

CONSULTATION ON OFFSHORE TRANSMISSION COST ASSESSMENT: DEVELOPMENT PROPOSALS)

SCOTTISHPOWER RENEWABLES RESPONSE

Chapter 2: The current cost assessment process

Question 1

Are there any factors, other than those mentioned, that we should consider in relation to developing the cost assessment process?

We agree with Ofgem's consideration of the factors of Data Definition and Data Provision, Continuity and Clarity, and Certainty of Regulatory Treatment of Costs when considering how their approach to cost assessment may be enhanced. Taking each factor in turn we would note the following:

- **Data provision:** We agree with Ofgem's proposal that clearer data definitions and improved templates would be beneficial. Coupled with this, the process may also be enhanced if an agreed comprehensive list of deliverables to Ofgem and their appointed auditor could be developed to ensure consistency of submission, in substance and format, at both the ITV and FTV stages. We believe that this would avoid duplication and streamline the process, with improvements in consistency and interpretation of data provided.
- **Initial engagement from Ofgem:** Low carbon, intermittent technologies continue to evolve with substantial innovation required to support the development and incorporation of Round 3 offshore wind in both a technological and market sense. It may be desirable for Ofgem to engage with developers earlier during the project definition/development stage in order to better appreciate the parameters within which a project will develop with regard to the contracting, construction and installation strategies selected (i.e. EPC contracting method vs multi-contracting method),. Developers would likewise benefit from greater assurance that there was a greater understanding of the rationale supporting their approach with an opportunity to appropriately query or challenge during the development process.

In addition we would propose that the technical analysis of the design should be cognisant of National Grid CIONs and early design work completed by the developer. This key stage of development is completed many years before the ITV is calculated. If Ofgem engaged earlier in the process, with an opportunity to comment on the appropriate functionality of the system at this earlier stage in the project, this could streamline later processes and avoid unnecessary delays or costs that may otherwise be incurred.

Such an approach may serve to complement initiatives elsewhere in Ofgem regarding the potential for greater coordination of offshore transmission, previously consulted on by Ofgem¹.

Given the limited number of OFTO processes to date, and the continuing evolution of offshore wind as it moves further from shore, into deeper waters with Round 3 projects, there will likely be further learnings and advancements in offshore transmission. We would therefore welcome the opportunity to engage with Ofgem to understand more fully how the cost assessment methodology should evolve over time.

¹<https://www.ofgem.gov.uk/ofgem-publications/51533/consultationonaproposedframeworktoenablecoordinationofoffshoretransmission.pdf>

Chapter 3: Potential approaches for developing benchmarking

Question 1

What are your views on the appropriate dataset to use for deriving benchmarks and how they could be used in the cost assessment process? What are your reasons for this preference?

We recognise that past cost information can be a helpful indication of potential future costs; however, there would require to be some flexibility so as not overly generalise during a period where the offshore wind sector is moving towards more complex and innovative projects as part of Round 3.

Should earlier datasets be relied on for benchmarking purposes (Initial or ITV), it could mean that forecasted costs are being compared rather than a comparison with actual outturn costs, increasing the potential for error as certain unplanned events may not have been accounted for at that early stage.

Future dated projects should take account of past experience with regard to risks and potential cost implication when developing the assumption base for its initial value and ITV. However, no developer could have perfect foresight of the potential risks and in spite of past experience or benchmarking, although potentially a useful indicator, there may be deviations from time to time. For example, exceptional weather, unforeseen ground conditions or a damaged export cable are examples of incidents that could occur with implications for cost. Whilst a risk-adjusted view may have been taken in determining the Initial or ITV it will potentially not reflect the actual cost incurred (i.e. DFTV).

As noted, we anticipate that there will be a shift in the engineering and innovation approach to offshore wind as we progress to Round 3, with the scale and location of projects calling for more advanced installation techniques and vessels than currently used for the smaller scale, near shore, shallow projects in Rounds 1&2. Benchmarks derived from Rounds 1&2 will not include such elements and therefore would be of limited usefulness.

