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Consultation on the proposed Delivery Model for Shetland transmission project

On behalf of National Grid Electricity Transmission (NGET), we welcome the opportunity to respond to Ofgem's consultation setting out their 'minded-to' position to fund delivery of the Shetland transmission project through the Strategic Wider Works (SWW) mechanism under RIIO rather than the Competition Proxy Model (CPM). We believe this is the right decision in the interests of consumers.

We agree that each of the updates made to the consumer benefit analysis (CBA) should be made and that each one of them reduces the benefit of implementing CPM for Shetland transmission project. Following those updates, we note that there is no consumer case to implement CPM for Shetland (further strengthened in Ofgem's conclusion of Hinkley Seabank (HSB)), despite Ofgem's revised CPM WACC assumptions still being lower than those in the RIIO counterfactual. This is because the additional costs that CPM imposes on consumers through the requirement to ensure each project is financeable on a stand-alone basis (which is consistent with a proxy for competition) and the adverse consumer impact of recovering the investments over a shorter 25-year period.

Ofgem considers its decision to be finely balanced. However, this is prior to the consideration of additional costs omitted from Ofgem's analysis that would further increase the costs of CPM relative to SWW. These include further increases to the WACC allowance and the costs of transferring risks to consumers and / or suppliers to facilitate a project finance risk profile.

We welcome Ofgem's decision to revisit its analysis and confirm agreement with the conclusion that the implementation of CPM for Shetland is not in the interests of consumers. This is consistent with our view, as per our responses to earlier consultations on CPM and ongoing engagement with Ofgem, that CPM does not deliver benefits to consumers compared with SWW or full competition. When examined the three 'key benefits' cited for CPM and they do not deliver real benefits for end consumers when all risks are fully considered. CPM as drafted is therefore a flawed model when compared to RIIO or full competition, on this or other projects. We continue to believe that this, along with the consequences of the uncertainty CPM creates, leads us to conclude that proposing CPM for T2 has a negative consumer impact. We therefore, do not support the inclusion of CPM for RIIO-T2. The rest of this response focuses on the specifics around Shetlands delivery model (in Section 5).

If you have any questions on this response, please contact Sultana Begum on 0750 003 1237.

Yours sincerely,

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Question 8: Do you agree with the findings of our analysis?

We welcome and support Ofgem revisiting the analysis that underpinned its minded-to-position to apply CPM to the Shetland transmission project.

As the detailed financial model that supports the analysis was not shared by Ofgem, no review or comments have been made related to this. We agree with the updates made to the consumer benefit analysis (CBA) which resulted in the overall reduction of the consumer benefit if Shetland is delivered via CPM relative to its March 2019 minded-to-position (details provided below).

Movements in the CBA, attributed to the updated cost of debt and equity inputs demonstrate one of the fundamental challenges with CPM, namely that a project that Ofgem initially believes could generate consumer value can easily turn into one that does not, due to movements in the financial markets. Given that, for Shetland, the allowed return in operations would not be set until 2024, any decision to implement CPM would represent a 'gamble' on behalf of consumers.

It is noteworthy that Ofgem's updated analysis shows a net consumer detriment from implementing CPM for Shetland despite using a lower WACC allowance than the RIIO counterfactual. This is because CPM increases costs for consumers in, at least, two ways compared to the use of RIIO SWW.

First, the need to ensure (consistent with a proxy for a competitive outcome) that a project is financeable on a stand-alone basis, as opposed to being part of a financeable portfolio, drives increased costs for consumers.

An additional consumer detriment is caused by the recovery of the investment over 25 years under CPM rather than 45 years under RIIO. The WACC allowance proposed by Ofgem for CPM lies below the Social Time Preference Rate. Under these circumstances' society would prefer to pay later rather than sooner. As such, CPM introduces a dis-benefit to consumers by using a 25-year operations period rather than a 45-year period. Ofgem currently considers the decision to be finely balanced. Our response to the questions below identifies additional costs not currently considered in the revised CBA. Once included these costs will increase the consumer detriment and further support the decision not to apply CPM to Shetland.

The conclusion that implementing CPM to Shetland is not in consumers' interests is in line with our expectations and decisions made by Ofgem on HSB. We note that Ofgem still considers that there may be real benefits in using CPM on future projects, which we continue to disagree with. Ofgem suggests the value for consumers from delivering CPM come from three *"key benefits"*. When properly scrutinised it is evident that, in principle, these key benefits cannot support Ofgem's proposition that CPM can deliver value.

