Ex-Post Cost Review of Galloper Offshore Wind Farm Transmission Assets

Report of Grant Thornton UK LLP

dated 29 July 2019

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1 EXECUTIVE SUMMARY

1.1 Grant Thornton UK LLP (Grant Thornton) has been instructed by the Office of Gas and Electricity Markets (Ofgem) to carry out a review of the ex-post cost information, prepared by Innogy Renewables UK Limited (Innogy), for the transmission assets (the Transmission Assets) of the Galloper Offshore Wind Farm (the Wind Farm), in accordance with our instructions set out in paragraph 1.3 below.

1.2 The Wind Farm is owned by a consortium of investors including Innogy Renewables UK Limited (Innogy), Siemens Financial Services, Sumitomo, ESB, and a consortium managed by Green Investment Group and Macquarie Infrastructure and Real Assets. The ownership structure was set out in our ex-ante report dated 13 February 2018. The project is developed by Galloper Wind Farm Limited (GWFL/the Developer) and project construction and operations are managed by Innogy through a Management Services Deed (MSD).

1.3 The review has sought to determine whether the Developer has procedures in place for managing directly and indirectly incurred costs, and to carry out certain testing on whether the Developer's latest assessment of the costs of the Transmission Assets have been incurred as stated. Our review and this report is based upon the costs recorded the cost assessment template (CAT) provided to Ofgem on 7 November 2018 (the 7 November 2018 CAT). Further detail of our work is set out in **Section 3**, supplemented with **Appendices 1** to **5**, and is summarised as follows:

- establish the processes and policies undertaken by the Wind Farm for making payments for directly and indirectly incurred costs;
- in relation to directly incurred costs, for selected contracts, trace expenditure through the purchasing and payments system and reconcile to the costs included on the invoice schedule to the 7 November 2018 CAT;
- in relation to indirectly incurred costs, for a sample of transactions, trace expenditure through the accounting system, and confirm the amount allocated has been correctly applied in accordance with the stated allocation methodology, using appropriate metrics in respect of the costs between transmission and generation; and
- compare the costs at 7 November 2018 to the Indicative Transfer Value (ITV) at March 2018, and obtain explanations for significant variances arising between the costs at the two dates.

1.4 This report reflects the 7 November 2018 CAT together with information and explanations received by Grant Thornton up to and including 21 December 2018. Our report does not therefore reflect any information or the outcome of discussions held after that date.

1.5 The Developer has prepared cost templates setting out its assessment of the costs of the Transmission Assets throughout the development of the Wind Farm. We reviewed an earlier version of the cost template dated 17 May 2017 (the ex-ante review) which culminated in the submission of our report dated 13 February 2018. Our report was considered by Ofgem in establishing the project's ITV[1].

1.6 The 7 November 2018 CAT is summarised below:

Breakdown of Transmission Assets costs

	CAT Reference	March 2018 ITV £	7 November 2018 CAT £	Movement £
Project common costs	CR8	[redacted]	[redacted]	[redacted]
Offshore substation	CR2	[redacted]	[redacted]	[redacted]
Submarine cable supply and installation	CR3	[redacted]	[redacted]	[redacted]
Land cable supply and installation	CR4	[redacted]	[redacted]	[redacted]
Onshore substation connection	CR5	[redacted]	[redacted]	[redacted]
Reactive substation	CR6	[redacted]	[redacted]	[redacted]
Connection costs	CR7	[redacted]	[redacted]	[redacted]
Total capital costs		[redacted]	[redacted]	[redacted]
Interest during construction		[redacted]	[redacted]	[redacted]
		291,647,614	**300,676,373**	**9,028,759**

1.7 The 7 November 2018 CAT reflects a net increase in the cost of the Transmission Assets of £[redacted] from the March 2018 ITV. In relation to the overall increase of £[redacted] to the CAT, the principal increases and reasons are detailed below:

- A £[redacted] increase in relation to the Electrical Systems contract (APC)[2] – the contract is not yet closed out, and the expected forecast is based upon the signed terms of reference for a settlement to the outstanding disputed costs between the Developer and APC. This increase relates to extensions to the Time for Completion and for additional payment arising out of and in connection with the delays to the works
- A £[redacted] increase in relation to Jack-up barge and supply boat, due to additional work requiring extending the use of the Seajacks Jack-Up Vessel 'Hydra'
- A £[redacted] increase in relation to export cable variations, which include variations for additional surveys, testing, beach works and delayed operations
- A £[redacted] increase in relation to resources costs[3], due to changes in the resource plan (e.g. change in role durations or change to the OFTO allocation of resource.)

[1] Letter from Ofgem to GWFL dated 22 March 2018 "Indicative Transfer Value for the Galloper Offshore Windfarm Transmission Assets"

[2] £[redacted] increase is split across the four CAT templates: £[redacted] (CR2) + £[redacted] (CR4) + £[redacted] (CR5) + £[redacted] (CR6) = £[redacted]

[3] £[redacted] increase is split across two CAT templates: £[redacted] (CR5) + £[redacted] (CR8) = £[redacted]

1.8 The above increases (totalling £[redacted]) have been partially offset by the following decreased costs (totalling £[redacted]):

- The release of £[redacted] of contingency and uncertain costs as a result of the project nearing completion
- A £[redacted] decrease in crew transfer vessel (CTV) costs, as a result of "*firmed-up*" costs in the FTV (Final Transfer Value) compared to estimated forecast costs within the ITV
- A £[redacted] decrease in transaction costs, which in part relates to removal of contingencies for transaction fees and enabling fees which were in place at the time of the ITV and which have subsequently not materialised

1.9 The full analysis of the above variances is presented at **Appendix 5**.

SUMMARY OF FINDINGS

The Wind Farm's payment processes

1.10 Ofgem has instructed us to establish the Wind Farm's processes for making payments to suppliers for directly and indirectly incurred costs.

1.11 The Developer has confirmed that all large value contracts for the Wind Farm have been subject to a competitive tendering process. Based upon our review it appears the Developer has suitable systems in place for the approval and payment of invoices to contractors, including contract variations, and has further systems in place to ensure that, where appropriate, the allocation of costs between the Transmission and Generation Assets is properly recorded.

