



9 October 2020

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Via email

Dear

The Network Shareholders Group (**NSG**) participated in the AER's 2018 Rate of Return Instrument (**RORI**) process and welcomes the opportunity to comment on the working papers on the estimation of the return on equity for regulated energy network businesses.

As some of the largest domestic and global infrastructure investors with access to efficiently priced capital, we expect to play a critical role in the Australian energy system, including providing investment to support transition and decarbonisation. The availability and timeliness of major capital commitments to support sector transition is, and will continue to be, directly reliant on the adequacy of risk-adjusted returns available to investors.

A reasonable return commensurate with investment risk is supported by a robust, transparent, and fair regulatory process which promotes stakeholder confidence and drives a lower cost of capital for the benefit of consumers.

Key points

- 1. Guidance on how information and outcomes are to be assessed should be clearly established before the 'active' phase of the review commences
- 2. Cross checks must be applied to ensure continuing incentives for investment, access to capital, and returns commensurate with risk
- 3. We support retaining the use of the SL CAPM to guide (not set) estimates of the return on equity to aid stability and predictability
- 4. Application of SL CAPM must be capable of reflecting changes in market conditions and risks in line with market practice

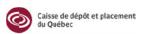
1. An objective assessment framework will increase stakeholder trust in regulatory decisions

In our submission to the AER's Consultation Paper on the 2022 RORI process, we recommended the establishment of an objective and transparent framework for assessing the long-term impacts on price, reliability and security of energy system resulting from the RORI decision. We also recommended establishing an agreed facts data base, incorporating a financeability assessment and providing clarity and consistency in the treatment of material presented by stakeholders. ¹

NSG, Response to the AER's consultation paper on the 2022 RORI process, 16 January 2020.









We remain of the view that this will increase the confidence of stakeholders in the AER's decisions and act as an important accountability measure particularly in the absence of any independent third-party review process.

The assessment framework should ensure the RORI achieves the National Electricity Objective (**NEO**) and the Revenue and Pricing Principles (**RPPs**) under the National Electricity Law (**NEL**). The NEO purposefully requires the promotion of the long-term interests of consumers in relation to price and service to avoid short term objectives being achieved without due regard to longer term consequences. The RPPs also require that Network Service Providers (**NSPs**) have a reasonable opportunity to recover its efficient costs and incentives are sufficient to support efficient investment.

We recommend that the AER develop a set of measures that will facilitate an assessment of its decision making on equity returns in the context of the NEO and RPPs. This should include a holistic assessment of the impact on incentives for investment, capital investment and service outcomes in response to current and expected decisions and that changes in efficient financing costs are reflected. It will also ensure that information and evidence will be assessed appropriately and consistently across stakeholders.

2. Appropriately applied cross-checks will underscore the reasonableness of the RORI outcomes

As a result of the 2018 RORI, the return on equity has fallen by more than 250 basis points. The equity risk premium in the 2018 RORI (3.66%) was 89 basis points below the equity risk premium in the 2013 Rate of Return Guideline (4.55%). The total return on equity has fallen a further 180 basis points due to the reduction in the risk-free rate to anomalously low levels and has remained low due to unprecedented intervention by the Reserve Bank of Australia (**RBA**) in the bond market. Expected equity returns are even lower again due to the AER's methodology for forecasting inflation that does not allow significant changes in market conditions to flow through and revenue models that permanently embed the difference in lower returns.

In this context, it would be prudent to consider the impacts of changes to the RORI on investment incentives, and the reasonableness of the overall return provided, rather than simply rely on technical modelling outcomes, which do not change with dynamic market conditions.

We consider that the investment that occurs after a RORI is applied is relevant to understanding the incentives for investment and sufficiency of returns to investors provided in that decision. Further, unlike information on transaction and trading multiples, this information is subject to significant review, audit, and adjustment to ensure comparability and consistency over time.

In the recent electricity network performance report, the AER concluded that investors continue to view allowed returns as being at least sufficient to attract efficient investment.² However, the information reviewed was for a period before the 2018 RORI was established (even in draft) or applied ³, hence it is difficult to see how such a conclusion could have been reached. In that same report the AER acknowledged a significant decline in capital expenditure since 2012 and that the investment was below efficient levels but did not link these outcomes to the sufficiency of returns on investment.⁴

This highlights the need to undertake and respond to independent cross checks to ensure the RORI outcome is reasonable given available information on market expectations and conditions. For example,

² AER, Electricity Network Performance Report 2020, p. 3.