1. *"The locking in of debt and equity rates that reflect current market rates, which remain low historically"*

There are several reasons why Ofgem's suggestion that value can be created by locking in current rates cannot be expected to generate consumer value. These include:

- The efficient nature of financial markets means current interest rates available for the lock in period would reflect expectations of future interest rates, i.e. value could only be "locked in" if the financial markets were erroneously optimistic about future interest rates; and
- The fact that consistent application of CPM cannot be expected to create value, while opportunistic or asymmetric application (i.e. applying CPM only where Ofgem considers returns would be lower for transmission owners (TOs) compared to RIIO financial parameters) will reduce investor confidence and require offsetting increases in the WACC for the RIIO price controls, making CPM a zero-sum game at best. More likely, is that the uncertainty around application of CPM will have an overall negative impact.

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Taking the first of these points: long-term interest rates already reflect market expectations of the evolution of short-term rates. A borrower can therefore expect to be no better or worse off from locking in debt over a longer period compared to a series of shorter-term loans over the same amount of time. For the proposition to hold you would have to believe the market for debt is inefficient and that longer duration securities are mispriced relative to shorter term securities. Such a belief is contrary to rational and evidence based regulatory practice. Indeed, 'locking in' a rate transfers the risk to the lender and therefore this will have an additional cost associated with it compared to a series of short loans where the borrower carries the risk.

Also, CPM cannot be expected to deliver value for consumers either with a consistent application of CPM to all eligible projects, or with an opportunistic application only. If CPM is consistently applied to all projects, over time the cost of debt will, on average, approximate to the RIIO cost of debt allowance meaning that there is no consumer value to be derived on the cost of debt, i.e. you cannot expect to beat an average cost of debt, on average, with a consistent application of CPM.

Ofgem appears to favour an opportunistic – or asymmetric – application of CPM, i.e. only using CPM when interest rates are below the cost of debt index. An asymmetric approach would result in a TO being underfunded (i.e. receiving an allowance below the WACC) as the RIIO portfolio would tend to accumulate a disproportionately high proportion of assets for which the cost of finance is higher than the RIIO trailing average. This would give rise to financeability concerns as illustrated below:

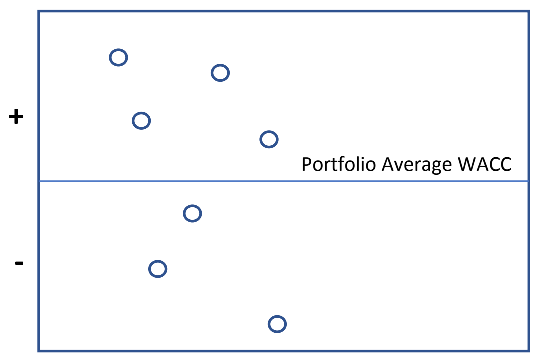

Figure 1: Pre-CPM Portfolio WACC

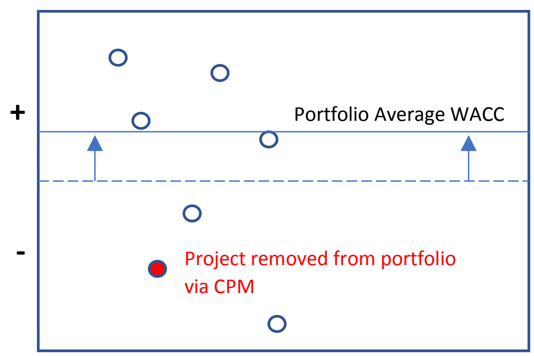

Figure 2: Post-CPM Portfolio WACC

Figure 1, the TO receives an allowance that reflects the average cost of debt across the portfolio (average WACC). Figure 2, however, highlights when a project is removed from the portfolio for delivery via CPM, the cost of debt pertaining to that project should also be removed to adjust the portfolio WACC. This adjustment results in a higher portfolio WACC, which is not currently taken into consideration by Ofgem. Should CPM be applied to several projects, it will result in the consistent underfunding of the TO.

