

12 December 2017



Part of the Energy Queensland Group

Mr Warwick Anderson
General Manager
Australian Energy Regulator
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Dear Mr Anderson

ISSUES PAPER – REVIEW OF THE RATE OF RETURN GUIDELINES

Ergon Energy Corporation Limited (Ergon Energy) and Energex Limited (Energex) welcome the opportunity to provide a submission to the Australian Energy Regulator (AER)'s *Issues Paper: Review of the rate of return guidelines* (the issues paper).

Ergon Energy and Energex are supportive of the AER's incremental approach to reviewing the rate of return guidelines. Ergon Energy and Energex consider that a number of aspects relating to the rate of return are now fairly settled, for example the application of the trailing average return on debt, supporting the AER's approach to this review.

In relation to the key issues identified for review, Ergon Energy and Energex's concerns mainly relate to the AER's approach to estimating the return on equity, particularly the exercise of fixing the market risk premium, and as a result, the equity risk premium. Ergon Energy and Energex believe that such an approach, which results in the return on equity varying one for one with the government bond yield, is unlikely to be in the best interests of network businesses and their customers.

Ergon Energy and Energex provide responses to the AER's specific questions in the attached submission. Ergon Energy and Energex also support the submissions made by Energy Networks Australia and Queensland Treasury Corporation.

Should you require additional information or wish to discuss any aspect of this submission, please do not hesitate to contact either myself on (07) 3851 6416 or Trudy Fraser on (07) 3851 6787.

Yours Sincerely

A handwritten signature in black ink, appearing to read 'Jenny Doyle', written over a white background.

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Encl: Ergon Energy and Energex's submission to the Issues Paper

AER Issues Paper Review of the Rate of Return Guidelines

Ergon Energy and Energex
Submission

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1. INTRODUCTION

Ergon Energy Corporation Limited (Ergon Energy) and Energex Limited (Energex) welcome the opportunity to provide submissions to the Australian Energy Regulator (AER)'s issues paper on the review of the rate of return guidelines (the issues paper).

This submission, which is available for publication, is provided by Ergon Energy and Energex in their roles as distribution network service providers (DNSPs) operating in Queensland.

Ergon Energy and Energex are committed to providing:

- safe, reliable and affordable electricity supply;
- a great customer service experience;
- customers with greater control over their energy consumption;
- efficient and sustainable energy solutions; and
- access to the next wave of energy-linked innovative technologies and renewables.

Ergon Energy and Energex are both members of Energy Networks Australia (ENA), the national industry association that represents businesses operating Australia's electricity transmission and distribution and gas distribution networks. The ENA has prepared a comprehensive response to the issues paper, and we are supportive of the positions presented in their response.

Ergon Energy and Energex also support the submission made by Queensland Treasury Corporation.

Ergon Energy and Energex support the approach the AER has undertaken in the first review of the guidelines issued in December 2013. Specifically, Ergon Energy and Energex welcome the incremental approach of identifying a set of key issues for review, rather than seeking to reopen every aspect of the rate of return. Ergon Energy and Energex believe that a number of aspects of the rate of return are now fairly settled, for example the application of the trailing average cost of debt, supporting the AER's approach to this review.

2. RESPONSE TO ISSUES PAPER QUESTIONS

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)?*

Ergon Energy and Energex recognise that the rate of return has a significant effect on regulated revenue; small changes in the rate of return generate substantial changes in regulated revenue. Furthermore, the determination of the rate of return is inherently subjective and complex. This is because many of the parameters are unobservable and must be estimated, in particular, the expected return on equity. There are a variety of approaches to estimating the rate of return; indeed, regulators currently adopt fundamentally different approaches to the same task. It is therefore plausible that different approaches to setting the allowed rate of return can achieve the NEO, ARORO and the RPPs.

In this context, issues relating to the rate of return have proven to be quite contentious. If the rate of return is set too high, customers will pay network charges that are higher than necessary. Conversely, if the rate of return is too low, network businesses will be unable to attract the necessary capital to invest in their networks. Neither of these scenarios promotes efficient investment in electricity services in the long-term interests of consumers.

