Rate of Return Guideline Review Issues Paper

12 DECEMBER 2017

Summary

- Queensland Treasury Corporation (QTC) welcomes the opportunity to provide comments on the Australian Energy Regulator's (AER) Rate of Return Guideline Review Issues Paper.
- In addition to providing responses to questions in the Issues Paper, we have identified some broader issues relating to the ongoing determination of the allowed return on debt after the transition to the new 'trailing average' approach has been completed.
- This submission does not re-visit or re-examine the merits of the AER's transition. The transition has been accepted and most service providers have made, and will continue to make, the necessary changes to their debt funding profiles. The transition should be left to run its full 10-year course.
- As the AER has stated that its decision to move to the trailing average was contingent on a full transition, it is appropriate for the AER to confirm its ongoing commitment to the trailing average approach.
- The AER's definition of efficient debt financing costs has changed since the current Guideline was finalised in 2013. The new definition is difficult to reconcile with the post-transition application of the trailing average approach.
- The AER has also recently stated that neither the on-the-day nor trailing average approach is clearly superior to the other. This suggests that the AER now sees little difference between the approaches, which creates uncertainty about its ongoing commitment to the trailing average approach.
- QTC understands that the AER's return on debt transition, which starts with an on-the-day rate, has been a contentious issue since the Guideline was finalised in 2013. However, the return on debt transition is a temporary, one-time event for each service provider. Arguments made to support an on-the-day transition should not affect the *post-transition* application of the trailing average approach.
- Stakeholders need to have confidence in the return on debt approach. Most service providers have already made significant changes to their debt funding strategies based on the trailing average approach, and consumers are expecting to enjoy the benefits of a more stable return on debt allowance and the elimination of windfall gains and losses that regularly occurred under the on-the-day approach. In QTC's view, the AER's ongoing commitment to the trailing average approach should be confirmed in the reviewed Guideline.

1 Responses to specific questions

Question 1: In your view, to what extent has the current approach to setting the allowed rate of return achieved the National Electricity Objective (NEO) and National Gas Objective (NGO), the Allowed Rate of Return Objective (ARORO), and the related revenue and pricing principles (RPPs)?

Return on debt

- There is general agreement that the debt strategy implied by the trailing average approach is prudent and efficient for highly geared firms (regulated and unregulated) that operate in capital intensive industries.

- The debt financing costs produced by an efficient debt management strategy are, by definition, efficient debt financing costs. Once the transition to the trailing average is complete the allowed return on debt will achieve the ARORO by being:

> '… commensurate with the efficient financing costs of a benchmark efficient entity with a similar degree of risk as that which applies to the service provider in respect of the provision of prescribed services.'

- Post-transition, there will be consistency between the allowed return on debt and the debt costs incurred by an efficiently financed service provider. This meets the requirements of Section 7A(2) of the NEL:

> 'A regulated network service provider should be provided with a reasonable opportunity to recover at least the efficient costs the operator incurs in-
>
> (a) providing direct control network services; and
>
> (b) complying with a regulatory obligation or requirement or making a regulatory payment.'

- Importantly, the recovery of efficiently incurred debt costs will, for the first time, be possible *in each regulatory year*. This will result in a zero annual net cash flow between the return on debt allowance and the interest paid by an efficiently financed service provider to its debt providers, which is consistent with the NPV=0 principle.
- The annual recovery of efficiently incurred debt costs is in the long-term interests of consumers because it eliminates the windfall gains and losses that were common under the on-the-day approach. This means that the allowed return on debt will no longer be a source of wealth transfers between consumers and service providers (in either direction).

Incentives for efficient investment

- Forecast capex for most service providers is significantly lower than in previous determinations. This means that the main investment decision relates to the ongoing investment in the existing regulated asset base (RAB).
- Under the trailing average approach the debt funded portion of the RAB is funded by a portfolio of fixed rate debt with staggered maturities out to 10 years. The annually updated return on debt provides correct signals for maintaining this investment by only using the prevailing cost of debt to compensate a prevailing debt transaction made by the benchmark efficient entity (ie, the annual refinancing of 10 per cent of the benchmark debt balance) and fixing the compensation for the 10-year benchmark debt term.
- This is a significant improvement on the previous approach, which implicitly used the prevailing cost of debt to compensate past fixed-rate borrowings made by the benchmark efficient entity that were not due to be re-financed and re-priced.
- Investment incentives could be strengthened by using a weighted trailing average to determine the allowed return on debt. This will ensure that increases in the benchmark debt balance are compensated using the same prevailing cost of debt that applies to the annual refinancing. However, a simple trailing average will be reasonable provided the forecast capex remains relatively low.