This would mark a significant departure from the logic and consensus underpinning RIIO, which is that a TO might be underfunded for some projects but can expect to balance those losses against instances where the average allowed return on the portfolio is above the cost of financing other projects within the portfolio. The introduction of opportunistic treatment of financing costs will not deliver value for consumers because it would be unsustainable. The fact that a TO will be at risk of under recovering its cost of debt will increase regulatory risk in the sector and reduce investor confidence. Regulatory discretion of this nature would lead to investors targeting higher returns in order to compensate for such losses. This will create pressure to increase the overall WACC – for debt and equity funders – which consumers would pay for in future projects.

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Moreover, the RIIO principles are such that, if CPM were to be applied opportunistically, it would (in principle) increase the allowances for the cost of debt under RIIO. Under Ofgem's RIIO-2 principles, any savings made by applying CPM opportunistically would be offset by consequential adjustments to the RIIO-T2 cost of debt. This would also be a consequence of applying Ofgem's current policy. The RIIO "Handbook for implementing the RIIO model" states that the cost of debt index will be subject to "a check that the index still provides a reasonable estimate of the cost of debt." Therefore, if new debt is partitioned into a CPM investment, there would need to be a compensating recalibration of the trailing average index used in the RIIO control to ensure that the allowances for cost of debt reflect expected (RIIO funded) costs. This would wipe out any perceived benefit from lower interest rates of adopting CPM.

2. *"Making use of market revealed project-specific benchmarks where appropriate (such as using the observed OFTO rates for the operational period)"*

Carving out single projects under CPM, rather than having them delivered as part of a portfolio of corporate-financed regulatory projects under SWW, does not generate value. The lower WACC associated with project-specific financing is achieved through additional protections and considerable risk transfers from the project company to contract partners and/or consumers, both of which carry significant cost. Ofgem has not included these costs in CPM despite it being a project-specific model. Returns should reflect risk, and with the underlying activities of constructing and operating a project being fundamentally the same whether SWW or CPM applies there is no reason to expect a different WACC unless there is a difference in risk.

Equally, the division of a project into construction and operations phases to determine the WACC for each cannot of itself generate a lower WACC. While splitting the WACC could allow for the use of better benchmark data, Ofgem has not adopted appropriate benchmarks for both phases, resulting in an inappropriate basis for drawing conclusions over the life of the project. To claim consumer value from splitting the construction and operational phases, it is incumbent upon Ofgem to identify appropriate benchmarks for both phases. For Shetland, OFTOs are the nearest comparators, however, there are still fundamental differences associated with both construction and operations between the two asset classes. Ofgem has acknowledged this in seeking to understand the comparison, and that it is difficult to monetise the value of undertaking this comparison.

There are material differences between the OFTO regime and CPM and, as a result, a false comparison has been drawn between the two. Unlike typical project-financed assets, such as OFTOs, CPM does not benefit from key contractual protections that provide certainty on the allocation of risk. It also lacks specificity, leaving considerable scope for regulatory discretion that could be perceived as increasing regulatory risk. It is wrong to contend that locking in the WACC for the 25-year operational period reduces regulatory risk sufficiently to make risks equivalent to the OFTO benchmark. Where there are no construction risks borne by the OFTO which is priced post-construction for a 25-year revenue period, which therefore, has a lower risk profile than under RIIO SWW. Further, investors can take little assurance that regulatory risk has reduced given the lack of a separate licence, Ofgem's inability to commit not to reopen CPM (i.e. fetter its discretion), and the very fact that Ofgem initially proposed to re-open a price control to introduce CPM. A more balanced view of risks suggests CPM is no less risky than RIIO over the lifetime of the asset (when taking note of the construction benchmarking for CPM) and so a lower WACC cannot be expected. Not only are risks different to the OFTO regime but as reported in previous consultation responses and covered briefly in response to question 9 below, the OFTO returns used by Ofgem appear to be understated and flawed.

3. *"Enabling a higher gearing during the operational period, through a project-specific risk allocation, resulting in lower overall financing costs*"

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CPM cannot drive savings on the basis that higher levels of gearing can be achieved for single-asset infrastructure projects than would be appropriate for diversified portfolios under RIIO. Ofgem relies heavily on evidence from the OFTO regime, interconnectors and PFI/PPP projects to support this assertion. Ofgem has observed a higher gearing and a lower WACC for those projects but has wrongly assumed a causal link and is wrong to draw the conclusion that these projects benefit from a lower WACC because of the higher gearing.