³ The 2018 draft was released in July 2018 and established in December 2018 but was not applied in a regulatory determination until 1 July 2019.

⁴ AER, Electricity Network Performance Report 2020, p. 18.











the final and draft determinations released by the AER since the 2018 RORI⁵ have included a regulated return on equity that is equal to or lower than the regulated return on debt. This outcome is unreasonable and would not be expected to attract equity in either theory or practice and should demonstrate that model has been applied in a way that is not consistent with the NEO or RPPs.

A further important cross check is one of internal consistency. Regardless of the model adopted to guide returns on equity, those returns should enable sufficient revenue to be recovered by a regulated business to support the credit metrics assumed in the estimation of returns. If the cost of debt, for example, is estimated on the basis of a BBB+ credit rating and 60% gearing, the revenue to be recovered by the regulated business should be sufficient to achieve these credit metrics. For example, this is not achievable under the 2018 RORI for an illustrative \$2 billion project of similar size to those identified in the Integrated System Plan.. Accordingly, there must be a problem with the estimate of the return on equity as it is the only balancing item.

In the 2018 RORI process, although cross checks were applied and not met, this ultimately did not change the outcome. Therefore, in the absence of third party or independent review, to strengthen accountability and governance, we recommend that the cross-checks and market reasonableness tests be verified (with reasons given) by an independent panel of experienced practitioners. The panel should have equal representation selected by consumers and the regulated businesses.

3. SL CAPM should guide the cost of equity estimate

We support the AER's view that the standard Sharpe-Lintner capital asset pricing model (**SL CAPM**) should play a major role in the AER's determination of the return on equity in the 2022 RORI. We consider that the retention of this model provides a degree of stability and predictability in the regulatory process and aligns with the estimation approach adopted by most economic regulators and market practitioners globally. However, we disagree with the AER's assessment of key SL CAPM parameters outlined in the Draft Working Paper, as those parameters systematically underestimate the risk of investing in regulated networks and fail to provide investors with a reasonable opportunity to recover the efficient cost of equity.

The AER's consultant, The Brattle Group notes that the AER's return on equity is the lowest of international regulators surveyed. Key drivers of this include:

- 1. Not incorporating forward-looking evidence to the same extent as some other regulators;
- 2. Placing no weight on cross checks and results of other financial models; and
- 3. Using longer estimation periods when estimating equity beta.

The expected return on equity must be commensurate with risk and market conditions. Therefore, the SL CAPM should be applied in a manner that enables prevailing risk, and changes in risk, to be reflected in the estimate of equity returns. This can only be achieved if the parameters are forward-looking and contemporary, as indicated by The Brattle Group.

4. A return must be commensurate with risk and market conditions

Market risk premium to reflect forward looking views of market risk

We support using dividend growth models (**DGM**) to inform the choice of market risk premium (**MRP**) to include relevant and forward-looking market information. There was considerable material provided by stakeholders during the 2018 RORI to support the role and use of forward-looking information in a forward-looking estimate of returns. The Brattle Report confirmed that this approach is adopted by

⁵ NSW electricity distribution determinations in April 2019 and South Australian and Queensland electricity distribution draft determinations in September 2020.

⁶ TransGrid, National Electricity Rules change proposal, Making ISP projects financeable, Participant Derogation, 30 September 2020, p. 4.











international regulators which suggest that the reliability challenges noted by Satchell and Partington can be overcome. However, if it is agreed that regard should be had to forward-looking information, then it should have a reasonable influence on the MRP estimate adopted and not be fully discounted as was the case in 2018 RORI.

We also support recognising the relationship between the MRP and the risk-free rate as highlighted in the Brattle Report. ⁷ The 2018 RORI assumes that total market returns have a one for one movement with the risk-free rate. However, none of the information before the AER in the 2018 RORI, or now, supports a one for one fall in equity returns with the risk-free rate.

Nor do market practitioners and valuation experts adopt a short-term risk-free rate with a long-term MRP. Instead they match a long-term risk free rate (or blend) with a long term MRP – or adjust the MRP. Indeed, the increased volatility in risk-free rates has resulted in a more volatile MRP and upward adjustment to reflect the anomalously low government bond yields. Examples from market practitioners include:

- Ilan Sadeh of Hastings Funds Management (and the Investor Reference Group's nominee to the
 expert panel during the 2018 RORI process) presented to the AER Board in 2018 that a MRP of
 6% is adopted with a long term average of the risk free rate, whereas spot rate is better matched
 with a MRP of 6.5%.8
- Rob Koh of Morgan Stanley referred to using a MRP of 6% matched with a mix of spot and long term average risk free rate; and
- David Johnston of Queensland Treasury Corporation presented material supporting both that falls in bond rates were not matched with falls in expectations of equity returns and MRPs used by valuation experts increase with falls in bond rates.⁹

