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PR19 draft methodology
Water 2020
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30th August 2017

Dear Ofwat,

Methodology for the 2019 price control (PR19)

Whilst National Grid will not be directly impacted by Ofwat's methodology, we are aware that UK Regulators are working together, through UKRN, on cost of capital matters. We therefore thought it would be helpful to share our views on the information contained in the consultation regarding setting the cost of equity, which includes our comments on the analysis undertaken by PwC. The response is intended to help UK Regulators in the difficult task of setting regulatory cost of equity and balancing the pressures on consumer bills and ensuring regulatory regimes attract efficient financing and investment for the long-term in critical national infrastructure.

Our response focuses on one question within Ofwat's consultation, namely "*Do you agree with our proposed approach to setting the cost of equity, based on the best estimate of expected returns in the 2020-25 period?*" Our comments in the detail of this letter predominantly relate to the core methodologies regarding forecasts of total market return within the cost of equity approach, rather than any water company specific issues. We recognise the overall methodology for allowed cost of equity needs to be considered in the relevant context of the price control for which it is being set and we will clearly take forward our sectoral discussions with Ofgem as part of the RIIO-2 Framework consultations which have recently commenced.

The question at the heart of Ofwat's proposed methodology is the extent to which long term historical data or future looking data should be used to forecast expected total market return. The exact methodology Ofwat propose in this space in unclear, but Ofwat appear to suggest greater weight should be applied to forward looking estimates in PR19. Indeed the supporting document from PwC seems to suggest sole reliance on forward looking estimates which would be a concern if it were to be applied.

Our comments are therefore split between those relating to the overall total market return methodology and more specific points on PwC's Dividend Discount Model (DDM) forecasts:

Total Market Return methodology:

1. **Parameter change versus methodology change**: There is a fundamental difference between changes in the parameters used in calculating allowed returns and changing the methodologies used for setting allowed returns. Investments in water and other regulated industries have been and continue to be made in long term assets that last for 20 to 45 years or longer. Whilst investors might expect changes in parameter values over these periods, they would not expect changes in the underlying methodology. Ofwat's proposed approach seems to involve this latter kind of change. This would not be consistent with the regulatory principles of predictability and consistency and as a result it would increase regulatory – and hence network – risk. Ofwat may argue that the proposed approach to setting cost of equity in PR19 is just an evolution from previous regulatory methods. This does not seem to be the

case. Whilst the Capital Asset Pricing Model (CAPM) approach is maintained giving an air of familiarity, the proposed methodology is set out as a more fundamental shift, particularly when published alongside the PwC report which discusses sole use of forward looking data to set total market return.

2. **Increased use of forward looking data**: The "lower for longer" arguments set out by PwC may be enough to justify care being taken in setting cost of equity for the next regulatory reviews but they are not sufficient to fundamentally change a critical regulatory approach. Moving towards increased use of forward looking data to set the total market return would lead to:
   - More subjective forecasts for the allowed return resulting in greater investor uncertainty
   - Greater volatility in customer bills between price controls, a move which would be counter to customer requirements

It is the greater susceptibility to more sensitive and assumption based inputs that causes the concerns. Whilst Ofwat recognise this, there are no solutions offered and the issues would be exacerbated by sole use of forward looking estimates to set the total market return as espoused by PwC. Investors and customers should be concerned if 100% reliance was placed on forward looking values. Previously, forward looking methods have only been used to cross check regulatory forecasts sourced from long term historical average data sets. Placing greater weight on this data would therefore be a material change from approaches used by UK regulators and the Competition and Markets Authority (CMA), who have preferred to place weight on the objective evidence provided by the level of historic returns as the best indicator of future equity return.

3. **Use of long term averages**: There is a need to focus on long term averages in determining total market return for long term businesses. This ensures that the impacts of short term anomalies are not unknowingly factored in. This applies in the current methodology which uses historical data to set total market return but equally applies when considering forward looking data. Ofwat set out reasons as to why there could be a longer period of low interest rates than originally considered but they do not know that this will prove to be the case, and even if it did the implications for equity returns are not clear. The start of PR19 is still over two years away so any anchoring of figures around short term views which could easily change needs to be treated with utmost caution.

