.

Land Cable costs

2.20. The Developer's final cost submission included a reduction for the land cable costs.

Ofgem's view

2.21. We agree that it was appropriate for the Developer to make this adjustment.

Efficiency of Capex costs

2.22. The Developer submitted increased Capex costs associated with: offshore substation commissioning and spare transformer, offshore cable installation, onshore substation, and fault repair on the offshore cable. For the purposes of informing our assessment of the efficiency of the Capex costs, we asked our technical consultant DNV GL to examine the cable jointing cost increases. We also undertook further investigations to gain a better understanding of the issues to inform our views on whether the other changes proposed by the Developer were economic and efficient. We have detailed below the main issues that were considered and how we have assessed these costs.

Offshore substation

2.23. Since the indicative transfer value the offshore substation costs increased to cover commissioning works carried out by the Developer's contractor. The commissioning works were charged on a time and materials (T&M) basis, based upon actual works carried out.

2.24. The increase in T&M costs relates to slow progress in commissioning due to bad weather and delays to the subsea cable installation. We received a cost breakdown from the Developer which itemised the increases. These cover, amongst other things, T&M costs and claims submitted by the contractor, sub-contractor works, scaffolding and painting costs, fibre optic works etc. The Developer mitigated delays by allocating a jack up barge which enabled personnel to stay on the platform full time even during poor weather conditions.

Ofgem's view

2.25. Based on the information provided, we consider that the delays to the commissioning were caused by events that were outside of the Developer's control. We also note the mitigating actions taken i.e. the use of a jack up vessel which reduced overall vessel costs and subsequent project delays. Therefore, based on the information provided by the Developer, we have decided to include the cost increase in the final transfer value. This is consistent with positions we have taken on other projects where cost increases are due to an appropriate response by the Developer to matters outside its control, for example, bad weather which often leads to cost overruns and delays.

Spare offshore transformer

2.26. In its final cost submission the Developer included the costs of a spare offshore transformer. The Developer's justification was based on, amongst other things, the likely failure rates for offshore transformers, the environmental conditions that may be encountered by a repair team and the time it will take to repair a fault or replace the transformer.

Ofgem's view

2.27. We considered the justification proposed by the Developer based on information available at the time, including the expected fault rates and time to repair for the offshore transformers and the value of lost generation that could be avoided by the provision of a spare onsite. We have concluded that the costs of purchasing a spare in this case is justified.

Offshore cable jointing costs & installation delays

2.28. The export cable installation programme was subject to delays and cost increases. The events that caused these issue were:

- a delay in collecting the cable which delayed cable trials and the installation programme; and
- an incident which required the cable to be cut and perform jointing works. Two campaigns were required before the jointing works were successfully completed. The first campaign took place just before the consent window was due to close. The second campaign commenced in Spring 2012 (when the consent window reopened).

2.29. We asked DNV GL to undertake a review of the jointing campaigns.

DNV GL's conclusions

2.30. DNV GL concluded that the first campaign was not an economic and efficient cost from the point of view of the transmission assets. The Developer accepted DNV GL's findings in respect of the first campaign.

2.31. With regards to the second campaign, DNV GL noted that:

- the Developer was able to evidence that a detailed risk assessment took place;
- there was a reduced risk that the campaign would be curtailed by the consent window as there was sufficient time to complete works;
- jointing works in Spring was a less risky option, given the good weather conditions;
- the Developer used a larger vessel for the second campaign works (with higher day rates and mobilization and demobilization costs), which enhanced operational flexibility and could accommodate a diving team to undertake the required jointing works; and
- the level of costs incurred were reasonable under the circumstances faced by the Project, for example, the limited number of contractors available to carry out the required works.

Ofgem's view

2.32. The first campaign was unsuccessful and did not achieve its objectives. Furthermore, DNV GL highlighted that the first campaign was inefficient from the point of view of the transmission assets. We have put this position to the Developer. They have accepted DNV GL's conclusions on the first campaign and subsequently withdrew the related costs from their cost template submission.

2.33. We have considered the second campaign costs and note DNV GL's comments on the planning and preparation that took place and the costs incurred. We consider that the Developer demonstrated that it had planned and carried out the second campaign works in an efficient manner. We have therefore concluded that costs related to the second campaign were incurred efficiently and should be included in the final transfer value.

2.34. The remaining cost increase in relation to the cable installation programme relates to weather delays and increased vessel costs. These are costs passed through by contractors and caused by matters that were outside the control of the Developer. We have concluded that these costs should be included in the final transfer value.