Directly incurred costs

1.12 Ofgem has instructed us to carry out certain procedures (as detailed at paragraph 3.14) on the costs payable by the Wind Farm to:

- Alstom Petrofac Consortium (APC) in relation to the Engineering Procurement Construction Installation (EPCI) contract for the provision of electrical systems works, the manufacture, supply and construction of the onshore substation, the onshore cable works, the Offshore Substation Platform (OSP) and jacket foundation and the offshore transportation and installation of the OSP and foundation (Electrical Services Agreement – NRL 2587); and
- VBMS (UK) Ltd/ NKT cables GmbH & Co (VBMS) for the supply and installation of the export cable (Export Cables Agreement – NRL 3129).

1.13 The OFTO allocation of the two contracts totalled £214.6 million and represent 79.4%[4] of the total capital costs. These procedures have been carried out as required and a summary of findings is set out below:

Summary of direct costs testing

	Invoices paid £	Accrued amounts	Amounts not related to the Transmission Assets £	Total per 7 November 2018 CAT £
VBMS Contract	[redacted]	[redacted]	[redacted]	[redacted]
	[redacted]	[redacted]	[redacted]	[redacted]
	[redacted]	[redacted]	[redacted]	[redacted]
APC Contract	[redacted]	[redacted][5]	[redacted]	[redacted]
	[redacted]	[redacted]	[redacted]	[redacted]
	[redacted]	[redacted]	[redacted]	[redacted]
	[redacted]	[redacted]	[redacted]	[redacted]
Total	[redacted]	[redacted]	[redacted]	[redacted]
	[redacted]	[redacted]	[redacted]	[redacted]

1.14 We have verified that invoices totalling £[redacted] have been paid, representing [redacted][6] of the selected contracted costs included in the 7 November 2018 CAT.

1.15 The accrued costs totalling £[redacted], representing [redacted]% of the selected contract costs, relate to the final documentation invoices for the APC contract which are still to be invoiced and paid. The Developer has confirmed that, as part of settlement negotiations with APC, further costs of £[redacted] in relation to the capacitor can defect are required and accordingly an increase in the Transmission Costs of £[redacted] is required. The Developer has provided us with the signed Settlement Terms of Reference (5 October 2018) for the APC contract – however, we understand from the Developer that this settlement agreement has been superseded by a formal agreement, which has been issued for signature by both parties. We are awaiting a copy of the formal agreement from the Developer. This agreement, which supersedes the signed Settlement Terms of References, and the values in the CAT, is for exactly £[redacted] more than the previous agreement and the £[redacted] is payable on completion of outstanding works in relation to the capacitor can defect.

1.16 Amounts not related to the Transmission Assets of £[redacted] represent amounts paid to contractors which relate to the portion of the Wind Farm retained by the Developer.

[4] £[redacted] / £[redacted] = [redacted] %

[5] This amount does not include the additional £[redacted] for the capacitor can payment, as described below in paragraph 1.14

[6] [redacted] / [redacted] = [redacted] %

Indirectly incurred costs

1.17 Ofgem has instructed us to carry out certain procedures (as detailed in paragraph 3.20) in relation to a sample of indirect costs payable by the Wind Farm.

Project management support services costs

1.18 We have been provided with a breakdown of project management support services costs and verified a sample of these costs to underlying records. The breakdown is in form of a resource planner, an excel spreadsheet which creates the forecasted costs based on the resource plan. The resource planner lists all personnel and project roles, durations, actual rates, shift pattern, derived estimated working days and inflation (as per the MSD).

1.19 Costs have been allocated to the Transmission Assets based upon the time spent between the transmission and generation businesses by the Developer's staff and the external contractors who worked on the Wind Farm development. Shared resource costs have been allocated to the Transmission Assets using the allocation rate of [redacted] %, derived from OFTO allocation percentages applied to each of the roles in the resource planner. This is an increase from the allocation rate used at the ITV stage of [redacted] %.

1.20 Our testing in relation to indirect costs (on a random sample of five employees) is summarised below:

Summary of indirect costs testing

	Function [internal/external]	June 2017 estimated cost £	June 2017 actual cost £	Agreed to invoice	Agreed to ledger	Agreement to bank
Rebecca Somers	Internal	[redacted]	[redacted]	✔	✔	✔
Tamsyn Rowe	Internal	[redacted]	[redacted]	✔	✔	✔
Antonio Lopez	Internal	[redacted]	[redacted]	✔	✔	✔
Robert Richardson	External	[redacted]	[redacted]	✔	✔	✔
Gareth Lindsay	External	[redacted]	[redacted]	✔	✔	✔
		[redacted]	[redacted]			

CONCLUSIONS

1.21 Our review of the Wind Farm's processes and procedures has indicated that it has suitable policies for the approval and payment of goods and services received, including for the allocation of costs where appropriate between the Transmission and Generation Assets.

1.22 On the basis of our review of the information and the explanations received to date in relation to the sample of directly and indirectly incurred costs that we have been asked to review, we can confirm that they are:

- supported by invoices, ledgers and bank statements that indicate that they have been incurred or are due; and

- that the relevant cost is included within the 7 November 2018 CAT.

1.23 This is subject to the cost of the Transmission Assets being increased by £[redacted] in relation to the APC contract, as detailed at paragraph 1.14 above and to obtaining the formal agreement which replaces the settlement agreement (5 October 2018).

1.24 We also recommend that Ofgem should discuss the increase of the OFTO costs included in the 7 November 2018 CAT, in particular the increase in relation to the category specific project management costs and the change to the OFTO allocation of resource (from [redacted]% to [redacted]%).

Grant Thornton UK LLP

Grant Thornton UK LLP
London

24 May 2019

2 INTRODUCTION

INSTRUCTIONS

2.1 Grant Thornton has been instructed by Ofgem to prepare a report on our review of the cost information and 7 November 2018 CAT for the Transmission Assets of the Wind Farm, prepared for Ofgem by the Developer (the ex-post review). This review is limited to the procedures set out in more detail in **Section 3**, and in particular to a sample of costs which have been selected by Ofgem.

2.2 Throughout the development of the Wind Farm, Ofgem has required the Developer to submit cost templates which set out both the estimated and actual costs that will be or have been incurred in relation to the Transmission Assets.

2.3 In October 2017, we conducted reviews of the cost template for the Transmission Assets, based upon the cost template submitted to Ofgem dated 17 May 2017 (the ex-ante review). At this stage, although construction of the Transmission Assets was well under way, as there remained a degree of uncertainty over a number of costs, a contingency provision of £[redacted] (which equated to [redacted] %[7] of the pre-contingency capital costs) was included in the Grant Thornton ex-ante report. The contingency cost was reduced to £[redacted] at ITV.