We agree with Ofgem that DFTV could be an appropriate dataset from which to derive benchmarks (corrected for data errors and misallocations). As noted, the corrected DFTV would include the cost incurred due to issues that arise in reality during the actual construction, e.g. construction delays, and so represent a factual view of the comparators in a group. DFTV requires the developer to have a firm understanding of the balance of costs from the 90-95% to the 100% total spend level. We would propose that Ofgem also consider any 'major' outstanding construction milestones (not necessarily determined by % cost of the entire project) or significant issues raised by the Preferred Bidder (i.e. costs Ofgem anticipate will be needed before agreement is reached) on a case by case basis. Together with the developer, Ofgem could then appraise the issue and ensure an appropriate Final Transfer Value is developed.

Question 2

What are your views on the appropriateness of total project cost benchmarking? If you believe it is an appropriate approach, what should be the cost driver(s) to be used for such benchmarking?

As previously mentioned the characteristics of offshore wind will change as we move from Rounds 1&2 to the further from shore, deeper water, substantially larger Round 3 sites.

Round 3 offshore wind will also require substantial innovation compared to current offshore wind practices with regard to complexity of location and operation and requirement to utilise more innovative technologies

With regard to total project cost benchmarking, whilst there may be some benefit of benchmarking to support initial contractual negotiations, other factors may influence the cost at any particular time such as supply chain capacity, global demand, availability of installation vessels, volatility of commodity markets affects costs and as such costs may vary over time.

In addition project specific issues may also affect costs such as location, environmental designations, seabed conditions and this may result in a necessary deviation from a benchmarked cost appraisal.

We therefore believe the effectiveness of total project cost benchmarking is limited,.

Question 3:

What are your views on the appropriate measures for benchmarking each of the individual component cost drivers?

As noted above, benchmarking figures from Rounds 1&2 may not be directly relevant for Round 3 projects due to the increased scale, complexity and the different technologies used.

With respect to individual component cost drivers, and to ensure no distortionary effects, costs may require to be normalised for commodity cost impacts and also impacts from worldwide demand changes (manufacturing and installation) to provide a useful benchmark. This would mean that any extra costs above the established benchmark could be isolated and separately assessed for reasonableness, for example the use of two export cables instead of one where the maximum single cable export rating may be breached.

As above, while there may be some benefit in a benchmark being available for the developer to support contractual negotiations, given the effect of variables such as supply and demand, commodity prices, the benchmark could diverge from actual cost incurred.

It is important that any cost assessment adequately considers the cost components and how these may vary by scale (i.e. £/MW) and/or by distance from shore (i.e. £/MW/km) as well as those cost elements that are fixed in nature (i.e. £m). Further, regarding the electrical design of the windfarm, consideration must be given to the costs of HVDC (where applicable) over an equivalent AC system and how electrical design for offshore projects will develop in the future (i.e. it is unlikely that 132kV will be a standard AC voltage for offshore projects in the future).

Chapter 4: Options for Ofgem engagement

Question 1

What are your views on the options for Ofgem engagement discussed in this chapter? Are there any other approaches to engagement through the various project stages that you think we should be considering?

We note Ofgem's preference with regard to engagement is to retain the current process (Option 1), with minor clarifications. Given the anticipated technological development offshore as we progress to Round 3, we would consider that there may be merit in earlier and more frequent engagement to minimise the risk of non-recovery, with Option 3 being worthy of consideration. We have considered each option and would note the following:

Option 1: Retain current process with minor clarifications

As technology advances and the windfarms move further from shore it may be beneficial for Ofgem to engage earlier in the project (e.g. before contracts are tendered), as this could ensure the proposed contracting strategy is acceptable to Ofgem. This could provide Ofgem with a greater understanding of the issues and give an increased level of comfort to the generator of project appreciation by the regulator with a view to optimising cost recovery, although we acknowledge that this option does not provide any certainty of cost recovery.