Onshore substation

2.35. Since the indicative transfer value the onshore substation costs have increased. The increase is an estimate for settling contract claims and variation orders. The costs cover a number of activities, for example, the reactive compensation equipment.

2.36. When we set the indicative transfer value, we included the cost of a spare 132kV to 400kV onshore transformer, but indicated that we would revisit this issue at the final transfer value stage. In the follow-up discussions, the Developer presented its cost benefit analysis (CBA) based on assumptions of expected fault rate and mean time to repair which showed that the potential value of energy saved would be significant relative to the cost of the spare. It also made reference to what it believes to be a requirement by the National Electricity Transmission System Security and Quality of Supply Standard (NETS SQSS).

Ofgem's view

2.37. We sought additional clarity on the circumstances surrounding the cost increases and the level of costs proposed. We have concluded that the cost increase is not due to Developer inefficiencies. We have allowed only the proportion of claims that are permissible under the terms of the contract arrangements between the Developer and its contractor. Therefore, we have agreed to include these in the final transfer value.

2.38. Regarding the onshore spare transformer, we have considered carefully the analysis presented by the Developer. We note that, without the spare transformer, the arrangement at the Project's onshore substation already meets the minimum

requirements of NETS SQSS. We also challenged the assumptions used by the Developer in its original CBA. The Developer's revised analysis, based on published industry data, suggests a net benefit of circa £4.7m and our internal analysis indicated that this is within the range that can be reasonably derived from industry data available at that time. We therefore conclude that the cost of the spare can be included in the final transfer value.

Cable fault costs

2.39. In December 2013, the cable protection relays detected a fault and tripped the circuit. The fault locators indicated that the fault was circa 33km from the offshore substation. After a further investigation the Developer sought quotes for undertaking repair works. At a late stage in the cost assessment the Developer submitted a cost estimate (including additional risk contingencies) to repair the cable fault.

Ofgem's view

2.40. Following discussion with the Developer, we established that the fault occurred after the cable was energised, in service and operational. As our cost assessment covers development and construction costs only, the fault occurred during a period outside of the scope of the cost assessment process. Accordingly, we have removed the costs from the Developer's cost submission.

Development costs

2.41. The assessed development cost for the Gwynt y Môr transmission assets is £51.5m. These are costs incurred by the Developer which were outside the scope of the main construction contracts. Our cost assessment is informed by the outcome of GT's investigation.

Accuracy and allocation of development costs

2.42. When the indicative transfer value was set in October 2012, development costs were estimated at £46.7m. The Developer submitted a final claim for development costs of £51.5m.

Ofgem's view

2.43. We have reviewed and considered the rationale for these allocations and consider that the costs have been appropriately allocated, on the basis of the detailed timesheets and estimates for project management supplied by the Developer.

Efficiency of Development Costs

2.44. The development costs submitted by the Developer have increased relative to the value in the indicative transfer value by £4.8m. The Developer has stated that this is due to an increase in project management costs and supporting offshore logistics costs, caused by extended construction timelines arising from the cable installation process and the offshore platform commissioning.

Ofgem's view

2.45. We have considered the Developer's submission and the level of their proposed increase in development costs. We agree that, given the increased scale and complexity of the operation following both the cable jointing and offshore platform commissioning issues, it is appropriate for additional development costs to be included in the assessed costs.

Interest during construction

2.46. The total IDC calculated for the Gwynt y Môr transmission assets in the assessed costs is £45.5m. We reviewed the Developer's IDC submission which has resulted in a number of IDC changes. The net impact of these changes was a £7.7m reduction to the Developer's IDC claim.

2.47. The main change from the indicative transfer value is a result of the extended construction timeline and increased Capex expenditure, reflecting the problems with cable jointing and the offshore platform commissioning program.

Accuracy and allocation of IDC

2.48. In determining the Project's IDC we have discussed with the Developer the operational status of the transmission assets. In particular, we reviewed the IDC submission and identified that the Developer had claimed IDC on elements of the transmission assets that were in service and operational. IDC can only be recovered for financing costs incurred by a Developer in the period of developing and constructing the transmission assets. Therefore, we removed the IDC claimed during the period in which the assets were operational. This resulted in a reduction of £7.3m.

Efficiency of IDC

2.49. The Gwynt y Môr transmission assets were constructed over the period January 2009 to July 2013. In July 2011, Ofgem consulted on the interest rate to be used to calculate the level of IDC for projects in the transitional tender rounds. We published our decision letter and explained that we will apply a capped rate[3] of 8.5 per cent

[3] We will apply the developer's rate (subject to economic and efficiency assessment), if that is below the capped rate.

from 1 December 2011. IDC incurred prior to this date is capped at a rate of 10.8 per cent.