2.4 Further to the ex-ante review, Ofgem set the ITV in March 2018. This was based upon the Transmission Assets costs included in our report (dated 13 February 2018), and adjusted for particular issues that had been highlighted in our draft report as follows:

Breakdown of Transmission Assets costs

		13 February 2018 Grant Thornton ex-ante report £	Adjustments per Grant Thornton ex-ante report £	Reallocation of Grant Thornton adjustment £	Ofgem ex-ante adjustments £	March 2018 ITV £
Project common costs	CR8	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Offshore substation	CR2	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Submarine cable supply and installation	CR3	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Land cable supply and installation	CR4	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Onshore substation connection	CR5	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Reactive substation	CR6	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Connection costs	CR7	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Total capital costs		[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Interest during construction		[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
		[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

2.5 This report reflects the 7 November 2018 CAT together with information and explanations received by Grant Thornton up to and including 21 December 2018. Our report does not therefore reflect any information or the outcome of discussions held after that date.

[7] £[redacted] / (£[redacted] - £[redacted]) = [redacted] %

2.6 The construction of the Transmission Assets is complete and the Wind Farm became fully operational in March 2018.

2.7 The main purpose of the ex-post review of the Wind Farm's Transmission Assets is to determine whether a sample of costs, selected by Ofgem, which have been included within the 7 November 2018 CAT prepared by the Developer for the Transmission Assets, are appropriately stated, and whether selected costs not directly attributable to either the generation or transmission businesses have been allocated to the Transmission Assets on a reasonable basis. In particular we have been asked to:

- establish the processes and policies undertaken by the Wind Farm for making payments to suppliers for directly and indirectly incurred costs;
- in relation to directly incurred costs, for selected contracts, trace expenditure from the cash flow schedule to the contract, the invoice, the accounting ledgers of the Wind Farm, and to the bank statements, and reconcile the costs included on the invoice schedule to the 7 November 2018 CAT;
- in relation to indirectly incurred costs, for a sample of transactions, trace from the 7 November 2018 CAT to journal entries made on the accounting system, and confirm the amount allocated has been determined as prescribed in the cost allocation methodology that the Developer has indicated, using appropriate metrics in respect of the allocation of costs between transmission and generation; and
- compare the costs at 7 November 2018 to the ITV and obtain explanations for variances between the costs at the two dates.

2.8 If further information is produced and brought to our attention after service of this report, we reserve the right to revise our opinions as appropriate.

2.9 This work does not constitute an audit performed in accordance with Auditing Standards.

2.10 Except to the extent set out in this report, we have relied upon the documents and information provided to us as being accurate and genuine. To the extent that any statements we have relied upon are not established as accurate, it may be necessary to review our conclusions.

2.11 The report has been prepared using Microsoft Word and Microsoft Excel. The report may contain minor rounding adjustments due to the use of computers for preparing certain calculations.

RESTRICTION ON CIRCULATION

2.12 Grant Thornton does not accept or assume responsibility, duty of care, liability or other obligation to any third party other than Ofgem who as a result, either directly or indirectly, of disclosure of the whole or any part of this report by Ofgem receives, reads or otherwise obtains access to this document. Any party relying on this report does so entirely at their own risk.

2.13 In the preparation of this report, Grant Thornton has been provided with material by Ofgem (and by third parties at Ofgem's request) relating to third parties. We have relied upon warranties and representations provided by Ofgem that (i) Ofgem is fully entitled to disclose such information to us for inclusion within our report, free of any third party rights or obligations and (ii) Ofgem will only permit circulation of this report in accordance with any rights to confidentiality on the part of any third party. Any objections to the inclusion of the material should be addressed to Ofgem. Accordingly, Grant Thornton acknowledge no duty or obligation whatsoever to any party in connection to the inclusion in the report of any material referring to any third party material or the accuracy of such material.

DISCLOSURES OF INTEREST

2.14 To the best of our knowledge, we have no connection with any of the parties or advisors involved in the Wind Farm development that would in any way impact upon our independence in preparing this report.

FORMS OF REPORT

2.15 For your convenience, this report may have been made available to recipients in electronic as well as hard copy format. Multiple copies and versions of this report may therefore exist in different media and in the case of any discrepancy the final signed electronic copy should be regarded as definitive.

3 THE GWFL EX-POST REVIEW

INTRODUCTION

3.1 The Wind Farm comprises of 56 Siemens SWT-6.0-154 WTGs providing a total name plate capacity of 336MW. In August 2017, a powerboost was implemented increasing this capacity to 352.8MW. Each WTG is linked to the offshore electricity platform by buried subsea array cables. Two export cable circuits, each consisting of a buried subsea 132kV export cable approximately 45km in length and an onshore cable approximately 0.85km in length, connect the OSP to the onshore substation (adjacent to the existing 132kV Greater Gabbard substation located at Leiston). Finally, two underground cables of approximately 0.28km link the onshore substation to the NGET substation.

3.2 The Wind Farm is owned by a consortium of investors including Innogy SE (25%), Siemens Financial Services (25%), Sumitomo (12.5%) and ESB (12.5%) and a consortium managed by Green Investment Group and Macquarie Infrastructure and Real Assets (25%)..

3.3 The Developer has confirmed that the ownership structure of the Wind Farm, has not changed from our ex-ante report.

INFORMATION PROVIDED

3.4 Grant Thornton has relied upon the following information in reviewing the cost assessment for the Wind Farm's Transmission Assets:

- the 7 November 2018 CAT, which includes actual costs incurred up to September 2018 and accrued costs that will be incurred from that date up to the closing out of all contracts, together with a list of variances between the March 2018 ITV (as detailed at paragraph 2.4 above) and the 7 November 2018 CAT;
- schedules of invoices prepared for the contracts selected for review by Ofgem, together with copies of contract documentation, invoices, bank statements and ledgers showing payments of the invoices recorded;
- schedules providing supporting information for the internal project management costs with copies of invoices and bank statements showing payments of the related invoices; and
- information and explanations provided to us by the Developer. This included a visit to Innogy's offices on 10 December 2018 to discuss the Transmission Assets, and subsequent email correspondence with staff responsible for the preparation of the 7 November 2018 CAT.

