Questions and answers: rate of return draft guideline information session

Andrew Reeves, Chairman, Australian Energy Regulator

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On 30 August, Mr Reeves outlined the key aspects of our rate of return draft guideline over a teleconference. Stakeholders were requested to email or tweet their questions in while listening to Mr Reeve's presentation. Eight questions were received. We thank stakeholders for their questions.

Our answers to those questions are set out below. Questions 1,4,5,6,7 and 8 were answered on the day.[1] Questions 2 and 3 were taken on notice.

Return on equity questions

1. **The draft guideline provides a useful flow chart of the estimation process for the return on equity. Will the final guideline include an indicative worked example using the AER's estimated input parameters (including the equity beta) under its 'foundation model' so that stakeholders can see how the approach would work in current market conditions?**

- It is our aim that the final guideline will contain sufficient detail so stakeholders can form a reasonable estimate of the value the AER will likely determine.
- Where possible, we have provided an indication of the likely final value, otherwise, we have provided a clear description of the estimation approach we will use to determine a value.
- For the final guideline, we will work through with stakeholders what exactly this might look like.

2. **Utilities raise equity progressively to fund capital expenditure. What is the justification for a 'fixed' ROE but a trailing and therefore floating cost of debt? Did the AER consider a floating ROE? i.e. annual adjustments to the ROE based on movements in the risk free rate.**

- Annual updates to the return on equity could be seen as an alternative method to achieve a more stable return on equity method over time.
- However, we consider our proposed approach is a preferable method to achieve this outcome. Our proposed approach adopts a 10 year forward looking return on equity at the start of each regulatory period based informatively on the Sharpe Linter CAPM, but also considers other information before determining a final return on equity estimate.
- A benefit of this approach is it is internally consistent because the risk free rate and risk premium on the equity side are determined at the same time based on all relevant information. In contrast, updating the risk free rate but not the risk premium may be internally inconsistent. And updating the risk premium (in additional to the risk free rate) annually would be practically difficult because the risk premium is not observable and can only be estimated by considering and applying judgement to a wide range of information.

[1] Note the response to questions 5 and 7 have been further elaborated on compared with the answer provided on the day.

- Further, our adoption of annual updates (and a trailing average) for the return on debt is to address debt specific concerns that have arisen. That is, to modify our debt approach to better reflect the actual and prudent financing practices of network businesses. No such equivalent considerations exist on the equity side.

- Finally, we note that unlike for the return on debt, the rules do not explicitly give us the option to estimate different returns on equity for different regulatory years in the regulatory control period.

- Therefore, in our draft guideline we maintained our current approach—that is, that the return on equity should be set for the entire regulatory period with no annual update.

3. What role do you see for the expected return on the market when estimating the forward looking MRP, noting that the expected return on the market is a parameter in the original Sharpe and Lintner academic papers?

- There has been considerable debate about the MRP over the past few years. In the recent Victorian gas access arrangement review process, we considered whether the MRP should be estimated directly, or indirectly. That is, the MRP can be estimated indirectly by estimating the expected return on the market and subtracting the risk free rate. Consistent with standard finance practice, we considered it was appropriate to estimate the MRP directly, based on a variety of sources. The Victorian gas final decision contains a detailed discussion of our considerations. We note that the APA Group sought review by the Australian Competition Tribunal of the AER's decision on the MRP. The APA Group specifically sought review of the AER's decision of estimating the MRP directly, rather than indirectly. The Tribunal's decision on this matter is expected in mid-September 2013. Accordingly, we will take into account the Tribunal's decision in forming our final guideline.

- The draft guideline outlines the sources of evidence we propose to consider when estimating the forward looking MRP. These include:

    - Historical excess returns
    - Survey estimates
    - Dividend growth models
    - Implied volatility
    - Other regulators' estimates

- We also propose to use the 'Wright approach' to estimating the Sharpe Lintner CAPM at the return on equity level. The Wright approach is a particular CAPM implementation put forward by Professor Stephen Wright in his report for the network businesses. The Wright approach assumes there is a perfectly negative relationship between the risk free rate and the MRP by assuming the expected return on the market reflects the long term average.

4. Question on the implementation of the beta: What have the draft models shown as an outcome of beta and MRP based on the revised approach?

- The final guideline will include parameter values for the equity beta, but not the MRP or risk free rate.

- We have commissioned a report which updates the empirical estimates of equity beta from those we commissioned in the context of the 2009 WACC review.

- We expect to release this report in September, with an accompanying note outlining our further considerations on beta and a proposed equity beta value. We will seek submissions on that material which will be taken into account in developing the final guideline.
- The risk free rate is variable over time and observable. As such, consistent with our current approach, it will be updated at the time of a determination.
- An estimate of the MRP will not be provided in the guideline. Instead, we will estimate the MRP at the time of a determination (based on the approach and material outlined in the draft guideline).

