nationalgrid

National Grid House
Warwick Technology Park
Gallows Hill, Warwick
CV34 6DA

Mr Thomas Johns
New Transmission Investment
Ofgem
10 South Colonnade
Canary Wharf
London,
E14 4PU

Chris Bennett
Director, UK Regulation

chris.bennett@nationalgrid.com
+44 (0) 7767 298985

www.nationalgrid.com

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Consultation on the Hinkley-Seabank updated delivery model minded-to position

We welcome Ofgem's consultation setting out their 'minded-to' position to fund delivery of the Hinkley-Seabank project (HSB) through the Strategic Wider Works (SWW) mechanism under RIIO rather than the Competition Proxy Model (CPM). As we have noted in our responses to earlier consultations, 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 HSB. Following those updates, we note that there is no consumer case to implement CPM for HSB despite Ofgem's revised CPM WACC assumptions still being lower than those in the RIIO counterfactual. This is because of additional costs that CPM imposes on consumers through the requirement to ensure each project is financeable on a stand-alone basis (consistent with a proxy for competition) and the adverse consumer impact of recovering the investments over a shorter 25 year period.

Ofgem currently considers the decision to be finely balanced. 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 (most notably to reflect the forward curve of projected interest costs), the costs of transferring risks to consumers and / or suppliers to facilitate a project finance risk profile, and the costs of reopening the price control if CPM is implemented in the RIIO-1 period.

We therefore welcome Ofgem's decision to revisit its analysis and confirm that we agree with Ofgem's conclusion that the implementation of CPM is not in the interests of consumers for HSB. This conclusion is consistent with our view, as advised previously through our responses to earlier consultations on CPM and ongoing engagement with Ofgem, that CPM does not deliver benefits to consumers compared with SWW. In particular, and as set out in the answers to the questions addressed in this letter, when they are considered in detail it is clear that, in principle, the three "key benefits" that Ofgem believes support the proposition

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Registered Office: 1-3 Strand, London WC2N 5EH
Registered in England and Wales, No 4031152

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that CPM could deliver consumer value for projects, cannot actually be expected to deliver consumer value.

We continue to have reservations about the potential use of CPM in RIIO-T2 and the current assumptions on cost of capital for RIIO-T2. These concerns are not the covered by this response. The current consultation is specific to the implementation of CPM to HSB and we have focused this response accordingly.

If you have any questions on this response, please contact Richard Allman on 01926 656354.

Yours sincerely,

[By email]

Chris Bennett

Director, UK Regulation, National Grid

National Grid plc
Registered Office: 1-3 Strand, London WC2N 5EH
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Question 1: Do you agree with our findings and analysis?

We welcome and support Ofgem's decision to revisit the analysis that underpinned the previous decision to apply CPM to HSB.

We have not received the detailed financial modelling that supports the analysis set out in Ofgem's October consultation, and so have not been able to review this. However, we agree that each of the factors identified by Ofgem, and listed below, reduce the consumer benefit of CPM relative to the July 2018 Decision:

- Updated cost of debt and equity inputs into the CPM WACC methodology based on January 2019 data;
- Updated RIIO counterfactual cost of equity; and
- Use of the detailed CPM financial model.

The movement in the CBA attributed to the updated cost of debt and equity inputs demonstrates 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 HSB, the allowed return in operations would not even 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 HSB despite using a lower WACC allowance than the RIIO counterfactual[1]. 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. The additional costs of ensuring the project is financeable are referred to by Ofgem in their consultation as being a result of using the CPM financial model.

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 question 2 below identifies additional costs not currently considered in the revised CBA. Once included

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[1] Assuming a 5-year construction period the average CPM WACC is 2.10% to 2.88% (e.g. 3.11% x 5/30 + 1.9% x 25/30) compared to a RIIO counterfactual of 2.88% to 3.08%

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these costs will increase the consumer detriment and further support the decision not to apply CPM to HSB.

The conclusion that implementing CPM for HSB is not in consumers interests is in line with our expectations. We note that Ofgem still considers that there may be real benefits in using CPM on other projects. Ofgem suggests the value for consumers from delivering CPM comes from three *"key benefits"*. When properly scrutinised it is evident that, in principle, these key benefits cannot support Ofgem's proposition that CPM can be expected to deliver value.

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

There are a number of 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 already 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.
- 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.

Taking the first of these points: long-term interest rates already reflect market expectations of the evolution of future short-term rates. A borrower can therefore expect to be no better or worse off from locking in debt over a longer period of time 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.

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 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

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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: the TO would have an allowance that reflects its actual cost of debt in respect of any project for which the actual cost of debt is lower than the average (i.e. CPM projects); but, the TO would receive an allowance that only reflects the average cost of debt in respect of projects which happen to be financed when the actual cost of debt is higher than the average. Accordingly, the TO would not recover its actual WACC for projects within the RIIO portfolio.

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 even under the most optimistic outcome. 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.

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

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whether SWW or CPM applies there is no reason to expect a different WACC unless there is a difference in risk.