EX-POST REVIEW

3.5 The main purpose of the ex-post review is as set out in **Section 2**.

3.6 The 7 November 2018 CAT for the Transmission Assets of the Wind Farm is summarised below:

Breakdown of Transmission Assets costs

	CAT Reference	March 2018 ITV £	7 November 2018 CAT £	Movement £
Project common costs	CR8	[redacted]	[redacted]	[redacted]
Offshore substation	CR2	[redacted]	[redacted]	[redacted]
Submarine cable supply and installation	CR3	[redacted]	[redacted]	[redacted]
Land cable supply and installation	CR4	[redacted]	[redacted]	[redacted]
Onshore substation connection	CR5	[redacted]	[redacted]	[redacted]
Reactive substation	CR6	[redacted]	[redacted]	[redacted]
Connection costs	CR7	[redacted]	[redacted]	[redacted]
Total capital costs		[redacted]	[redacted]	[redacted]
Interest during construction		[redacted]	[redacted]	[redacted]
		[redacted]	[redacted]	[redacted]

THE WIND FARM'S FINANCIAL PROCESSES

Accounting systems

3.7 The Developers confirmed that there have been no changes in its accounting system since our ex-ante review.

3.8 All costs of the Wind Farm are posted to a Work Breakdown Structure (WBS) code in the accounting system. Costs have been grouped dependent on the cost activity that they relate to and whether they relate entirely to Transmission or Generation Assets, or to the Wind Farm as a whole (shared costs).

3.9 Shared costs are typically indirect costs which are for the general benefit of the overall project and include:

- general project management and administration;
- project support functions e.g. procurement, cost control, health and safety;
- general consultants e.g. legal/environment and consent;

3.10 Where costs are not directly attributable to either the transmission or generation business (shared/indirect costs), the Developer has allocated costs to the Transmission Assets using three different Cost Allocation Keys (CAKs):

- CAK1 – Cost-based CAK. Direct Transmission Assets costs as a percentage of total capital expenditure (CAPEX). The cost of Transmission Assets CAPEX is taken as a percentage of total Wind Farm CAPEX, where the rate derived is 23.0%[8] - the rate remains unchanged from our ex ante report;

[8] £[redacted] (OFTO main works) / £[redacted] (total CAPEX for main works) = [redacted]%. For calculation purpose, the Developer has rounded this up to [redacted]%

- CAK2 – Time-based CAK. Innogy internal project team time that is directly related to the Transmission Assets as a percentage of the total project team time that can be allocated either to the Transmission or to the Generation Assets. The overall OFTO derived rate of [redacted]% is applied to costs where it is reasonable to allocate indirect costs based on how much direct project team time is spent on different assets. This is an increase of 3.4 percentage points from the rate applied at the time of our ex-ante report;
- CAK3 – Area based CAK. For costs such as offshore site investigation and UXO clearance, where there are clear geographical areas in relation to costs incurred, the allocation has been made based on the proportion of offshore lease area. The Developer has determined that the Transmission Assets share of the geographical area of the Wind Farm is [redacted]%[9].

Process for making payments

3.11 The main process used by the Developer for making payments for both directly and indirectly incurred costs is set out below:

- initially, contractors submit applications for payment to the Developer. Applications for payment are required to be approved within 10 days and a payment certificate is issued once approved by the Package Manager and Contract Manager. Contractors subsequently prepare invoices following the receipt of payment certificates;
- invoices are received through the Galloper Invoicing Inbox. Once the source of the payment request has been identified (ie GWFL contracted Vendors or RWE Innogy UK Ltd vendors), the invoice is recorded on the GRN (Good Receipt Notice) register;
- a Payment Request Form (PRF) is required to be added to the invoice prior to passing to Projects Controls. This facilitates the split between PO lines, either for different WBS allocation or, for Contractors, to identify day rate costs from expenses;
- Projects Controls ensure the bank information is correct and add the latter to the PRF along with PO allocations and any splits required and the payment due date;
- invoices are reviewed by the Package Manager, supported by their Contract Manager, in order to check existence of a verifiable purchase order with sufficient remaining value;
- approvals are logged within the mailbox folder structure and within the SAP attachment to the GRN. Once the PRF, signed for approval, is received, the net value is GRN'd against the purchase order;
- GRN details (GRN ref, PO, line and invoice details) are then sent by email to 'AP SAP Administrator' and once the GRN is successfully matched by AP, the payment is processed;

[9] 11.25km² (OFTO area)/ 34.29km² (total area) = [redacted]%

- the Interim Manual Payment Process is then carried out between AP and Finance (Project Accountant) to ensure the correct payment date information and authorisation to make payment is in place. If a match does not take place, the invoice will appear on the list of parked invoices. The Project Controls team and Project Accountant review this list weekly.

Contract variations

3.12 The Developer has confirmed that the process for payment of contract variations is the same as for the general invoice system set out above.

REVIEW OF DIRECTLY INCURRED COSTS

3.13 Ofgem has selected the following two contracts of directly incurred costs for review:

Summary of directly incurred costs selected for testing

	CAT Reference	7 November 2018 CAT £	% of total Transmission Asset capital costs
VBMS Contract	CR3	[redacted]	[redacted]
APC	CR2	[redacted]	[redacted]
APC	CR4	[redacted]	[redacted]
APC	CR5	[redacted]	[redacted]
APC	CR6	[redacted]	[redacted]
		[redacted]	[redacted]

3.14 Ofgem has directed that our work in relation to these contracts covers the following:

- trace expenditure from the cash flow schedule to the relevant contract or other source record, and from the contract trace to an invoice(s) or journal;
- trace the invoice through the purchasing system;
- trace the invoice through to the payment system; and
- trace the payments through to the bank account.

3.15 Our testing in relation to these contracts is further detailed in **Appendix 1,** with the detailed testing for each of the suppliers in **Appendices 2 to 5**, and our findings are summarised in the following table:

Summary of direct costs testing

	Invoices paid £	Accrued amounts	Amounts not related to the Transmission Assets £	Total per 7 November 2018 CAT £
VBMS Contract	[redacted]	[redacted]	[redacted]	[redacted]
	[redacted]	[redacted]	[redacted]	[redacted]
	[redacted]	[redacted]	[redacted]	[redacted]
APC Contract - CR2	[redacted]	[redacted]	[redacted]	[redacted]
APC Contract - CR4	[redacted]	[redacted]	[redacted]	[redacted]
APC Contract - CR5	[redacted]	[redacted]	[redacted]	[redacted]
APC Contract - CR6	[redacted]	[redacted]	[redacted]	[redacted]
APC	[redacted]	[redacted]	[redacted]	[redacted]
	[redacted]	[redacted]	[redacted]	[redacted]
	[redacted]	[redacted]	[redacted]	[redacted]
	[redacted]	[redacted]	[redacted]	[redacted]
Total	[redacted]	[redacted]	[redacted]	[redacted]
	[redacted]	[redacted]	[redacted]	[redacted]

Invoices paid

3.16 Our review of invoices paid by the Developer, relating to the two contracts selected by Ofgem, confirmed payment to the contractor and raised no areas of concern.