Return on debt questions

5. In its draft guideline explanatory statement (page 82), the AER states:

> **"…we are satisfied that the trailing average portfolio approach is consistent with the allowed rate of return objective and recognises 'the desirability of minimising any difference between the return on debt and the return on debt of a benchmark efficient entity referred to in the allowed rate of return objective'.[191] Further, it provides service providers with incentives to engage in efficient debt financing practices and hence promotes overall efficiency of investment, operation and use of, electricity and natural gas services for the long term interest of consumers in a manner consistent with the NEO and NGO."**

In light of the AER's view that a trailing average is an efficient approach to debt management, can you please expand on the AER's reasoning as to why a transition is required for those businesses already engaged in an efficient portfolio approach to debt management, specifically the NSW DNSPs?

- The adoption of the trailing average portfolio approach for estimating the return on debt is a major change in the regulatory framework. We arrived at this decision through an extensive consultation process and analysis. We consider that the adoption of this approach requires a strong commitment from all stakeholders and a transitional arrangement is likely to support this commitment.
- We consider it is desirable to have a gradual change in approach to estimating the return on debt as unexpected and immediate changes to setting allowances can be disruptive to both service providers and consumers.
- We also consider that given the guideline is non-binding, a transition may prevent service providers from opportunistically seeking to switch from one debt approach to another depending on which approach provides the highest rate of return.
- Additionally, we are not looking at the specific financing practices of each business and the NSW businesses financing practices are not reflective of our proposed definition of a benchmark entity (i.e. debt borrowing is centralised to NSW TCorp).
- Finally, historical data used to estimate a trailing average may not be available and we would need agreement with the service providers on the averaging period for historical data—these issues will be avoided with the transition.

6. If the revised cost of debt methodology were to be implemented today, what would the estimated cost be vs recent determinations (6.55% cost of debt in today's SPN determination)?

- We don't have an expectation for the level of the rate of return. This is because this will largely depend on market circumstances at the time of each reset determination. However, we do have an expectation for a more stable rate of return.

- As we will generate a range for the return on equity and consider all relevant information in coming to a judgement on the return on equity, we expect that this is likely to result in a more stable allowed return on equity over time.

- Similarly, with the adoption of the trailing average portfolio approach, the return on debt will likely be more stable over time. This will take effect gradually as we transition into the new return on debt approach.

- Given the transition method we have proposed, the first year of the regulatory period will be similar to the current 'on-the-day' approach—the difference is that the rate is likely to be lower as we are changing the benchmark debt term.

- From the second year, onwards the allowed return on debt will also depend on the prevailing market conditions at that time.

7. How are you going to ascertain the interest rate for a 7yr debt each year? From Bloomberg? Or other sources?

- We are proposing at this time to use a third party dataset to estimate the return on debt as:

    - Third party data sources are provided for use by market practitioners and developed independent of the regulatory process.

    - The data has been constructed by experts with access to comprehensive financial databases, where judgements are made in terms of debt selection and any necessary adjustments to prices

    - Using an independent third party also reduces the scope for debate on debt instrument selection issues and curve fitting or the use of some form of averaging methods applied to the data.

- At this stage Bloomberg is the only independent third party data source that publishes an estimate of the return on debt. However, where available we will have a preference for using an independent third party data source where the method for estimating the return on debt is transparent.

Imputation credit questions

8. Could the AER outline the justification for moving to a gamma of 0.5 from 0.25 given the significant and detailed consideration of the value of gamma as part of the Australian Competition Tribunal's consideration of the issue in 2011?

- The Tribunal decision which set gamma at 0.25 was with regard to the specific evidence before it at the time.

- The Tribunal explicitly acknowledged that there would need to be further work on gamma, and in particular on interpreting dividend drop off studies in the broader context of other pieces of evidence. The Tribunal also considered that a better understanding of the conceptual framework was desirable.

- Three main points:
    - We’ve taken a fresh look at the conceptual framework and gone back to fundamentals—consistent with the electricity and gas rules
    - We've drawn on additional sources of evidence—our decision on the utilisation rate draws on implied market value studies, tax statistic estimates, and the equity ownership approach
    - We've drawn on a wider range of studies within particular sources of evidence—in the past, we sought ‘definitive’ studies to estimate the two components, and excluded all other studies. We now consider that a wider view of the evidence would lead to better regulatory outcomes.
- The AER has now had an opportunity to undertake this review, and fully re-evaluate the conceptual framework for imputation credits as well as the latest empirical evidence (including different types of evidence). This wider appraisal of all the available evidence we consider is better regulatory practice.
- Further information on this is available in chapter 8 of the explanatory statement and attachment K.