Equally, the mere 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; something it has not done in the construction period. As explained in previous consultation responses, the comparator set for HSB places a disproportionately large weight on companies that focus on commercial and residential property development, property investments and other property services such as home repairs and do not represent a suitable benchmark for the construction of electricity transmission assets.

With regard to the operations phase, there are limitations in the value of OFTOs as a benchmark. 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 benchmarks, and 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 and so a lower WACC should not 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 2 below, the OFTO returns used by Ofgem appear to be understated.

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

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.

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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 have to be transferred elsewhere (e.g. to consumers) to achieve project finance solutions. Absent 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 HSB 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 other projects either.

Question 2: Are there any additional factors that we should consider as part of our analysis and/or decision on whether to apply the CPM or SWW as the delivery model for HSB?

As stated in our response to question 1, we agree that the factors that Ofgem has taken into account in the revised CBA will each reduce the benefits of implementing CPM.

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:

- The use of the forward curve for the cost of debt when the operational WACC is set
- An understatement of the proposed WACC allowance
- The additional costs of transferring risks to consumers and / or suppliers
- Interactions with the RIIO regime
- The costs of reopening the price control in RIIO-T1

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Forward curve

The consultation document refers to a January 2019 data cut off for the inputs to the cost of debt and cost of equity. While this makes sense for the construction period, Ofgem's July 2018 proposals for CPM included setting the WACC for the operations period at the time the project transitions from construction to operations, which is anticipated to be in 2024.

Despite this policy intent Ofgem does not appear to have used a cost of debt for the operational period based on the forward curve and so has not used the higher interest rate that would be expected to be included in CPM revenues.

Given that the initial use of CPM was predicated on taking advantage of the current low interest rates, to have ignored the higher rates expected to apply in the future appears to be a significant oversight.

Understatement of proposed WACC allowance

In addition to the use of the forward curve above there are a series of other adjustments required to the WACC allowances initially proposed by Ofgem and updated in their 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.
  - The debt transaction costs are understated as they make insufficient adjustment to take into account 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.
  - Ofgem has not considered the returns for the Thames Tideway Tunnel project as a relevant benchmark despite it being the closest comparator to HSB in terms of regulatory framework.

- Similarly, in the operational period WACC:
  - As reported above, Ofgem does not appear to have taken account of the forward curve for expected interest rates.
  - 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

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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.

Correcting for each of 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 recognise 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 question 1 above, Ofgem's "Consultation on proposed changes to our electricity interconnector cap and floor regime to enable project finance solutions" acknowledges that risks have to 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.

We also note that Ofgem's consultation on the assessment of capital costs for HSB comments (in paragraph 1.15) that "if we conclude that HSB should be delivered under CPM (rather than SWW) then we may need to consult again on potential changes to HSB capital cost allowances" further underlining the expectation that there is a direct relationship between risk and capital costs.

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 a number of interactions between CPM and the RIIO regime. These interactions include the interaction between the cost of debt allowance for RIIO and separate funding for CPM, as discussed in our response to question 1 earlier, 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.

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The costs of reopening the price control in RIIO-T1

A stable and predictable regulatory environment is essential to ensuring National Grid can attract and secure the investment required to support the successful transformation of the energy sector at a low WACC – with consumers as the ultimate beneficiaries of these savings. The modification of the Transmission Licence part way through RIIO-1, to include CPM, would have undermined the price control and been a re-opener of that price control.

In setting the RIIO-1 price control for the period 2013 to 2021 Ofgem identified two possible mechanisms for the construction and operation of large onshore transmission projects that were new, separable and high value: delivery under the SWW mechanism or by a licensed third party following a competitive process run by Ofgem. CPM is neither of these mechanisms. Ofgem is clear that CPM is not SWW, repeatedly describing it as an "alternative" model. Ofgem also accepts that CPM does not involve actual competition or delivery by a third party. In addition to the project specific costs there would also be a cost impact of re-opening RIIO-1.

Ofgem included a mid-period review (MPR) in RIIO that would focus on changes to output requirements but would not be used to re-open the price control to change key financial parameters, such as the WACC. As part of that process they identified the potential for substantial costs through increases to the WACC if the price control were to be re-opened.

The burden of proof in setting out a compelling justification for a re-opening of the price control is on Ofgem. Ofgem sought to justify the proposed introduction of CPM on its view that competition would deliver savings for consumers. Ofgem's own analysis now demonstrates that implementing CPM is unlikely to be in the interests of consumers, and this is without the inclusion of the costs of re-opening the price control or additional costs referred to in this response.

We welcome Ofgem's minded-to position to implement SWW for HSB. Evidenced by Ofgem's analysis and the additional factors provided by this consultation response, we maintain that when compared with SWW, the implementation of CPM would increase costs to consumers for HSB and is likely to do so for any other project also.

National Grid plc
Registered Office: 1-3 Strand, London WC2N 5EH
Registered in England and Wales, No 4031152