The higher gearing capacity and lower WACC observed in the OFTO and similar regimes are the result of measures taken to significantly reduce risk, typically at high cost. In the “Consultation on proposed changes to our electricity interconnector cap and floor regime to enable project finance solutions” paper Ofgem acknowledge that risks must be transferred elsewhere (e.g. to consumers) to achieve project finance solutions. Absent of such extensive and costly de-risking, high levels of gearing cannot typically be achieved. No evidence has been produced to show that the estimated reduction in the WACC is sufficient to offset the increased costs associated with achieving this reduction in risk.

Also, Ofgem’s claim contradicts the Modigliani-Miller theorem, which is a basic corporate finance principle underpinning the Capital Asset Pricing Model (CAPM) commonly used by regulators in infrastructure industries, and indeed used to set the WACC for the construction period under CPM. This stipulates that firms cannot lower their WACC by simply increasing leverage. If a firm increases its leverage, then the required return on equity increases as equity risk becomes more concentrated. It may be true that this outcome can be affected by certain frictions, such as the tax shield which is applicable to debt, however this tax friction would not apply under the CPM regime because the regulatory framework gives licensees a tax allowance and sets the vanilla allowed return using the post-tax cost of equity and pre-tax cost of debt.

In conclusion, we agree with Ofgem’s finding that implementing CPM for Shetland would not deliver value for consumers and find that further analysis of the key CPM benefits identified by Ofgem demonstrates that it is unlikely that implementing CPM will generate benefits for consumers on future projects either.

Question 9: Are there any additional factors that we should consider as part of our analysis and/or decision on whether to apply the CPM for the Shetland transmission project?

As stated in our response above, we agree that the factors that Ofgem has considered in the revised CBA will each reduce the benefits of implementing CPM to Shetland. We equally believe the full extent of consumer detriment has not been reflected in the updated analysis. There are other additional costs to consumers that, based on the consultation, have not been included in Ofgem’s revised CBA. These include:

- An understatement of the proposed WACC allowance;
- The additional costs of transferring risks to consumers and / or suppliers;
- Interactions with the RIIO regime.

Understatement of proposed WACC allowance

There are a series of adjustments required to the WACC allowances initially proposed by Ofgem and updated in its consultation document. These include, but are not limited to:

For the construction period WACC:

- There are flaws in the asset beta range used by Ofgem, particularly for the low end of the range for CPM. Ofgem acknowledge construction as higher risk than operations and yet use the asset beta for the Scottish Transmission networks RIIO-1 control as a lower bound for a construction phase only beta despite that benchmark applying to activities which include substantial operations activities.

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- The debt transaction costs are understated as they make insufficient adjustment to consider the shorter tenor of the debt for construction.
- There is a failure to recognise a First of a Kind premium despite CPM being a new and untested regulatory model.

Similarly, in the operational period WACC:

- A First of a Kind premium would be relevant to the operational period as well as construction.
- The OFTO equity returns used to benchmark the equity return are understated as they take no account of additional returns from expected incentives or taxation performance and take no account of the opportunity for a terminal value to further enhance returns.
- Ofgem's gearing assumption appears to be based on the observed opening gearing of OFTOs which is higher than the expected average lifetime gearing and so inappropriate for a 25-year WACC calculation.

Correction to these items would be expected to result in an increase in the allowed CPM WACC and so would further undermine the consumer benefits of implementing CPM.

The additional costs of transferring risk to consumers and / or suppliers

Ofgem recognises the need for a CPM project to be financeable on a stand-alone basis and some of the costs of this are included in the updated CBA through use of the CPM Financial model.

The outcome of a competitive process would be a revenue stream based on internally consistent expectations relating to capital and operating costs, risks and expected returns. As identified in our response to the question above, Ofgem's "Consultation on proposed changes to our electricity interconnector cap and floor regime to enable project finance solutions" acknowledges that risks must be transferred elsewhere (e.g. to consumers) to achieve project finance solutions. The WACC for the operational period is based on OFTO benchmarks, each of which has been financed using project finance.

Ofgem's current analysis takes no account of any additional costs from transferring risks to consumers and / or suppliers. For example, fixing costs with suppliers may transfer the risk of overspend to them but will result in them including an additional risk margin in the price they charge.

Interactions with the RIIO regime

Through previous correspondence with Ofgem, we have highlighted several interactions between CPM and the RIIO regime. These include the interaction between the cost of debt allowance for RIIO and separate funding for CPM, as discussed in our response to the question above, and further interactions such as how tax allowances and tax trigger mechanisms may need to be adjusted. Some of these interactions may result in additional cost and unintended consequences.