Return on equity

- The AER's return on equity estimates have continued to change point-for-point with changes in the 10-year Commonwealth Government Security (CGS) yield. This is due to the AER's near sole reliance on historical excess returns to estimate the market risk premium (MRP).
- In QTC's view there is insufficient evidence to conclude that the required return on equity displays a perfect positive correlation with the 10-year CGS yield. Events over the last decade such as the global financial crisis and the European sovereign debt crisis have demonstrated that heightened investor risk aversion, and therefore a rising required MRP, tend to coincide with falling CGS yields.

  - As such, it is likely that the AER's return on equity estimates have been more volatile than the true required return on equity.
- The approach outlined in our response to Question 7 is one way of capturing these variations. QTC considers this approach will provide a better and more stable estimate of the allowed return on equity.

Question 3: Is the current approach to setting the benchmark term and level of gearing appropriate?

- The current 10-year benchmark debt term is based on sound, well-established financial risk management principles relating to the management of interest rate risk and refinancing risk.
- A 10-year benchmark term is consistent with observed debt maturity profiles for regulated and unregulated firms that maintain relatively high gearing.
- A 10-year benchmark debt term is an essential requirement for the proper application of the trailing average return on debt approach during and post-transition.

Question 4: Should the conditions and process for setting averaging periods be refined?

- A service provider should continue to have the ability to choose the averaging periods for the annual update of the allowed return on debt.
- The timing of annual debt issuances and any associated risk management transactions are directly related to these averaging periods. It is therefore appropriate for the return on debt averaging periods to be determined by the service provider.

Question 5: To what extent are changes required to our current approach of transitioning from an on-the-day rate to a trailing average?

- No changes should be made to the AER's 10-year transition to a full trailing average.
- Most service providers have made, and will continue to make, the necessary changes to their debt funding profiles during the transition period. It would be inappropriate to make any changes to the transition that would require these transactions to be changed or unwound.
- The AER has stated that its decision to move to the trailing average return on debt approach was contingent on a full transition that starts with an on-the-day rate. Now that service providers have accepted the full transition it is appropriate for the AER to confirm its ongoing commitment to the trailing average approach in the reviewed Guideline.

Question 6: Is it appropriate for us to review the return on debt implementation approach by performing a review of the four third party debt data series currently available to us? Please also explain if you think there is further valuing in broadening this scope of debt implementation issues and why you hold this view?

- The trailing average results in 10 per cent of the allowed return on debt being updated each year based on the prevailing 10-year corporate yield. One of the benefits of this approach is that any unbiased measurement errors in the data used to estimate the prevailing 10-year yield are unlikely to have a material impact on the allowed return on debt.
- For this reason QTC considers the current approach of giving equal weight the corporate yield estimates from the Reserve Bank of Australia (RBA) and Bloomberg to be appropriate. Incorporating additional estimates from Thompson Reuters and Standard & Poor's could be considered, however the incremental benefits are likely to be small under the trailing average approach.

Question 7: Would a more prescriptive approach to setting the equity risk premium be appropriate? If the Guideline has a more prescriptive approach to estimating equity risk premium, what set of conditions for reopening the Guideline would best achieve the national gas and electricity objectives and the allowed rate of return objective?

- A fixed MRP or equity risk premium should not be prescribed in the Guideline. This would effectively be a return to the previous electricity transmission rules, which the AEMC considered to be too inflexible to estimate the allowed return on equity at the time of a regulatory determination:

'In the directions paper, the Commission took the view that the Chapter 6A framework did not provide the level of flexibility required to allow the estimate of the rate of return to evolve as market conditions change. Fixing WACC parameters for long periods produces results that may not reflect current market conditions or the availability of information to estimate parameter values.