Accrued amounts

3.17 Our review of accrued amounts in relation to the contracts raised no areas of concern. The accrued costs relate to the final documentation invoices which are still to be invoice and paid. For the APC contract, we have been provided with a breakdown of the total contract costs which we have agreed to the contract and variation orders. The Developer has confirmed that, as part of settlement negotiations with APC, further costs of £[redacted] in relation to the capacitor can defect are required and accordingly an increase in the Transmission Costs of £[redacted] is required.

Amounts not related to the Transmission Assets

3.18 Amounts not related to the Transmission Assets represent amounts paid to contractors which relate to the portion of the Wind Farm being retained by the Developer.

3.19 For APC, costs have been allocated to either OFTO or the Developer on a line by line basis, save for project management costs that have been allocated based upon the Transmission Asset costs as a proportion of total contract non-project management costs.

REVIEW OF INDIRECTLY INCURRED COSTS

Project management costs

3.20 Ofgem has directed that our work in relation to project management costs covers the following:

- select a random sample of five employees;
- agree costs from each individuals timesheet to the system; and
- agree corresponding payment from the project.

3.21 Our detailed testing in relation to project management costs is set out in **Appendix 4**, and our findings are summarised in the following table:

Summary of indirect costs testing

	Function [internal/external]	June 2017 estimated cost £	June 2017 actual cost £	Agreed to invoice	Agreed to ledger	Agreement to bank
Rebecca Somers	Internal	[redacted]	[redacted]	✔	✔	✔
Tamsyn Rowe	Internal	[redacted]	[redacted]	✔	✔	✔
Antonio Lopez	Internal	[redacted]	[redacted]	✔	✔	✔
Robert Richardson	External	[redacted]	[redacted]	✔	✔	✔
Gareth Lindsay	External	[redacted]	[redacted]	✔	✔	✔
		[redacted]	[redacted]			

3.22 Our testing of project management support services costs demonstrated that costs have been paid as stated.

3.23 For the avoidance of doubt, we have not verified the suitability of the hourly rates (as set out in the CMA) charged to the project by the developer.

MOVEMENTS IN THE COST ASSESSMENT

3.24 The movements between the ITV set in March 2018 and the most recent cost assessment of 7 November 2018 are summarised in the following table:

Breakdown of Transmission Assets costs

	CAT Reference	March 2018 ITV £	7 November 2018 CAT £	Movement £
Project common costs	CR8	[redacted]	[redacted]	[redacted]
Offshore substation	CR2	[redacted]	[redacted]	[redacted]
Submarine cable supply and installation	CR3	[redacted]	[redacted]	[redacted]
Land cable supply and installation	CR4	[redacted]	[redacted]	[redacted]
Onshore substation connection	CR5	[redacted]	[redacted]	[redacted]
Reactive substation	CR6	[redacted]	[redacted]	[redacted]
Connection costs	CR7	[redacted]	[redacted]	[redacted]
Total capital costs		[redacted]	[redacted]	[redacted]
Interest during construction		[redacted]	[redacted]	[redacted]
		[redacted]	[redacted]	[redacted]

3.25 The 7 November 2018 CAT reflects a net increase in the cost of the Transmission Assets of £[redacted] from the March 2018 ITV, with the more significant movements comprising increases in certain capital costs amounting to £[redacted] and decreases in certain capital costs of £[redacted]. The principal increases and reasons for the increases in certain costs of £[redacted] are detailed below:

- a £[redacted] increase in relation to the Electrical Systems contract (APC)[10] – the contract is not yet closed out, and the expected forecast is based upon the signed terms of reference for a settlement to the outstanding disputed costs between the Developer and APC. This increase relates to extensions to the Time for Completion and for additional payment arising out of, and in connection with, the delays to the works;
- a £[redacted] increase in relation to Jack-up barge and supply boat:
- a £[redacted] increase in relation to export cable variations, which include variations for additional surveys, testing, beach works and delayed operations; and
- a £[redacted] increase in relation to resource[11], due to changes in the resource plan (e.g. change in role durations or change to the OFTO allocation of resource.)

3.26 The principal increases and reasons for the decreases in certain costs of £[redacted] are detailed below:

- the release of £[redacted] of contingency and uncertain costs;
- a £[redacted] decrease in CTV costs, as a result of "*firmed-up*" costs in the FTV compared to estimated forecast costs within the ITV;
- a £[redacted] decrease in transaction costs, which in part relates to removal of contingencies for transaction fees and enabling fees which were in place at the time of the ITV and which have subsequently not materialised.

3.27 The full analysis of the above variances is presented at **Appendix 5**.

IMPACT OF COST ASSESSMENT REVIEW

3.28 Following our review of the 7 November 2018 CAT, as detailed above, we consider that, other than increasing the cost of the Transmission Assets by £[redacted] in relation to the APC contract for the completion of outstanding works in relation to the capacitor can defect, there are no further amendments to be made to the cost template.

3.29 As detailed in **Appendix 5**, paragraph 5.17, included in CR5 "Onshore Substation" is an increase of £[redacted] in relation to category specific project management costs. We recommend that Ofgem should discuss these costs further with the Developer.

[10] £[redacted] increase is split across the four CAT templates: £[redacted] (CR2) + £[redacted] (CR4) + £[redacted] (CR5) + £[redacted] (CR6) = £[redacted]

[11] £[redacted] increase is split across two CAT templates: £[redacted] (CR5) + £[redacted] (CR8) = £[redacted]

1 INVOICE TESTING

VBMS

1.1 The 7 November 2018 CAT includes an amount of £[redacted] which was due to VBMS for the design, fabrication, supply, installation and testing of 132kV export cables, which is made up as follows:

VBMS

	£
Invoices paid	[redacted]
OFTO eligible amount	[redacted]
Invoiced but not paid	[redacted]
Total amounts paid	[redacted]
Total VBMS costs per 7 November 2018 CAT (£)	[redacted]

Review of amounts paid

1.2 We obtained a schedule of all amounts paid under the VBMS contract which recorded 38 purchase invoices. This schedule is included at **Appendix 2**.

