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RE: Cost assessment for OFTO tenders

Thank you for the opportunity to respond to this consultation. As one of the major developers of offshore wind in the UK market, DONG Energy has participated in several OFTO transactions to date, and thus have significant direct experience of the cost assessment process. We strongly support Ofgem's proposals to improve the engagement process with generators, and think the work done to date on improving the cost template is valuable. We think Ofgem need to be very cautious when introducing benchmarking of costs, as there are many different cost drivers for the components of an offshore transmission system and it is important that projects are compared on a like for like basis. We do not think it is appropriate to introduce an incentive mechanism, as developers currently have strong incentives to reduce costs to minimise TNUoS charges.

Our response to the detailed questions can be found below.

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Yours sincerely

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DONG Energy



Chapter 2: The current cost assessment process

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Question 2.1: Are there any factors, other than those mentioned, that we should consider in relation to developing the cost assessment process?

Having completed 5 tenders to date, we believe there are important lessons for Ofgem to learn for the development of the benchmarking methodology in particular. So far, we have found the benchmarking of costs to be lacking in visibility (i.e. what the costs are being compared to), and little evidence shared with developers. Further, Ofgem's process and assessments need to take account of the fact that there are at most 2-3 offshore wind farms built every year, and the lack of suppliers and competition has an impact on costs that needs to be taken into account. Ofgem should also take account of the lifetime aspect of costs. Developers may take decisions to for example improve redundancy in the transmission assets which increase the overall CAPEX but offer reduced lifetime costs in terms of lost revenue to the developer.

The category costs for the initial benchmarking exercise is a step in the right direction, and we look forward to the publication of the peer reviewed data set.

Chapter 3: Benchmarking

Question 3.1: 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 believe that component cost benchmarking is the more appropriate approach for benchmarking, but have concerns around how this will be implemented in a fair and comparable way. In order to get more correct benchmarking installation cost should be segregated where appropriate. This is already proposed for the offshore subsea cable installation, but we think it should also be applied to e.g. the onshore cable installation.

We believe Ofgem needs to carefully consider the application of onshore benchmarks obtained through the price control processes as there are differences in their application and technology type which could lead to price disparity. Firstly, forthcoming offshore wind farms are likely to employ 220kV cabling. This is not at present an onshore voltage level in the UK therefore cable and switchgear cost benchmarks will not be available in the price control dataset. The use of STATCOMs and large filters is also prevalent in offshore transmission systems, however this is not the case onshore where SVCs are more common. The delivery and procurement strategy for onshore assets also differs for onshore TOs as opposed to developers (e.g. alliance frameworks vs competitive tender) which may influence cost outturns. Therefore reliance on the cost data provided by onshore TOs may not be suitable alone for analysing the efficiency of developer spend.

Alignment of categories to the normal contractual split seen by projects will give a more correct benchmarking. The onshore cable category should therefore be split into cable supply and installation cost. The cable supply could then be benchmarked by the size and voltage of cable (driven by MW), and the length. Installation costs are not primarily driven by the same factors as the cable costs (or only to a very limited extent), but depend largely on site conditions, such as the number of crossings of cables, gas pipes, bridges and roads involved in the installation.

Furthermore, we would like to highlight the difficulty providing or obtaining cost benchmarks for emerging (e.g. HVDC) and novel transmission technologies. Failure to account for this uncertainty in the cost assessment process could lead to an overly conservative, backwards looking design approach from developers which is not in the interests of the overall industry.



It would also be appropriate to include adjustment factors to material prices, where relevant. For example, copper prices have a significant impact on the subsea cable supply cost, and a reference copper price adjustment should be made as this cost is driven by global factors and is normally out of the hands of suppliers.

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Our experience is that there can be significant variation in the design and equipment required for onshore substations. For example, some projects do not include an onshore transformer (e.g. Walney 1), and the wind park is connected through filters to the grid. For this reason, the cost items for the onshore substation should be benchmarks separately, in categories such as:

- Landowner fees or purchase of land.
- Onshore substation building (square meters)
- Onshore transformer
- Onshore harmonic filters
- Switchgears
- SVCs and STATCOMs

It is also important to note that TR1 and TR2 projects have been relatively simple, and may be proportionally simpler compared to the upcoming R3 projects where the scale and distance means significantly more onshore infrastructure may be required.

In summary, if Ofgem is to proceed with benchmarking, we propose an approach that ensures that a 'like for like' comparison can be done to the largest extent possible. Components should be grouped into appropriate categories, and the cost of installation should be covered separately.

Question 3.2: 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?