Ergon Energy and Energex note that the AER's current approach to setting the allowed rate of return has only been applied over the past three years, following the 2012 amendments to the National Electricity and Gas Rules which fundamentally changed the rate of return framework. Thus, while noting that network businesses have been able to invest in their respective networks over the past three years, it is too early to draw firm conclusions regarding the extent to which, overall, the AER's current approach has achieved the NEO, ARORO and RPPs.

Certainly, there are aspects of the AER's current approach that most stakeholders agree will contribute to the achievement of the NEO and ARORO. In particular, the trailing average approach to estimating the return on debt is consistent with efficient debt management practices, and therefore results in debt financing costs that are commensurate with efficient financing costs of a benchmark efficient entity of a similar risk. Moreover, the trailing average approach will result in less volatile regulated revenue and prices across regulatory periods, compared to the previous on-the-day approach.

However, Ergon Energy and Energex have reservations about some aspects of the AER's current approach, in particular, the estimation of the return on equity. Ergon Energy and Energex believe that the AER's current approach undermines transparency and predictability. While Ergon Energy and Energex support the use of Sharpe-Lintner Capital Asset Pricing Model (SL-CAPM) as the foundation model for estimating the return on equity, the manner in which evidence that is relevant to estimating the parameters of the models is treated by the AER is of significant concern.

Broadly speaking, the AER's current approach to estimating the equity beta and market risk premium (MRP) involves, first, forming a "primary range" of estimates using its preferred sources of evidence, and thereafter using other sources of evidence combined with regulatory judgement to select point estimates within the primary ranges. It is the latter step in this approach that, to date, has not been reasonably transparent and predictable. Ergon Energy and Energex acknowledge that the use of judgement is unavoidable when distilling a range of evidence. However, the AER could be a lot more transparent in its exercise of judgement, in particular, in relation to the relative

weight placed on other (secondary) evidence in selecting the point estimates.

The AER's estimation of the MRP since publishing the current guideline illustrates this issue. The AER's current guideline specifies that the AER will determine the MRP at each determination, and that the estimate will be informed by historical excess returns, dividend growth model (DGM) estimates, survey evidence and conditioning variables. DGMs provide forward looking estimates and estimates that vary through time, and the AER proposed that it would apply this evidence symmetrically. However, since the publishing the guideline, the AER used its discretion to place less weight on DGM evidence – as estimates from the evidence increased. Thus, notwithstanding the AER indicating that it was going to review the MRP at each determination, its approach was to effectively fix the MRP over the past three years.

Moreover, given that the equity beta was fixed in the guideline, the AER effectively maintained a constant equity risk premium and simply added the prevailing 10 year Commonwealth government bond yield (risk-free rate) to determine the allowed return on equity, in every revenue determination. As a result, the return on equity varied one for one with the government bond yield. Since the guideline was published in December 2013, the 10 year Commonwealth government bond yield has varied from a high of approximately 4.38 per cent to a low of approximately 1.82 per cent. This represents a potential variation in the allowed rate of return of approximately 1 per cent and a substantial variation in revenue and network prices for any network business.

Ergon Energy and Energy do not believe such an approach, in which regulated revenues and prices are exposed to sudden and significant fluctuations in bond markets is in the long term interests of customers.

2. *Should information on profitability, asset sales, financeability and any other financial information be used when assessing outcomes against the NEO and NGO, ARORO, and the related RPPs? If so, how?*

Ergon Energy and Energex's view is that information on profitability, asset sales, financeability and other financial information is potentially useful in testing the reasonableness of the AER's overall revenue determinations. In particular, financeability tests can be used to test the impact of AER's decisions on the financial health of a regulated network business. A network businesses' ability to finance its operations, service its debts and maintain its credit rating are important considerations in achieving the NEO. These tests are used extensively by other regulators, both here in Australia and overseas.

However, Ergon Energy and Energex consider that it is difficult to use this information to directly inform the rate of return, and more specifically to make like-for-like assessments. A range of other factors have an effect on profitability, asset sales and financeability etc. For example, a network businesses' responsiveness to the incentive regulatory framework will directly impact on the profitability of the business.

3. *Is the current approach to setting the benchmark term and level of gearing appropriate?*

Ergon Energy and Energex consider that the current approaches to setting the benchmark term and level of gearing remain appropriate.

Ergon Energy and Energex agree that the 10-year term for both the return on debt and return on equity is consistent with the long-lived nature of network investments. In Energex and Ergon's view, this is largely a settled issue amongst most stakeholders that does not warrant revisiting.