Vouching to invoices

1.3 We agreed all 38 invoices recorded on the schedule to the underlying invoice.

Vouching to purchase ledger

1.4 We agreed all 38 amounts to the purchase ledger.

Vouching to bank statements

1.5 We agreed the payment of all 38 amounts to bank statements.

APC

1.6 The 7 November 2018 CAT includes an amount of £[redacted] payable to APC for the provision of electrical systems work and installation of an offshore substation platform, which is made up as follows:

APC

	£
Invoiced amounts	[redacted]
Accrued costs	[redacted]
Total amounts paid/payable	[redacted]
Amounts not related to the Transmission Assets	[redacted]
Total amounts paid/payable in relation to the Transmission Assets	[redacted]
Total APC costs per 7 November 2018 CAT (£)	[redacted]
	[redacted]

Review of amounts paid

1.7 We obtained a schedule of all invoices paid under the APC contract which recorded 27 purchase invoices. This is included at **Appendix 3**.

Vouching to invoices

1.8 We agreed all 27 invoices recorded on the schedule to the underlying invoice.

Vouching to purchase ledger

1.9 We agreed all 27 invoices to the purchase ledger.

Vouching to bank statements

1.10 We agreed the payment of all 27 invoices to bank statements.

Accrued amounts

1.11 Our review of accrued amounts in relation to the APC contract raised no areas of concern. The accrued costs relate to the final documentation invoices which are still to be invoice and paid. For the APC contract, we have been provided with a breakdown of the total contract costs which we have agreed to the contract and variation orders. The Developer has confirmed that, as part of settlement negotiations with APC, further costs of £[redacted] in relation to the capacitor can defect are required and accordingly an increase in the Transmission Costs of £[redacted] is required.

Amounts not related to the Transmission Assets

1.12 Amounts not related to the Transmission Assets represent amounts paid to contractors which relate to the Generation Assets.

1.13 For APC, costs have been allocated to either Transmission or Generation Assets on a line by line basis according to the nature of the costs, save for project management costs that have been allocated based upon the total of other contract costs attributable to either the Transmission or Generation Assets.

2 VBMS INVOICE REVIEW

Invoice no.	Description	Invoice date	Net invoice value £	Date paid	Agreed to invoice	Agreed to ledger	Agreed to bank
PJ1402150024	M1 - Receipt of Notice to Proceed, Hedging of LME metals, first production length 132 kV AC Submarine Export cable production commencement	[redacted]	[redacted]	[redacted]	✔	✔	✔
PJ1402150029	M4 - Second production length 132kV C Submarine Export cable production commencement	[redacted]	[redacted]	[redacted]	✔	✔	✔
PJ1402160011	M7 - Approval of Baseline Programme, M10 - Approval of HSE & S Plan	[redacted]	[redacted]	[redacted]	✔	✔	✔
PJ1402160015	M5 - Factory Acceptance Test (FAT) of length 1.1 132kV AC Submarine Export Cables successfully complete, M6 Factory Acceptance Test (FAT) of length 1.2 132kV AC Submarine Export cables successfully completed	[redacted]	[redacted]	[redacted]	✔	✔	✔
PJ1402160031	M8 Approval of Project Administration Manual	[redacted]	[redacted]	[redacted]	✔	✔	✔
PJ1402160032	M11 Factory Acceptance Test (FAT) of length 1-3 132 KB submarine cable successfully completed	[redacted]	[redacted]	[redacted]	✔	✔	✔
PJ1402160059	M9 Approval of route engineering	[redacted]	[redacted]	[redacted]	✔	✔	✔
PJ1402160083	M13 - Approval Engineering & Construction Manual	[redacted]	[redacted]	[redacted]	✔	✔	✔
PJ1402160039	M21 - Mobilisation of Beach Team	[redacted]	[redacted]	[redacted]	✔	✔	✔
PJ1402160047	M14 Approval of CPP (as per CDM Regs 2007) M18 Mobilisation of installation spread	[redacted]	[redacted]	[redacted]	✔	✔	✔
PJ1402160048	M12: Cable splice connecting lengths 1.1 & 1.2, M15: Cable splice connecting lengths 1.2 & 1.3	[redacted]	[redacted]	[redacted]	✔	✔	✔
PJ1402160050	M20: Load and testing of cable 1 and transport to Galloper site	[redacted]	[redacted]	[redacted]	✔	✔	✔
PJ1402160051	M22: Start of cable 1 pull-in beach operations	[redacted]	[redacted]	[redacted]	✔	✔	✔
PJ1402160058	M16: Evidence of Marine Permits, Approval of RAMS by MWS, Completion of installation spread trials	[redacted]	[redacted]	[redacted]	✔	✔	✔
PJ1405160064	M24: Lay down cable and protect at OSP location (wet storage) (outside scope of UK VAT due to work taking place greater than 12NM from the UK)	[redacted]	[redacted]	[redacted]	✔	✔	✔
PJ1402160097	M23: Installation/burial of cable 1 to OSP	[redacted]	[redacted]	[redacted]	✔	✔	✔
PJ1402160087	VO 004 - Provision of Guard vessel	[redacted]	[redacted]	[redacted]	✔	✔	✔
PJ1403160099	M27 - Factory acceptance test (FAT) of length 2.1 132kV AC submarine. Export cables successfully completed	[redacted]	[redacted]	[redacted]	✔	✔	✔
PJ1402170001	VO 004 - Provision of guard vessel during	[redacted]	[redacted]	[redacted]	✔	✔	✔