The Commission retains its view that Chapter 6A is insufficiently flexible to be the best framework for achieving the NEO and RPP in the future.' [1]

- In QTC's view, a binding Guideline should be more prescriptive than a non-binding Guideline. One way to achieve greater prescription is by assigning fixed weights to the Ibbotson, Wright approach and dividend growth model (DGM) estimates of the MRP. Each estimate would be updated prior to the start of each regulatory control period. The weighted average MRP would be used to estimate the allowed return on equity.
- Some potential weighting options are shown in Table 1:
  - Option 1 is a neutral approach that gives equal weight to each estimation method.
  - Option 2 gives a 50 per cent weight to the approach that produces return on equity estimates that move point-for-point with the 10-year CGS yield, and 50 per cent total weight to the approaches that produce return on equity estimates that are less sensitive to changes in the 10-year CGS yield.
  - Option 3 gives a 50 per cent total weight to the approaches that use historical data and a 50 per cent weight to the forward-looking DGM approach.

TABLE 1: POTENTIAL WEIGHTING OPTIONS FOR ESTIMATING THE MRP

Estimation method	Option 1 (%)	Option 2 (%)	Option 3 (%)
Ibbotson	34	50	25
Wright approach	33	25	25
DGM	33	25	50

- In addition to being simple and transparent, the benefits of a weighted average approach are as follows:
  - Explicit and meaningful weight is given to multiple estimation methods, thereby reducing the reliance on the outcomes from any single method.
  - Explicit and meaningful weight is given to estimation methods that use historic and forward-looking data, thereby making use of non-overlapping data.
  - The return on equity estimates will be less volatile and will not move point-for-point with changes in the 10-year CGS yield. However, it is likely that the return on equity estimates will still move in the same general direction as the 10-year CGS yield.
  - The weighted average MRP estimate will vary over time and is likely to better reflect the level of investor risk aversion when the return on equity is reset compared to using a fixed MRP.
- The strengths and weaknesses of the different MRP estimation methods have been considered in detail in previous AER decisions and various consultant reports. The main conclusion is that no single method can be expected to provide the best estimate of the forward-looking MRP. As such, it reasonable to give explicit and meaningful weight to multiple approaches when estimating the MRP.

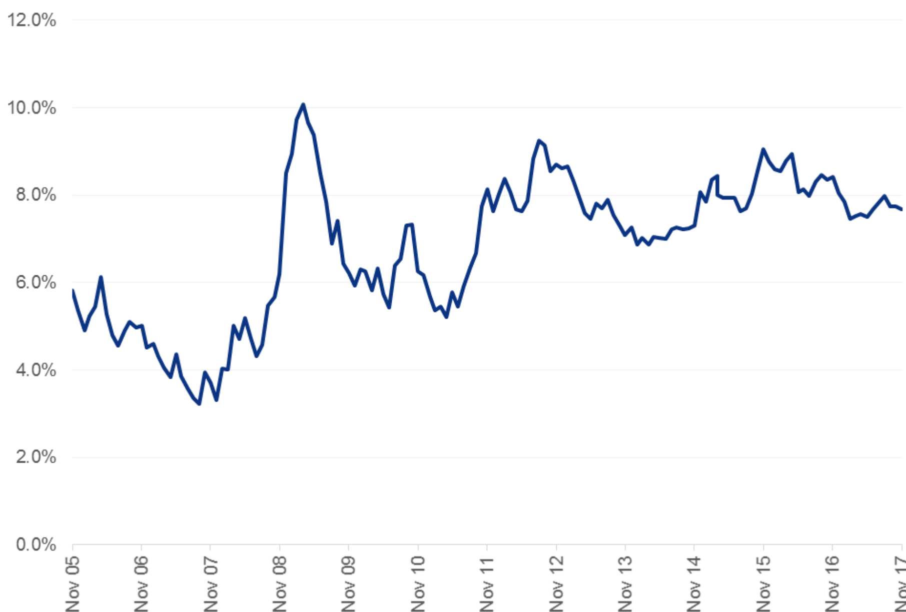
Question 9: What is the appropriate role of dividend growth models (DGMs) in setting the allowed return on equity?

- The DGM should be given explicit weight when determining the MRP. The DGM should not be relegated in importance to a cross-check or some other role as contemplated in the Issues Paper.

[1] AEMC Draft Rule Determination, pp. 39-40

- The weight should be large enough to ensure the DGM estimate makes a meaningful contribution to the MRP used to determine the allowed return on equity.
- One of the strengths of the DGM is that it produces economically sensible MRP estimates over time as shown in Figure 1:
  - The MRP was relatively low in 2005–2007. Realised real equity returns during and just prior to this period were significantly higher than the long-term average, and the average 10-year CGS yield was approximately 6.0 per cent. It is reasonable to expect that investors were requiring a relatively low risk premium during this period to provide equity capital, and this is reflected in the DGM estimates.
  - The heightened level of investor risk aversion during the global financial crisis (2007–2009) and the European sovereign debt crisis (2011–2012) is reflected in the relatively high DGM estimates during these 'flight-to-quality' periods.