2.50. For the period January 2009 to November 2011 we used the Developer's rate and for the assessed costs the 8.5 per cent cap has been applied.

2.51. By considering our own modelling of the likely time required to develop and construct assets of this nature and the time taken by other Developers on the projects in the transitional tender rounds, we have concluded that the extended period (once corrected as above) is acceptable and has been allowed in the final transfer value.

2.52. The Capex reductions for cable faults relative to the Developer's submission, as set out in previous sections, have resulted in a further reduction of £377K to the Developer's IDC claim.

Transaction costs

2.53. The indicative transfer value did not contain any transaction costs as they were not known at the time. The Developer has subsequently submitted a firm estimate of the costs they expect to incur to asset transfer. The total of these items results in the allowed transaction cost element of the submitted transfer value being £2.1m.

Accuracy and allocation of transaction costs

2.54. The Developer provided information regarding both internal and external costs. For their internal costs they provided information on the personnel who were involved and their day rate relating to the work undertaken and time spent on the tender process as opposed to the construction of the Project or generation activities. The external costs related to professional services in respect of the tender, e.g. legal, accountancy and technical. These totalled £2.1m.

2.55. In its final cost submission, the Developer also claimed £6.7m for the cost of providing a parent company guarantee (PCG). The Developer confirmed that this is standard M&A practice; and was requested by the Preferred Bidder as part of the transaction to cover any liabilities that can arise as a result of warranty or indemnity claims under the Sale and Purchase Agreement.

Ofgem's view

2.56. We have concluded that the costs provided by the Developer were allocated appropriately and have included the £2.1m in the final transfer value.

2.57. In our cost assessment guidance document[4] we explain that transaction costs relate to costs that a Developer has incurred during and as a result of the tender process.

[4] https://www.ofgem.gov.uk/publications-and-updates/offshore-transmission-guidance-cost-a

The costs relate to tender fees payable to Ofgem and a Developer's internal and external costs, which arise as the Developer may need to use a range of resources or services. The costs of a PCG do not come within the category of transactions costs as explained in the guidance. In addition, the cost of the PCG is being incurred in relation to a liability which will arise on transfer to the OFTO, which is after the development and construction of the transmission assets is complete. Therefore, for the reasons set out above we have removed the £6.7m from the Developer's cost submission.

Efficiency of transaction costs

2.58. Transaction costs can only be provided to us by Developers to a reasonable degree of accuracy towards the end of the tender process. The transaction costs submitted by the Developer (excluding the PCG costs) represent approximately 0.7 per cent of the total Capex and development costs. We have considered the types of resource costs incurred in relation to this Project's tender process and these transaction costs appear reasonable in comparison with other projects.

Contingency

2.59. The assessed costs do not contain a separate contingency value. The contingency provision of £23.9m at the indicative transfer value stage has primarily been utilised to deal with the cable installation, offshore platform commissioning issues and development costs.

Confirmations in relation to tax benefits

2.60. The indicative transfer value was calculated on the basis that the purchaser would obtain the full benefit of all available capital allowances. If this was not the case for the final transfer value we would reduce the assessment of costs for an amount that reflects the value of the tax benefit retained by the Developer. For the final transfer value the Developer has confirmed that the purchaser will be able to obtain the full benefit of all available capital allowances and therefore it has not been necessary to reduce the assessment of costs.

3. Conclusion

3.1. In conclusion, in accordance with Regulation 4 of the Tender Regulations, the Authority has assessed the economic and efficient costs which ought to have been incurred in connection with developing and constructing the Gwynt y Môr transmission assets to be £351,857,878.24

Appendices

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Appendix 1 - Glossary

A

Authority

The Gas and Electricity Markets Authority

C

Capex

Capital Expenditure

D

Developer

Gwynt y Môr Wind Farm Limited

DNV GL

Det Norske Veritas Germanischer Lloyd

G

GT

Grant Thornton

I

IDC

Interest During Construction

IM

Information Memorandum detailing the projects details released to QTT bidders through the tender portal.

ITT

Invitation to Tender

M

MW

Megawatt

MVA

Megavolt-Ampere

O

OFTO

Offshore Transmission Owner

P

Project

The development and construction of the Gwynt y Môr offshore transmission assets

PTRA

Post Tender Revenue Adjustment

Q

QTT

Qualification to Tender