Invoice no.	Description	Invoice date	Net invoice value £	Date paid	Agreed to invoice	Agreed to ledger	Agreed to bank/ credit note
PJ1402170004	M28 Factory acceptance test (FAT)	[redacted]	[redacted]	[redacted]	✔	✔	✔
PJ1402170003	M29 Factory acceptance test (FAT)	[redacted]	[redacted]	[redacted]	✔	✔	✔
PJ1402170012	VO 004 - Provision of Guard vessel	[redacted]	[redacted]	[redacted]	✔	✔	✔
PJ1402170021	VO 009 - Additional survey works	[redacted]	[redacted]	[redacted]	✔	✔	✔
PJ1402170024	VO 004 - Provision of Guard vessel from 20/01/2017 to 28/02/2017	[redacted]	[redacted]	[redacted]	✔	✔	✔
PJ1402170025	VO 009 - Delayed Landfall demobilisation	[redacted]	[redacted]	[redacted]	✔	✔	✔
PJ1402170032	MS30 - Cable splice connecting lengths VO 008 - Reduction in spare cable length	[redacted]	[redacted]	[redacted]	✔	✔	✔
PJ1402170040	AAN 1 OSP delay	[redacted]	[redacted]	[redacted]	✔	✔	✔
PJ1402170041	VO 004 - Guard Vessel 1st to 31st March 2017	[redacted]	[redacted]	[redacted]	✔	✔	✔
PJ1402170044	M32 - Load & testing of cable 2, M33 - Mobilisation of Beach Team	[redacted]	[redacted]	[redacted]	✔	✔	✔
PJ1402170048	VO 004 - Provision of Guard vessel	[redacted]	[redacted]	[redacted]	✔	✔	✔
PJ1402170054	Milestone 32.1 - Contract agreement N0. 01 0.5% increase	[redacted]	[redacted]	[redacted]	✔	✔	✔
PJ1402170055	V004 provision of guard vessel	[redacted]	[redacted]	[redacted]	✔	✔	✔
PJ1402170058	M39 - Vessel demobilisation of installation spread	[redacted]	[redacted]	[redacted]	✔	✔	✔
PJ1402170070	M36 - OSP permanent hang offs cables 1, MS7 - OSP pull-in & temporary hang-off cable 2, OSP permanent hang-offs cables 2	[redacted]	[redacted]	[redacted]	✔	✔	✔
PJ1405170052	Acceptance of F Testing cable 1, Amour Anchor cable 1, Recover and install wet storage cable 1, installation/burial cable 2, Completion of beach joints 1 & 2, Provision of Guard vessel, With-held amounts by EMPLOYER. AAN 1 OSP delay	[redacted]	[redacted]	[redacted]	✔	✔	✔
II1452180027	M40 Finish of cable lying and burial and variations	[redacted]	[redacted]	[redacted]	✔	✔	✔
II1452180043	M41 - Terminate cables 1 & 2 OSP	[redacted]	[redacted]	[redacted]	✔	✔	✔
II1452180059	M42, Complete testing of cables 1&2, Cables 1&2 detailed report, client acceptance, documentation - variations	[redacted]	[redacted]	[redacted]	✔	✔	✔
Paid to date			[redacted]				

3 APC INVOICE REVIEW

Invoice no.	Description	Invoice date	Net invoice value £	Date paid	Agreed to invoice	Agreed to ledger	Agreed to bank/ credit note
7000500394	Certificate n1	[redacted]	[redacted]	[redacted]	✔	✔	✔
7000505624	Certificate n2	[redacted]	[redacted]	[redacted]	✔	✔	✔
7000510884	Certificate n3	[redacted]	[redacted]	[redacted]	✔	✔	✔
7000515202	Certificate n4	[redacted]	[redacted]	[redacted]	✔	✔	✔
34156IN072	Certificate n5	[redacted]	[redacted]	[redacted]	✔	✔	✔
7000522384	Certificate n6	[redacted]	[redacted]	[redacted]	✔	✔	✔
7000524605	Certificate n7	[redacted]	[redacted]	[redacted]	✔	✔	✔
7000530224	Certificate n8	[redacted]	[redacted]	[redacted]	✔	✔	✔
7000532778	Certificate n9	[redacted]	[redacted]	[redacted]	✔	✔	✔
7000537948	Certificate n10	[redacted]	[redacted]	[redacted]	✔	✔	✔
7000543794	Certificate n11	[redacted]	[redacted]	[redacted]	✔	✔	✔
7000548314	Certificate n12	[redacted]	[redacted]	[redacted]	✔	✔	✔
7000553037	Certificate n12a	[redacted]	[redacted]	[redacted]	✔	✔	✔
7000554148	Certificate n13	[redacted]	[redacted]	[redacted]	✔	✔	✔
7000558373	Certificate n14	[redacted]	[redacted]	[redacted]	✔	✔	✔
7000562223	Certificate n15	[redacted]	[redacted]	[redacted]	✔	✔	✔
7000568052	Certificate n16	[redacted]	[redacted]	[redacted]	✔	✔	✔
7000571607	Certificate n17	[redacted]	[redacted]	[redacted]	✔	✔	✔
7000578807	Certificate n18	[redacted]	[redacted]	[redacted]	✔	✔	✔
7000584429	Certificate n19	[redacted]	[redacted]	[redacted]	✔	✔	✔
7000587997	Certificate n20	[redacted]	[redacted]	[redacted]	✔	✔	✔
7000592687	Certificate n21	[redacted]	[redacted]	[redacted]	✔	✔	✔
7000598608	Certificate n22	[redacted]	[redacted]	[redacted]	✔	✔	✔
34156IN081	Certificate n23	[redacted]	[redacted]	[redacted]	✔	✔	✔
34156IN083	Certificate n24	[redacted]	[redacted]	[redacted]	✔	✔	✔

Invoice no.	Description	Invoice date	Net invoice value £	Date paid	Agreed to invoice	Agreed to ledger	Agreed to bank/ credit note
34156IN084	Certificate n25	[redacted]	[redacted]	[redacted]	✔	✔	✔
34156IN085	Certificate n26	[redacted]	[redacted]	[redacted]	✔	✔	✔
Paid to date			[redacted]				

4 INDIRECT COSTS REVIEW

PROJECT MANAGEMENT COSTS

4.1 The Developers have outlined the process for allocating project management costs to the Transmission Assets. The process is as follows:

- the Developer has a resource planner, which includes both internal employees and external employees, which is updated for actuals every three months, by each individual and activity during the construction of the Wind Farm;
- each role in the resource planner is also assigned an estimated OFTO percentage allocation, based upon their role. These percentages are subsequently *"firmed-up"* with actual OFTO allocations based upon the data from the internal time reporting system, CSS, which allows employees to allocate their time to specific work streams;
- in terms of payment, estimated quarterly costs from the resource planner are billed and paid in arrears;
- once data from the internal time reporting system has been gathered, a "*firmed-up*" invoice is then produced, which is either a credit or debit, depending on the difference between the estimated cost and the actual cost, and this "*firmed-up*" amount is subsequently paid/or received through the bank.