FIGURE 1: DGM ESTIMATES OF THE MRP



Source: QTC calculations

- As the DGM is a forward-looking approach that uses the current price of the equity market and consensus forecast dividends, it has no overlap with MRP estimates derived from historical data. As such, the DGM is likely to provide useful incremental information that is not captured by historical MRP estimates.

2 General comments on the allowed return on debt

2.1 Current Guideline

- The development of the Guideline is a requirement under the new National Electricity Rules (NER) and National Gas Rules (NGR). The rules were amended by the Australian Energy Market Commission (AEMC) following a series of rule change proposals by the AER and group of major energy users.
- The Guideline sets out the AER's approach for determining a rate of return that achieves the allowed rate of return objective (ARORO), which is:

> '…that the rate of return for a distribution network service provider is to be commensurate with the efficient financing costs of a benchmark efficient entity with a similar degree of risk as that which applies to the distribution network service provider in respect of the provision of standard control services.'

- The AER finalised the current Guideline in December 2013 after an extensive consultation involving consumers, service providers, investors and central financing authorities such as QTC.
- The AEMC provided the AER with clear guidance on how the allowed return on debt should be determined (emphasis added):

> 'The Commission [AEMC] considers that the long-term interests of consumers are best served by ensuring that the methodology used to estimate the return reflects, to the extent possible, the **efficient financing and risk management practices** that might be expected in the absence of regulation.' [2]
>
> 'The Commission intends that there is consideration of the extent to which the methodology used is commensurate with the **financing and hedging strategy of the benchmark efficient service provider**. This means that there should be consideration of the extent to which the methodology matches the funding costs **expected to be incurred by a benchmark efficient service provider over the regulatory period**, having regard to the debt arrangements the benchmark efficient service provider is likely to already have in place.' [3]

- One of the most significant changes in the Guideline was the AER's decision to move to an annually updated trailing average to determine the allowed return on debt. The trailing average replicates the annual debt servicing cost for a benchmark portfolio of 10 fixed rate loans with annual maturities from 1–10 years. Each year the maturing loan (which equals 10 per cent of the total borrowing) is refinanced with a new 10-year fixed rate loan at the prevailing 10-year interest rate.
- The trailing average approach is consistent with the AEMC's guidance. In explaining its reasons for adopting the trailing average the AER stated (emphasis added):

> 'We consider that holding a portfolio of debt with staggered maturity dates is likely an **efficient debt financing practice** of the benchmark efficient entity operating under the trailing average portfolio approach.
>
> We consider that the regulatory return on debt allowance under the trailing average portfolio approach is, **therefore, commensurate with the efficient debt financing costs** of the benchmark efficient entity.
>
> We further consider that the trailing average portfolio approach is consistent with other requirements of the rules, RPP, and the objectives.' [4]

- In QTC's view these statements continue to be valid and are applicable to the AER's post-transition application of the trailing average. QTC also agrees with the AER's conclusion that the trailing average reflects a 'forward-looking return on debt' even though it is based on costs efficiently incurred at various dates in the past:

> 'The trailing average portfolio approach estimates the return on debt as 'the average return on debt that would have been required by debt investors in a benchmark efficient entity if it raised debt over an historical period prior to the commencement of a regulatory year in the regulatory control period.' This reflects the forward-looking return on debt that would be incurred by the benchmark efficient entity for debt raised incrementally.' [5]

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[2] AEMC Draft Rule Determination, p. 73

[3] AEMC Draft Rule Determination, p. 92

[4] Rate of Return Guideline Explanatory Statement, December 2013, p. 102

[5] Rate of Return Guideline Explanatory Statement, December 2013, p. 107

- It is appropriate for each of these statements to be re-confirmed in the reviewed Guideline, along with a reference back to the original guidance provided by the AEMC.

2.2 Post-Guideline developments

- The AER's definition of efficient debt financing costs has changed since the current Guideline was finalised in 2013. The AER has also recently stated that neither the on-the-day nor trailing average approach is clearly superior to the other.
  - QTC considers it appropriate for both of these issues to be clarified in the reviewed Guideline.
- QTC understands that the AER's return on debt transition, which starts with an on-the-day rate, has been a contentious issue since the Guideline was finalised.
- However, the return on debt transition is a temporary, one-time event for each service provider. Arguments made to support an on-the-day transition should not affect the *post-transition* application of the trailing average approach.