Network businesses predominantly invest in 30 to 60 year assets; thus, have to raise long-term debt in order to manage refinancing and interest rate risks. Because of the limited availability of very long term debt, network businesses generally refinance their debt several times over the life of the assets. A shorter benchmark term increases the frequency with which the entity has to refinance its debt, and thus significantly increases the refinancing risks of the benchmark efficient entity. Such an outcome is unlikely to contribute to the NEO.

Also, given that most businesses are currently in the process on transitioning to the full 10 year trailing average return on debt, any changes to the 10 year benchmark term for debt would necessitate reopening the debate on transition methods. This would be unnecessary development that undermines regulatory stability and is not in the long-term interests of customers.

In relation to gearing levels, Ergon Energy and Energex consider that this is one of the most settled issues in regulation. A benchmark gearing ratio has been widely used by Australian regulators over a long period of time, and remains appropriate going forward in order to promote regulatory stability. While Ergon Energy and Energex recognise that actual gearing levels vary over time in response to market conditions, and differ between entities, it will be difficult to determine precisely that there has been structural change in the benchmark gearing.

Also, Ergon Energy and Energex agree that the approach of benchmarking the gearing levels of businesses with a similar degree of risk to regulated Australian energy networks is appropriate and should not warrant extensive review. However, Ergon Energy and Energex do not consider that it is appropriate to use book values. The AER's task is to estimate the expected rate of return, and in this regard, standard finance practice is the use of market values of equity and debt. That is, the task is to calculate the returns required by investors in the market. Further, other elements of the rate of return are estimated using market data, and, accordingly, the same approach must be adopted for benchmark gearing levels.

4. *Should the conditions and process for setting averaging periods be refined?*

Ergon Energy and Energex generally consider that the current conditions and process for setting averaging periods are reasonable. Ergon Energy and Energex's engagement with the AER staff in previous determinations was straightforward and not burdensome. It is important that network businesses retain the ability to nominate averaging periods.

However, in relation to the averaging period used to estimate the annual prevailing return on debt, Ergon Energy and Energex note that, in addition to the conditions in the guideline, the AER set out further conditions in the revenue determinations to accommodate the annual pricing proposal process, that is:

- The periods must end no later than 25 business days before a service provider submits its annual pricing proposal or reference tariff variation proposal for year *t* to the AER
- The periods must commence no earlier than 12 months plus 25 business days before a distributor submits its annual pricing proposal for year *t* to the AER.

It would be worthwhile for these conditions to be set out in the guideline, to the extent that they are well accepted by all stakeholders.

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

Ergon Energy and Energex do not consider that changes are required to current approach of transitioning to the trailing average approach. Almost all businesses are in the process of transitioning to the full trailing average approach following the recent round of regulatory determinations. This is a settled issue and Ergon Energy and Energex support the continuation of the current transition until the trailing average is fully implemented.

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?*

Ergon Energy and Energex support a review of all four third party debt data series published by the Reserve Bank of Australia (RBA), Bloomberg, Thomson Reuters and Standard & Poor's. The data series are published by reputable, independent institutions; therefore, it is worth investigating their respective merits.

The data series will employ different methodological choices particularly in relation to bond selection criteria and curve fitting methods. It is reasonable to expect that using all four data series potentially reduces estimation errors in estimating the return on debt of the benchmark efficient entity. For example, using all four data series, say with equal weighting, would reduce the risk of material error in the event that a particular data series were to diverge significantly from the return on debt of the benchmark efficient entity.

However, Ergon Energy and Energex consider that the application of the trailing average approach will play a bigger role in reducing the impact of estimation errors given that annual prevailing return on debt estimates only have a 10 per cent weighting.

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?*

As previously mentioned, the practical effect of the AER's current approach to setting the return on equity has been to set a fixed equity risk premium of 4.55 per cent, using an equity beta of 0.7 and MRP of 6.5 per cent. In relation to the equity beta and MRP it is worth noting that, in the current guideline, the AER specified the equity beta value and the approach to determining the MRP. That is, the value of the MRP was not specified in the guideline, but was determined in each determination using the process set out in the guideline. At the time of publishing the guideline, in December 2013, the guideline approach resulted in a 6.5 per cent estimate of the MRP.