4.2 As instructed by Ofgem, we selected a sample of five individuals for us to test the above process.

4.3 The Developers have provided details from these five employees' estimated and actual timesheet records. We have traced these to the estimated and "*firmed-up*" invoices being raised, posted on the system and paid as follows:

Internal project management costs

Employee	Function [internal/ external]	June 2017 actual hours	Rate (day) £	Cost £	Agreed to invoices	Agreed to ledger	Date estimated invoice paid	Date "*firmed-up*" invoice paid	Agreed to bank
Rebecca Somers	Internal	[redacted]	[redacted]	[redacted]	✔	✔	[redacted]	[redacted]	✔
Tamsyn Rowe	Internal	[redacted]	[redacted]	[redacted]	✔	✔	[redacted]	[redacted]	✔
Antonio Lopez	Internal	[redacted]	[redacted]	[redacted]	✔	✔	[redacted]	[redacted]	✔
Robert Richardson	External	[redacted]	[redacted]	[redacted]	✔	✔	[redacted]	[redacted]	✔
Gareth Lindsay	External	[redacted]	[redacted]	[redacted]	✔	✔	[redacted]	[redacted]	✔
				[redacted]					

5 MOVEMENTS BETWEEN THE COST TEMPLATES

5.1 We have been instructed to compare the total Transmission Asset costs as set out in the 7 November 2018 CAT with the total Transmission Asset costs included within the ITV at March 2018, and to obtain explanations for variances between the two dates. The movement is summarised in the table below:

Breakdown of Transmission Assets costs

	CAT Reference	March 2018 ITV £	7 November 2018 CAT £	Movement £
Project common costs	CR8	[redacted]	[redacted]	[redacted]
Offshore substation	CR2	[redacted]	[redacted]	[redacted]
Submarine cable supply and installation	CR3	[redacted]	[redacted]	[redacted]
Land cable supply and installation	CR4	[redacted]	[redacted]	[redacted]
Onshore substation connection	CR5	[redacted]	[redacted]	[redacted]
Reactive substation	CR6	[redacted]	[redacted]	[redacted]
Connection costs	CR7	[redacted]	[redacted]	[redacted]
Total capital costs		[redacted]	[redacted]	[redacted]
Interest during construction		[redacted]	[redacted]	[redacted]
		291,647,614	**300,676,373**	**9,028,759**

5.2 We have sought explanations from the Developers for the reasons for the significant movements in each of the cost categories and these are summarised below:

PROJECT COMMON COSTS

5.3 Project common costs have decreased by a net amount of £[redacted].

Decrease of £[redacted]

5.4 The largest decrease within this cost category is the release of £[redacted] in relation to contingency. Contingency has been removed from the FTV as risks have either been mitigated, transferred or crystallised.

Decrease of £[redacted]

5.5 There was a further decrease of £[redacted] in relation to transaction costs, comprising legal fees which have been reduced, due to contingencies in place at the time of the ITV having subsequently not materialised. The decrease also comprises the reallocation of costs from OFTO transactional fees, such as identifiable resource costs (OFTO Manager), to project common resource costs.

Increase of £[redacted]

5.6 Offsetting the above decreases, resource (non-category specific) costs have increased by £[redacted] – this is as a result of changes to the resource plan, such as change in role durations, change to the OFTO allocation of resource (OFTO resource allocation rate increasing from [redacted] % to [redacted] %)

OFFSHORE SUBSTATION

5.7 Offshore substation costs have increased by a net amount of £[redacted].

Increase of £[redacted]

5.8 Variations in relation to the APC electrical systems contract are split across the four CAT templates for Offshore, Onshore substation, Reactive substation and Onshore Cable – together, they form the variations to close out the contract. We note four significant increases in relation to the APC electrical systems contract which are split across the CAT categories as follows: £[redacted] (offshore substation); £[redacted] (land cable); £[redacted] (onshore substation); and £[redacted] (reactive substation). The Developers have provided us with the signed Settlement Terms of Reference (5 October 2018) for the APC contract, which confirms that the contract price is to be increased by £[redacted], of which £[redacted] relates to the offshore substation, with the Developers allocating the additional costs of the electrical contract only to each category based upon the total cost of the contract. This overall increase relates to extensions to the Time for Completion and for additional payment arising out of and in connection with the delays to the works. After taking into account the liquidated damages of £[redacted], in respect of reimbursement of lost revenue, the contract stands at £[redacted]. This amount has been agreed to the FTV back up document, and the OFTO element, namely £[redacted] has been agreed to the FTV CAT.

Increase of £[redacted]

5.9 There was a further increase of £[redacted] in relation to jack-up barge and supply boats – variation orders have been provided which substantiate the extension of the use of the Seajacks Jack-Up Vessel 'Hydra'.

Decrease of £[redacted]

5.10 Offsetting the above increases, there was a decrease of £[redacted], relating to a decrease in the use of crew/personnel transfer vessels provided by James Fisher Marine Services.

SUBMARINE CABLE SUPPLY & INSTALLATION

5.11 Submarine cable supply and installation costs have increased by a net amount of £[redacted].

Increase of £[redacted]

5.12 The largest increase within this cost category is an increase of £[redacted], in relation to export cable variations (VBMS). A summary of the variations has been provided to us, along with the relevant variation orders – these include additional surveys, testing, beach works and delayed operations. We have been provided with the final payment certificate, which details the total variations of £[redacted]. This sum is reflected in the FTV back up document. Out of the £[redacted], £[redacted] relates to the provision of the guard vessel, £[redacted] is a consequential delay payment and is deemed non-OFTO and the remaining £[redacted] covers all variations in relation to the VBMS contract, which equals the value in the FTV.

LAND CABLE SUPPLY & INSTALLATION

5.13 Land cable supply and installation costs have increased by a net amount of £[redacted].

Increase of £[redacted]

5.14 The largest increase within this cost category is an increase of £[redacted]. Please refer to paragraph 5.8.

ONSHORE SUBSTATION

5.15 Onshore substation costs have increased by a net amount of £[redacted].

Increase of £[redacted]

5.16 This relates to variations in relation to the APC contract. Please refer to paragraph 5.8.

Increase of £[redacted]

5.17 There was a further increase of £[redacted], in relation to category specific project management, which is a result of changes to the resource plan, such as change in role durations, and "*firmed-up*" allocations.

REACTIVE SUBSTATION

5.18 Reactive substation costs have increased by a net amount of £[redacted].

Increase of £[redacted]

5.19 This relates to variations in relation to the APC contract. Please refer to paragraph 5.8.

CONNECTION COSTS

5.20 There has been no movement in connection costs.

INTEREST DURING CONSTRUCTION

5.21 Interest during construction (IDC) has increased by £[redacted]. IDC is outside the scope of this review and therefore no further work has been performed in this area.

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