12 December 2017

Mr Warwick Anderson
General Manager
Australian Energy Regulator
GPO Box 520
MELBOURNE VIC 3001

Via: rateofreturn@aer.gov.au

Dear Warwick

AER Issues Paper- Review of the Rate of Return Guideline

SA Power Networks, Australian Gas Infrastructure Group, CitiPower, United Energy and Powercor (the Businesses) are pleased to enclose a joint submission on the AER's Issue Paper - Review of the Rate of Return Guideline (Issues Paper).

The Businesses note their input into and support of the submissions also provided by Energy Networks Australia to the AER Issues Paper. This submission summarises our view on the key issues raised in the Issues Paper and highlights some matters we consider are particularly important in the Guideline review process.

We note our support for developing a Guideline that is capable of being accepted by stakeholders. We also support the incremental nature of this process in light of the significant review underpinning the current Guideline and that, as noted by the AER, there have been no material changes in finance theory that would warrant changes in the current approach to setting the rate of return.

The key issues raised in this submission therefore focus on relevant considerations in updating the data to ensure the most recent and reliable evidence is used to inform the rate of return. This is particularly important given changes in the risk environment faced by our businesses, including as a result of recent changes in technology and policy.

As noted in our earlier submission, we consider that the AER has developed a comprehensive review process that is consistent with developing a guideline that is capable of being accepted. We look forward to participating in the review to support the AER in achieving this objective. Please contact Patrick Makinson on (08) 8404 5865 if you would like to discuss this submission further.

Yours sincerely

Sean Kelly
General Manager Corporate Strategy

Renate Vogt
General Manager Regulation

Craig de Laine
General Manager Strategy and Regulation

Submission on the AER Issues Paper

As noted, the Businesses have provided input into and endorse the Energy Network Australia submission to the AER Issues Paper. We therefore do not seek to replicate that submission or provide detailed responses to each of the questions set out in the Issues Paper. Rather, we provide our views on the overall approach to the Rate of Return Guideline (Guideline) review and a summary of our position on key issues.

We have also attached potential questions and issues for the concurrent evidence sessions contemplated in the AER's Positions Paper.[1] The list is provided to assist the AER and stakeholders in developing the questions and approach, but is necessarily preliminary in nature. We will provide separate submissions on the issues to be covered and experts to be involved in accordance with the process set out in the Positions Paper.

Overall approach to the review

In order to efficiently invest and operate network infrastructure in the long term interests of consumers, network businesses require a reasonable and sustainable return on investment. The AER has set a goal of determining a rate of return that promotes the efficient investment in and use of energy network services for the long term interests of consumers.

The AER has also endorsed the objective of developing a Guideline that is capable of being accepted by all stakeholders, an objective we support. We believe that this objective will be met through a comprehensive review process that provides stakeholders with repeat opportunities to provide input, with balanced consideration of that input, clear articulation as to how conclusions are reached and with AER responses to feedback transparently reported on through the process.

We consider that such a review outcome is consistent with above-mentioned goal of promoting efficient investment in, and efficient operation and use of energy network services for the long term interest of consumers. It is also consistent with the COAG Energy Council's policy intent to improve certainty and transparency of regulatory decisions.[2]

The AER and stakeholders have generally agreed that the review of the Guideline should be incremental in nature. This is appropriate given a current Guideline already exists that itself was the outcome of significant review. It is with this in mind that we do not intend to revisit areas of debate already considered, such as the use of multiple models to directly inform the cost of equity.

The focus should instead be on incremental improvements to the current Guideline based primarily on updating the relevant evidence used to set the rate of return. This also reflects that, as noted by the AER, there has been no material changes in finance theory warranting a reconsideration of settled issues. This approach will, in our view, provide greater certainty and confidence in the regulatory process.

If changes to methodology are made, then the overall approach to setting that particular aspect of the rate of return must be considered. For example, the Issues Paper questions the role of certain models used to inform parameter estimates used to set the return on equity, which issues if opened-up again

[1] *AER Positions Paper – Review of the rate of return guidelines – Process for the guideline review, November 2017.*

[2] *COAG SCO Bulletin: Binding Rate of Return Guideline, 4 October 2017*

will need to be considered in the context of the use of the foundation model used to set the cost of equity.

Finally, as the AER notes in the Issues Paper, it is expected that legislative changes will soon be made that will have the effect of making the Guideline binding on the AER and networks. It will be important that there is an ability to "re-open" the Guideline where there is a material change in market circumstances, which event and associated process will need careful consideration in this review process.