Further evidence of the inverse relationship between the MRP and bond rates and the need to match the bond rate with an appropriate MRP is outlined by KPMG in the 2017 DUET Scheme Booklet:

"The risk free rate of return is the return on a risk free security, typically for a long-term period. In practice, long dated Government bonds are accepted as a benchmark for a risk free security. In Australia, the 10 year Commonwealth Government bond yield is commonly referenced, of which the current spot yield was 2.713% as at 31 January 2017.

However, since the global financial crisis in 2008, Government bond yields have remained low compared to long-term averages. Combined with market evidence which indicates that bond yields and the market risk premium are strongly inversely correlated, it is important that any assessment of the risk free rate should be made with respect to the position adopted in deriving the market risk premium. As we adopt a long term view on the market risk premium (rather than spot), it is also important to do the same with the risk free rate to ensure the combination of the risk free rate and market risk premium represents an appropriate return in the current investment environment.

Consequently, the risk free rate has been selected by reference to both the current spot yield and long term forecast yields on 10 year Australian Government bonds. We have adopted 4.0% as an appropriate risk free rate, which represents a blend of the spot rate and a forecast long-term bond yield of 4.753% (based on an average of long term bond yields sourced from Oxford Economics (5.106%) and BIS Shrapnel (4.400%)."¹⁰

⁷ The Brattle Group, A Review of International Approaches to Regulated Rates of Return, June 2002, p. 60.

⁸ Ilan Sadeh, Transcript from concurrent evidence sessions, 5 April 2018, p. 70.

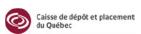
⁹ Rob Koh and David Johnston, presentations to the AER's online forum on rate of return working papers, 16 September 2020.

¹⁰ KPMG Independent Expert's Report and Financial Services Guide, March 2017, found at http://duet.net.au/qetattachment/ASX-releases/2017/Court-Approves-Despatch-Of-Scheme-Booklet/COURT-APPROVES-DESPATCH-OF-SCHEME-BOOKLET.pdf, p. 249.











The inverse relationship between the MRP and risk-free rate must feature in the estimation of equity returns. We recommend that the MRP be applied to a long-term measure of the bond rate given the term for which the MRP will apply (up to 9 years with a four year RORI and five year regulatory period).

Equity beta to signal prevailing risk

We support developing equity beta estimates that are representative of the prevailing risks associated with regulated entities. In the 2018 RORI process, the NSG submitted that there were several rising risks that were not compensated for in the regulated rate of return such as regulatory, sovereign, technological and low inflation risk, yet equity beta was reduced. Paradoxically, these risks have continued to grow as regulated equity returns have fallen.

This is because the AER's method for estimating equity beta does not enable changes in risk to influence equity beta estimates. The AER relies on long data sets and obsolete data points with no regard to directional changes in any of the series considered. This method results in any prevailing risk signals, or change in risk, being lost.

We welcome the reports from both The Brattle Group and Partington and Satchell that identify that most regulators use a shorter time frame to estimate equity beta to give greater weight to current financial conditions. We also note that Rob Koh outlined his practice was to use a short time series of three years to estimate equity beta. This is consistent with ensuring equity beta estimates appropriately represent prevailing risk and can provide valuable insight on changes in risk as signalled by the market.

Conclusion - Investors have a critical role in developing an efficient electricity system

It is investors that will be called upon for undertaking the significant capital investment required to deliver the benefits to customers from increased interconnection, connection of renewable energy zones, supporting distribution networks as a platform for new services and technologies and continued safe and reliable operations.

There is little recourse available to investors in the short term to respond to anomalously low returns given the responsibility to maintain services, comply with obligations and ensure the safety of the community. However, over the longer term, deficiencies in incentives and returns will impede efficient levels of investment, which will have a detrimental impact on the services received and available to consumers.

The RORI will affect the returns on more than \$100 billion in electricity network investment and is the key driver and determinant of efficient investment in network infrastructure over the long term. A reasonable return commensurate with risk supported by a robust, transparent, and fair regulatory process for determining regulated returns promotes stakeholder confidence, which, in turn, drives a lower cost of capital for the benefit of consumers.













If you have any questions or would like to discuss further, please contact Spark Infrastructure (phone Regards,



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