Option 1 could be acceptable if detailed guidance and cost assessment criteria was consulted upon and advised to industry; however given development timescales for larger scale offshore wind projects (potentially 7-10 years), this would be very challenging. There may be a need for some flexibility to be built into the model allowing for evolving costs over time; however projects would require confirmation that any submission could not be retrospectively adjusted using alternative cost assessment methods should treatment change following notification.

Option 2: Collect data and review accuracy/completeness at each project stage

This option may be constructive if the first review (with clearly defined deliverables) is completed following acceptance of the connection offer from National Grid. Ofgem could then supply a list of matters they wish to review at the next stage and articulate how they would like additional/future information presented for each subsequent stage. The effectiveness of this process would rely on Ofgem reviewing the developer's approach at each stage, with appropriate feedback and recommendations being made. As the developers progress through each stage, this would effectively act as gate, reducing the risk of non-recovery if the developer implements the various recommendations or can satisfy Ofgem of an appropriate reason why an alternative approach should be acceptable.

Option 3: Collect data and assess costs at each project stage

This option may be administratively burdensome; however, given the transition to larger, more complex offshore locations, adopting this approach may provide a useful learning curve to ensure an appropriate knowledge of costs is developed, albeit there will continue to be a requirement to consider project specific matters.

Although the majority of the contracts may be signed with contracted costs known at the point of providing the Information Memorandum to Ofgem, manufacturing and installation issues may occur which could affect project programme and therefore cost at subsequent stages. This may require further engagement by Ofgem in order that any changes are agreed.

Throughout the development of our East Anglia ONE project, we have been pleased to informally follow this approach by sharing information with Ofgem as the project develops. Whilst no formal response has been provided, we would be pleased to continue with this level of engagement in order to educate the process at the very least on what may be an acceptable design and procurement strategy. Developers have this information and should be in a position to engage with Ofgem throughout the project lifecycle: a feedback loop from Ofgem would be a helpful addition to the process.

Option 4: Defer cost assessment until after the Preferred Bidder (PB) has been appointed

Given the timing of engagement under this Option, this may result in considerable due diligence and/or significant risk of under recovery from the perspective of the developer should issues arise. It is important for both developers and bidders that at this point in the OFTO process there is a good degree of confidence in the information being provided – this option provides less assurance than the others for all parties involved. We would not support the introduction of this Option.

Question 2

Do you agree with our views on the advantages and disadvantages of the options presented? Which option offers the best way forward for the enduring regime, and why?

As noted above, there is a requirement to appreciate the fundamental difference in the scale, complexity and risk of Round 3 over Round 1& 2 projects. Ofgem should therefore review the cost model with respect to planned Round 3 HVDC projects and should outline the level of detail, for example, required in Option 3 as to what data they would expect to review and assess at each stage. This would serve to better inform all parties involved with a view to optimising the design and contractual approach as well as minimising the risk of non-recovery which could have implications for longer term investor confidence if not appropriately evaluated.

Chapter 5: Potential options for efficiency incentives

Question 1

What are your views on whether and how to develop incentive for generator build projects?

The developer is incentivised by the current cost recovery process to minimise spend to achieve the availability requirement of the OFTO and the developer. Benchmarking is a useful first step in establishing a dataset that can be refined and used to provide assurance to Ofgem, appointed auditors and ultimately OFTO bidders that the assets have been developed at an efficient cost. However given the shift to larger, further from shore assets, there is a need to recognise that flexibility will be required. Once the dataset has been refined to include Round 3 projects there may be a more robust base on which to set efficiency incentives. The developer is incentivised to minimise costs given the risk of potential non-recovery if costs are deemed to be ineligible, and also be virtue of the fact that any additional cost will require to be funded and paid for via transmission charges for the lifetime of the project.

**ScottishPower Renewables
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