4. **Timing of methodology review**: It is perhaps telling that the question of applying more weight to forward looking estimates is being raised by Ofwat at a time when these forecasts (or at least those from PwC) are below historical average returns. It seems likely that Ofwat would be more circumspect about proposing to change their approach in this way now – or indeed retaining such an approach in the future - if short term indicators were pointing to a markedly higher total market return than historical averages. The proposed approach therefore creates a clear asymmetric risk for investors which would increase the average level of required returns in the future, as well as risking undermining confidence in the stability of the regulatory framework

5. **Impact of a sharp reduction in returns**: In their document, PwC note that a long term historical approach to setting total market return would give a figure more than 100 basis points higher than the forward looking approach. Applying the proposed methodology changes would therefore create a sharp reduction in returns between successive price controls, with the risk of correspondingly sharp increases in customer bills in future price controls. This sharp reduction in the allowed cost of equity would have a significant impact on sector investment and customer bill volatility. The subsequent sharp increase in customer bills in the future would come at a time when consumers would also be dealing with higher mortgage payments creating the risk of an affordability crunch. Ofwat state that their total market return assumption has moved over previous price reviews but importantly the movement has never been this large between two price controls. Ofwat need to be mindful of the consequences of lower investment in the UK water sector that could be caused by such a change in approach, as well as the future impacts on consumer bills.

6. **PR99 forward looking total market return forecasts**: In the data Ofwat show, the total variance in total market return assumptions over the last 25 years has been less than 150 basis points (total range 6.25 to 7.7%). This range would reduce significantly to less than 100 basis points if the PR99 outlier of 6.25% is removed from the data set. This compares to the PR19 proposed drop of more than 100 basis points *in one control period*. The PR99 control illustrates how such a change would have a major impact and why decisions on equity returns need to be handled with care. The outcome from PR99 – partly fuelled by the low total market return assumptions – caused a flight in equity away from water, increased companies' credit risk and gave rise to significant changes in the sector. Whilst these impacts need strong consideration, the most pertinent point from PR99 is that it represented the last time greater weight was placed on forward looking data rather than historical long run averages in setting total market return. This needs to be a cause for reflection for Ofwat as they consider doing the same again.

PwC's Dividend Discount Model (DDM) forecasts:

1. **Broader DDM forecasts not referred to despite use by CMA**: Whilst PwC refer to several items of data in their reports, the majority of these are only used as cross checks rather than for forecasting purposes. The total market return forecast ultimately relies solely on their DDM. This in itself is a concern but crucially the paper does not reference other DDM forecasts that have historically been used in cross checking total market return forecasts. This is an important oversight, particularly when the different forecasts are compared. The CMA have previously utilised Bank of England DDM outputs, and there are also DDM outputs from sources such as Bloomberg which can usefully be referred to here. Comparing these data sets to the PwC DDM forecasts shows marked differences:

Total market return (real with respect to RPI)	Index	December 2016
PwC	FTSE all share	5.1% to 5.5%[1]
Bank of England	FTSE all share	7.1 to 7.7%
Bloomberg	FTSE 100	8.0%

It is unclear from Ofwat's or PwC's documents why these other data sets have been ignored as they show materially higher forecasts which would align more closely to historical long term forecasts from Dimson, Marsh and Staunton (DMS) which have remained at ~7.3% real for over ten years.

2. **CMA precedent**: In forecasting the total market return assumption for Northern Ireland Electricity (NIE) in 2014, the CMA referenced DMS data and DDM estimates from the Bank of England. Looking further at this data shows that these forecasts are at a higher level now than they were at the time of this appeal outcome. This would suggest that the 6.5% total market return forecast determined by the CMA at that point should still apply or even be increased.

3. **Market to Asset Ratio (MAR) data**: PwC appear to cross check their DDM forecasts to the implied returns from observed MAR data and conclude there is correlation in the results. However, interpreting MAR data is notoriously unreliable and highly sensitive to assumptions and market impacts. For example, it is worth noting that the listed water companies are mainly top performing networks whose investors would be factoring in regulatory outperformance. At least one of the companies referred to has also been subject to recent takeover speculation which would likely have an upward impact on their share price. In addition, MAR data only gives an indication of the performance for the individual companies it relates to and not the total market return expected by investors. Given that only a small number of regulated companies are listed - and these companies tend to include more than

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[1] Using PwC's total market return forecast of 8% to 8.5% and RPI of 2.8%

just UK regulated activities in their group – any reference to MAR ratios implying expected return needs to be viewed with a critical eye.

We have sent this response to our contacts in Ofgem and hope that it is a helpful contribution to the ongoing discussions taking place on cost of equity at UKRN. We would be more than happy to meet with members of the Ofwat or Ofgem teams to discuss our response further.

Yours sincerely,

[By email]

Chris Bennett