We do not believe that total project cost benchmarking is appropriate. This does not account for different treatments in terms of risk allocation and contracting strategies, as well as differences in site location and other project-specific costs. Table 3.2.1 illustrates the volatility in these figures, demonstrating a >100% per MW cost differential between the cheapest and most expensive transitional projects.

Question 3.3: What are your views on the appropriate measures for benchmarking each of the individual component cost drivers?

The proposed components may be appropriate, but Ofgem needs to be able to consider special circumstances where the developer can provide evidence to support cost differences. It is important for Ofgem to note that while the industry is evolving, it is not yet a stable commodity-like industry and a lot of issues such as volatile input prices and suppliers going bankrupt are beyond the control of developers.

DONG Energy is committed to reducing the cost of offshore wind, and a large part of this is developing a standardised wind farm, including transmission assets, which will cut costs both in development, design, procurement, and manufacturing. However, this means that for an individual transmission asset, the chosen design will not necessarily be as bespoke as has currently been the case. We urge Ofgem to consider this important factor when considering benchmarking (and wider cost assessments), as unfavourable treatment of



standardised assets could hamper the success of cost reduction from a pipeline of projects, ultimately reducing the overall cost to the consumer.

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It may only appropriate to employ aggregated measures against large portfolios of projects in order that project specific anomalies may be smoothed out. This becomes more pronounced and difficult to manage when breaking projects down into smaller elements; e.g. offshore cable (£/km) onshore substation (£/MW). We believe there could be issues with simplifying the cost of an offshore substation to a £/MW measure. This is due to the significant platform construction overheads, where even a small wind farm needs a platform with jacket, auxiliaries, et c. which are not significantly different to a much larger wind farm. Also, our experience is that most equipment is not linear in price on a MW basis, which will again make fair comparisons on a £/MW basis difficult.

Chapter 4: engagement with Ofgem

Question 4.1: What are you 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 welcome Ofgem's consideration of a range of options for engagement. As set out in our response below, we believe Option 1 (improving the existing approach) offers the best balance of improved engagement with the least change in terms of costs or change of law. Based on our experience to date, a useful improvement would be for Ofgem's engagement to start around FID with a review of the fact book case, and an understanding of the methodology and assumptions used. This would ensure that the initial understanding is correct, and Ofgem has a good starting point for its assessment. Combined with an improved template, this should allow for the process to be improved.

For more complex projects, for example those involving anticipatory investment or new designs, Ofgem should offer the opportunity for developers to present designs and procurement strategies prior to construction, in order to get early confirmation that costs will not be disallowed at a later stage.

Question 4.2: 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?

We agree with Ofgem's assessment of the pros and cons of the options. We believe Option 1 provides the best way forward, as it addresses issues with the current process without significantly increasing costs or requiring a change of law.

We think there will always be an issue associated with the fact that there will never be certainty around costs until late in the construction process. We would prefer to tie the submission of cost data to milestones around specific construction activities, or a certain level (e.g. 75%) of total spend having been realised. Due to the timing of the tender process we will never be able to submit 100% of costs with full certainty until commissioning has been completed (at which point the preferred bidder is already appointed and hand-over is about to take place). However, we think the current approach of submitting costs with around 95% certainty is appropriate and forms an acceptable commercial risk to developers.

As offshore wind projects move further offshore and increase in size the design of the OFTO assets will change, and new technologies such as HVDC transmission may become necessary. In such new and special circumstances



we believe Ofgem should be able to give early reassurance that costs will be allowed in order to allow developers to proceed with more innovative or less tested solutions with confidence. The absence of this may hamper the deployment of new technologies that could ultimately save costs to the consumer.

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Chapter 5: efficiency incentives

Question 5.1: What are your views on whether and how to develop incentive for generator build projects?

We do not think that Ofgem should introduce efficiency incentives for generator build projects. First of all, we do not agree with Ofgem's assessment that the socialisation of a proportion of the asset cost through the current TNUoS charging methodology results in a reduced incentive in terms of cost control. As one of the largest developers of offshore wind in the UK market, our experience is that there is always a strong incentive to reduce costs and seek maximum recovery of incurred costs through the cost assessment process. Ofgem's assessment of the incentives to incur costs in an economic and efficient manner are only focused on the cash flow argument, i.e. that the project will see a reduced TNUoS charge from the socialisation of certain costs, and is not much affected by disallowed costs. However, this fails to take account of the accountancy treatment of disallowed costs, where any incurred costs that are deemed inefficient and disallowed by Ofgem are included as losses and have an impact on the annual results of the company.

We are also concerned that an efficiency incentive would not be able to capture large differences in contracting strategies and developers' different appetite for risk.

Finally, Ofgem have not explained how they expect such an incentive to be funded. We do not believe that this proposal will be a good use of consumers' money.