

Mr Warwick Anderson
General Manager
Australian Energy Regulator
GPO Box 3131
Canberra ACT 2601

By email: RateOfReturn@aer.gov.au

11 March 2022

Dear Warwick,

Submission on AER's rate of return information paper

Jemena welcomes the opportunity to comment on the AER's December 2022 rate of return information paper and final omnibus paper. We appreciate the Australian Energy Regulator's (AER) consultative approach in its development of the 2022 Rate of Return Instrument (2022 RoRI) and successful expert concurrent sessions it held in February 2022.

In this submission we share our concerns with the final omnibus paper and information paper in relation to the following key issues –

- Term of risk free rate
- Measurement of market risk premium
- Sample for measuring equity beta
- Trailing average cost of debt

We welcome any further queries in relation to this submission. If you wish to discuss this submission please contact Sandeep Kumar [REDACTED]

Yours sincerely

[REDACTED]
Ana Dijanosic

General Manager – Regulation

Annexure A

Risk free rate term

In our opinion, no new arguments have been put forward in the 2022 Rate of Return Instrument (**RORI**) in respect of term of risk free rate that the AER has not already considered in 2018 RORI and 2013 guideline. The AER mentions in the 2018 RORI –

There are two opposing principles considered below that guide how we have decided the appropriate term for the risk free rate. They are whether: • a term that reflects the long-lived nature of the underlying assets is more appropriate, or • whether to a term that is consistent with how investors would value an investment in a government bond is more appropriate.

These are the same two principles discussed in the February 2022 concurrent sessions. In its 2018 assessment the AER explained that the CAPM is a single period model and estimates how investors will value potential returns from investing in long life assets. The AER concluded –

Our final decision is to maintain use of a 10 year term for the risk free rate. We consider the use of a 10 year term will lead to an overall rate of return that will better contribute to the achievement of the NEO and NGO. We consider a 10 year term is consistent with the theory of the Sharpe-Lintner CAPM which is a single period equilibrium model, estimating the returns an investor requires over a long-term investment horizon. The 10-year term also reflects the actual investor valuation practices and academic works.

Since 2018 RORI there has been no change in CAPM theory, or in actual investor valuation practices. Nor has any stakeholder raised the issue of risk free rate term. The AER's PTRM is also consistent with a 10-year term as it does not assume refinancing of entire equity portion on RAB each time a business proposes its revenue requirement. Rather than devote a significant amount of effort over a settled issue, we consider that the AER should instead focus on the bigger issue of how to measure equity beta reliably and how to lower the volatility in the equity returns.

If the regulatory period was 4 years or 8 years, it would not change long term investor expectations when investing the same amount of capital on assets which will remain invested in assets for the same duration. However, under the AER's proposal, it would result in a different return on equity.

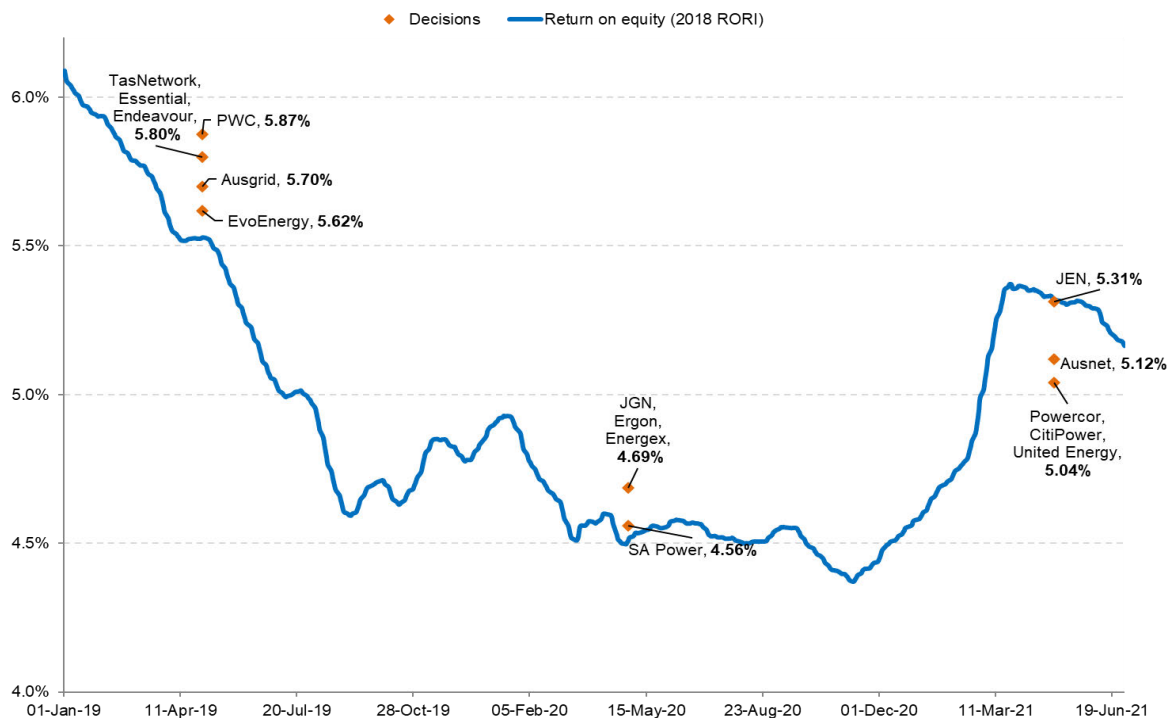
In our view, a change to tenor will mean moving to a RORI that is no longer consistent with CAPM theory, and is inconsistent with actual investor valuation practices. Such a move cannot be considered in isolation without understanding the impact on achievement of NEO/NGO, the impact on low beta bias, the market risk premium estimate and the compensation for equity raising costs in the PTRM.