Return on Debt

In relation to the return on debt, and consistent with the Energy Networks Australia submission, we consider that:

- The current Guideline transition to a trailing average should be maintained. A change in approach in circumstances where most networks are already part way through that transition would result in increased uncertainty and risk. This would also likely result in significant additional (and inefficient) financing costs if, for example, hedging arrangements reflecting the Guideline transition had to be unwound.
- Consistent with the continued application of the 10-year transition to a trailing average approach, the term of debt should be maintained at 10 years reflecting the long life of the assets involved in providing distribution services.
- We support consideration of whether any additional data source used to estimate the cost of debt are reliable, reflecting our general view that a reliance on a broader range of information will likely result in a better estimate. The Businesses support reliance on new data sources provided they meet the criteria set out in the Energy Networks Australia submission.
- The 60% gearing ratio in the current Guideline still appears appropriate, unless there is evidence of a material change in the historical market value gearing estimates (we note that market value approaches should continue to be used to ensure consistency with the estimate of other parameters).

Return on Equity

Consistent with an incremental approach, we support the current approach to setting the return on equity, which includes the continued application of the AERs foundation model (SL CAPM) approach. Under that approach, the AER has regard to the low-beta bias in the SL CAPM when choosing its point estimate for the equity beta. The Businesses are not aware of any new evidence since the making of the 2013 Guideline that would justify a change to this approach.

While there may be differences of opinion about the extent of the low beta bias and whether it can be accurately measured (something that the concurrent expert evidence sessions could consider), it is well accepted that the bias exists. The Businesses submit that the low-beta bias should continue to be a factor that influences the methodology for estimating the return on equity.

The increased structural changes in energy markets and the unprecedented challenges faced by networks as a result of emerging technologies are also relevant. The growth of distributed generation and the introduction of contestability of a number of services, such as metering, means that networks face greater risks than when the 2013 Guideline was made, and the risk is increasing. These risks need to be considered.

One pragmatic way to ensure any change in risk profiles has been taken into consideration is to use the most recent information available to inform the rate of return.

As explained in more detail in the Energy Networks Australia submission, the AER's current approach to the return on equity can produce volatile results. The combination of a risk free rate observed over a short term averaging period and a static risk premium for each network results in the return moving one-for one with movements in CGS yields. This outcome is inconsistent with providing regulatory certainty and stability, which factors support efficient investment in and use of network services.

In seeking greater stability, the Businesses submit that:

- It is important that parameter estimates are informed by all relevant evidence, in particular the market risk premium (MRP) estimate should be informed by both forward looking estimates as well as historic averages. This issue is addressed further below.
- Consideration should be given to lengthening the averaging period for the risk free rate to assist in smoothing out volatility.

Market Risk Premium

The Businesses support the continued use of both historical and forward-looking information in determining the MRP. This includes having regard to the estimates produced by the AER's specification of the dividend growth model (DGM) and the Wright approach and, wherever possible, explaining how this has been used to determine the cost of equity.

In the 2013 Guideline the AER acknowledged that giving a role to the DGM and Wright approach will result in more stable return on equity estimates over time.[3] As noted above and in the Energy Networks Australia submission, we consider that a more stable return on equity estimate is desirable in promoting efficient investment in and use of network services. Additionally, the DGM was a key component of the package of approaches underpinning our acceptance of the current guideline, and maintaining it is consistent with the incremental approach discussed at the outset of the Issues Paper. We therefore support the continued use of the DGM to estimate the MRP.

The MRP is a forward looking parameter. The effect of relegating the role of the DGM and other methodologies, such as the Wright approach, would be that the estimate of the MRP becomes defined by the historic averages.

In order to produce a return on equity that is consistent with prevailing conditions in the market for equity funds, is stable and promotes efficient network investment, the MRP must be informed by all relevant evidence, including forward looking estimates. For these reasons the Businesses support Energy Networks Australia's submission that the MRP should be informed by all relevant evidence, including the DGM and Wright approach.

3 Rate of Return Guideline, Explanatory Statement, page 66.

Equity beta

In arriving at its primary equity beta range in the 2013 Guideline, the AER relied upon empirical estimates of equity beta from nine domestic firms. Only three of those firms remain listed today. The inclusion of delisted firms in a sample of empirical estimates does not reflect prevailing market conditions, including changes in risk since the firm was delisted (especially if the beta estimate is informed by data that is almost 20 years old).