Efficient debt financing costs

- The current Guideline correctly describes efficient debt financing costs as the costs produced by an efficient debt management strategy based on portfolio of debt with staggered maturities out to 10 years.
- The AER's latest definition of efficient debt financing costs is not based on efficient debt financing practice. Rather, the prevailing cost of debt is now assumed to be the efficient financing cost for the benchmark efficient entity (emphasis added):

> 'Our reasoning in this decision for APA (consistent with our reasoning in all decisions released post 2015) makes clear **we consider past financing practices are largely neither relevant nor appropriate to our consideration of efficient financing costs of a benchmark efficient entity** with a similar degree of risk as APA in the provision of its reference services. Efficient financing costs must be seen in the context of the ex ante (or forward looking) nature of the regulatory scheme.' [6]

> **'We consider an allowed return on debt that reflects the prevailing market cost of debt promotes efficient investment decisions.** When firms make investment decisions, they estimate the cost of capital based on prevailing market rates. This is important because the cost of capital is based on investors' expectations of future returns.' [7]

- These views are difficult to reconcile with the ongoing post-transition application of the trailing average approach. For example, at the end of the 10-year transition period:
  - the allowed return on debt will reflect the average interest rate on the 'past financing practices' adopted by the benchmark efficient entity during the transition period, and therefore
  - the allowed return on debt will not reflect the prevailing market cost of debt.
- QTC understands the AER's reasons for not providing compensation during the transition period for historical debt costs that were efficiently incurred when the previous on-the-day approach was in effect. Presumably, these are the past financing practices that the AER is referring to as opposed to the practices that will be adopted by the benchmark efficient entity during the transition period.
- It would be helpful if the AER could confirm if the views expressed in the above quotes are intended to apply post-transition.

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[6] APA VTS Final Decision, p. 3-32

[7] APA VTS Final Decision, p. 3-321

Latest AER views on the trailing average and on-the-day approaches

- In its May 2016 final decision for AusNet Services the AER stated that:

> '… we consider that neither an on-the-day nor trailing average approach would be clearly superior to the other. Rather, each of these approaches has its own benefits and limitations.' [8]

- Using a trailing average of historical debt costs to determine the allowed return on debt is one of the most significant changes to the economic regulation of network service providers in Australia. It is highly unlikely that this change would have occurred if the AER did not consider the trailing average approach to be superior to the on-the-day approach.
- QTC is unaware of any developments since 2013 that would support a change in this position.
- The above quote suggests that the AER now sees little difference between the approaches, which creates uncertainty about its ongoing commitment to the trailing average approach.
- The trailing average was proposed by a group of energy users who were dissatisfied with the volatility of the return on debt outcomes under the on-the-day approach, and the windfall gains and losses that regularly occurred because the cost of debt paid by service providers rarely (if ever) matched the allowed return on debt.
- An assessment of the relative merits of different return on debt approaches should reflect the views of those directly affected by the return on debt outcomes. It is clear that consumers *and* service providers want the allowed return on debt to be determined using a trailing average approach rather than the on-the-day approach. This fact alone is a clear indication of the superiority of the trailing average approach, and this should be reflected in the reviewed Guideline.

2.3 Implications for the Guideline review

- Stakeholders need to have confidence in the return on debt approach. Most service providers have already made significant changes to their debt funding strategies based on the trailing average approach, and consumers are expecting to enjoy the benefits of a more stable return on debt allowance and the elimination of windfall gains and losses that regularly occurred under the on-the-day approach.
- In QTC's view, it is appropriate for the reviewed Guideline to:
  - confirm the AER's ongoing commitment to the trailing average approach
  - acknowledge the superiority of the trailing average approach over the on-the-day approach
  - re-confirm the points in the current Guideline relating to efficient debt financing costs being the outcome from adopting and maintaining efficient debt financing strategies (consistent with the AEMC original guidance on the return on debt), and
  - include a definition of efficient debt financing costs that is consistent with the ongoing post-transition application of the trailing average approach.
- Obtaining clarity on the issues raised in this submission is important given the likelihood of the Guideline becoming a binding instrument.

[8] AusNet Distribution Final Decision, May 2016, 3-100.