However, since then, the AER has continued to use its discretion to maintain the MRP at 6.5 per cent, despite evidence of a change in market conditions from DGMs. Consequently, setting the value of the equity risk premium in the next guideline, to the extent that is binding, is not a departure from the AER's current approach.

An outcome of the AER's approach of maintaining a fixed equity risk premium is a return on equity estimate that varies one for one with the government bond yield. Such an approach exposes network businesses and customers to a 'lottery' system where sudden fluctuations in the bond markets have a significant impact on regulated revenues and prices. It is not clear to Ergon Energy and Energex whether such an approach contributes to the achievement of the NEO and ARORO.

If the AER continues with its current approach, then Ergon Energy and Energex consider that the AER should set out clear worked examples illustrating, first, the events/conditions that would trigger a reconsideration of the estimated equity risk premium, and secondly, how the AER would adjust the equity risk premium. In other words, if the guideline is binding, there must be significantly less application of discretion after the guideline is finalised.

8. *Is the theory underlying the Black CAPM still appropriate for informing an equity beta point estimate? In its place, should alternative information to guide the selection of an equity beta point estimate?*

It remains unclear to Ergon Energy and Energex what exactly the ‘theory of the Black CAPM’ entails. The AER refers to the theoretical principles underpinning the Black CAPM suggesting that the standard SL-CAPM may underestimate the return on equity for firms with equity betas below 1.0. The AER uses this theory, together with estimates for international equity betas to inform the selection of the point estimate of the equity beta within a current range of 0.4 and 0.7.

Ergon Energy and Energex note that what is well documented and accepted in finance and economic literature is the concept of “low-beta bias”: the tendency of the SL-CAPM to underestimate the returns for low-beta stocks (those with a beta less than 1). Empirical tests of SL-CAPM using observed data have demonstrated that low-beta stocks produce higher returns than predicted by the SL-CAPM (and vice versa). This is the phenomenon of “low-beta bias” and is not equivalent to the Black CAPM which is a more general version of the CAPM. Ergon Energy and Energex believe that it would be an error on the AER’s part to disregard low-beta bias.

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

Ergon Energy and Energex’s view is that evidence from DGMs must be used to directly inform the estimate of the MRP. This is consistent with the AER’s view at the time of publication of the current guideline in 2013.

In the current guideline, the AER argued that the limitations of DGMs – particularly the sensitivity of DGMs to input assumptions – meant that DGMs they were unsuitable in directly estimating the return on equity of the benchmark efficient entity, as originally proposed by network businesses (as part of the multi-model approach). Instead, the AER argued that the implementation issues were less prevalent when using DGMs to determine an estimate of the return on market. Consequently, DGMs were better suited to inform the MRP.

However, since then, in the revenue determinations, the AER has made a concerted effort to move away from DGMs, placing less weight on the evidence as it indicated that the prevailing MRP was above its estimate of 6.5 per cent. The AER has emphasised the limitations of the DGMs as justification for placing less reliance on the models. In the Issues Paper, the AER proposes to relegate the importance of DGMs to a cross-check role because of the limitations of the DGMs.

Ergon Energy and Energex note that all models used to estimate the return on equity – including the SL-CAPM – are sensitive to input assumptions. For example, the SL-CAPM is sensitive to choices about the equity beta and MRP. Therefore, the “sensitivity to input assumptions” is not a valid reason for relegating the role of DGMs. DGMs are used extensively by academics, market practitioners and regulators and provide a forward-looking MRP, therefore, should be used to directly inform the estimate of the MRP.

10. Is it appropriate to limit the review of the valuation of imputation credits to updating the empirical analysis? Are there any particular issues we should take into account when updating empirical analysis?

Following the Full Federal Court of Australia's decision on the value of imputation credits, Ergon Energy and Energex believe this now a largely settled issue. Specifically Ergon Energy and Energex accept the 'utilisation rate' interpretation preferred by the AER, instead of the "value" interpretation previously advocated by network businesses.

11. Should expected inflation and its interaction with the allowed rate of return be a priority under the Guideline review?

Given that the AER has separately undertaken an extensive review of expected inflation over the past 7 months, Ergon Energy and Energex do not consider that this should be a priority under the guideline review.