Moreover, a sample of three firms is clearly insufficient to provide a robust and statistically-reliable estimate of equity beta. In these circumstances, the Businesses support the Energy Networks Australia submission that the estimate of equity beta is informed by a broader range of empirical estimates, including estimates from international energy network businesses and domestic infrastructure firms.

In the 2013 Guideline the AER had regard to the evidence of low-beta bias in arriving at its equity beta estimate to "mitigate possible low-beta bias".[4] As referred to in the Energy Networks Australia submission, the evidence of low beta bias is well-accepted. The Businesses are not aware of any new evidence that suggests otherwise. It is therefore important in this review that the AER continues to take account of the low-beta bias in estimating the return on equity.

Gamma

The Businesses accept the outcome of recent review activity that have upheld the AER's utilisation rate approach to estimating gamma. The Businesses accept the application of that approach in this Guideline review and look forward to working with stakeholders to focus on that approach.

The AER relies upon two different approaches to estimate the utilisation rate:

1. ATO tax statistics estimates.
2. The equity ownership approach.

Both approaches provide relevant evidence to inform the estimate of gamma and the Businesses agree that in this review the empirical estimates using these two methods should be updated. However, the Businesses submit that consideration should be given to the relative weight given to the above methods, and in particular:

- The use of ATO tax statistics to estimate the overall value of gamma. As Dr Hathaway points out in his letter attached to the Energy Networks Australia submission, the minimum data necessary to arrive at an overall estimate of gamma are company tax paid (credits created) and franking credits redeemed. The combination of these two data items directly estimates gamma. Dr Hathaway's view is that these two data items are 100% reliable as they are figures that relate directly to ATO tax collections.[5] This approach also has the advantage of not requiring a separate estimate of the distribution rate.
- Equity ownership estimates do not take into account the fact that, for various reasons, some investors who receive imputation credits do not in fact redeem them.

[4] *AER Rate of Return Guideline, 2013, Explanatory Statement, Appendix A, page 12.*
[5] *Letter from Dr Neville Hathaway to Energy Networks Australia, 12 December 2017, pages 1-2.*

- Equity ownership estimates are based on ABS data that requires filtering and adjustment and may be subject to sampling error.

If the distribution rate is to be estimated separately, the Businesses submit that no weight should be placed on estimates derived from the financial statements of a handful of ASX listed firms. This approach does not give rise to an estimate of the distribution rate for the benchmark efficient entity because most of the firms in the samples have material foreign income that can increase the distribution of imputation credits. By definition the benchmark efficient entity has no foreign income.

Finally, like other parameters, it is important in this review that all relevant evidence is taken into account, including the relative strengths and weaknesses of the methods for estimating the utilisation rate. This should be clearly explained in the Guideline, including how the relative strengths and weaknesses of the two methods above have been addressed.

Attachment: Suggested questions for concurrent evidence sessions

Overall approach

1. Where does the balance between judgement and data lie, and how precisely can we seek to estimate rate of return parameters objectively, using market data?
2. Under what circumstances should a binding Rate of Return Guideline be re-opened?
3. How should the changing risk profile faced by networks be taken into account in the regulatory framework?

Market Risk Premium

4. What role should the geometric mean of historical excess returns play in arriving at an estimate of the MRP?
5. What role should DGM estimates play in arriving at an estimate of the MRP?
6. How should the Wright evidence be used to inform the estimate of the MRP? How is this evidence used by other regulators?
7. How should independent expert valuation reports be used to inform the estimate of the MRP?
8. What estimate of MRP is supported by recent decisions of other Australian regulators?
9. What estimate of MRP is supported by recent surveys?
10. How should the set of relevant evidence be distilled into a single MRP point estimate?

Equity beta

11. Can a reliable estimate of equity beta, or a reliable range, be obtained from the three remaining firms? If not, how can the reliability of equity beta estimates used by the AER be improved?
12. Should equity beta estimates be re-levered to the 60% gearing of the BEE?
13. What is the appropriate role for the evidence on equity betas of overseas energy network businesses?
14. What is the appropriate role for the evidence from domestic infrastructure businesses?
15. How should low-beta bias associated with the SL-CAPM, and evidence from the Black CAPM, be taken into account when implementing the foundation model approach?

Gamma

16. What are the relative merits of the ATO tax statistics and equity ownership approaches to estimating gamma under a utilisation rate interpretation?
17. What are the relative merits of the ATO tax statistics and the "Lally" approach to estimating the distribution rate?
18. What role should data that is 12 or more years out of date have when estimating gamma using the equity ownership approach?