Market Risk Premium

Jemena, in its September 2021 submission on omnibus papers, provided a chart to demonstrate the volatility in outcomes from AER's approach to apply a fixed market risk premium on top of a changing risk free rate (see Figure 1).¹

¹ Jemena, submission on rate of return omnibus papers 3 Sep 2021 ([Jemena - Submission - Equity - 3 September 2021.pdf \(aer.gov.au\)](#))

Figure 1: AER's return on equity decisions over 2019-21



In our opinion, the AER's current approach results in volatile and lottery type outcomes which are inconsistent with delivery of the NEO and NGO objectives of long term economic efficiency. During the concurrent sessions the experts unanimously agreed that market risk premium moves with time. Both ENA and Jemena, in September 2021, have provided alternative approaches to the AER for estimating the MRP that would result in a less volatile return on equity allowance. We encourage the AER to consider both of these submissions.

Equity beta

The AER is yet to propose any new approach to estimating equity beta, despite the sample set for domestic beta reducing to one listed firm. A number of experts in the concurrent session agreed that the AER could look at international data to help estimate Australian beta. In this respect we encourage the AER to consider expanding the sample set, and that it separate electricity and gas samples. As Dr. Tom Hird noted—

How could stranding risk drive systematic risk? Well, it depends on the investors' view of likely cost in the future of - if you just think about now, could an investor be looking at a gas business and asking themselves, "Does this stranding risk raises my systematic risk assessment of that?" Well, if they think that sudden action on climate change is going to be bad for the market, say, and part of that sudden action on climate change is going to be bad for the gas network then there is a systematic component to that.

If, actually, worse than expected climate change is bad for the market and also is bad for gas networks as it triggers policy changes then there is a systematic component to that. Now, I am purely speculating about that, but the question is if we don't have the domestic Australian gas distribution

businesses in our sample, for example, or we have one transmission business then we are going to have trouble trying to tease that out.

Now, maybe we won't be able to tease that out using international comparators. Maybe it won't show up at all; the betas are too noisy. But I'm pointing out that would be an advantage from including international comparators, because you could examine exactly that issue.

We recommend that the AER considers expanding the sample for beta and in doing so examine the electricity and gas business' samples separately to understand the differences in systematic risks and meet the requirements of the NEO and NGO. The a priori hypothesis of no difference in electricity and gas beta that the AER has long held needs to be empirically tested with separate sample sets.

Weighted average cost of debt

The AER notes that some transmission businesses may have lumpy capital expenditure (capex) that results in debt refinancing requirements beyond the standard 10% that is embedded into the current trailing average approach. While this may be the case for transmission networks we do not consider it relevant for distribution networks. We do not support a change from current simple trailing average approach for the following reasons –

1. Our financing requirements are unlikely to be as lumpy as transmission networks.
2. Any weighting based on forecast capex is unlikely to align with the actual capex profile, especially for distribution businesses. It is conceivable that future capex which is considered efficient at the time of the determination might no longer be considered to be efficient at a later date, as new information becomes available. Even if the actual changes in RAB is used as weights, this could be done only through a retrospective NPV neutral true up which may be inconsistent with AER's ex-ante framework.
3. Weighted average approach will increase the complexity of the estimation process and could result in higher price volatility.

We therefore do not support a change to the AER's current simple trailing average approach.