

# Attachment 8: Rate of return, imputation credits and forecast inflation

Regulatory proposal for the ACT electricity distribution network 2019–24  
January 2018



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## Key points

For the rate of return, Evoenergy has adopted the Australian Energy Regulator's (AER's) 2013 Guideline. However, if a trailing average approach without transition is ultimately used in remaking Evoenergy's 2015 decision on the return on debt, then Evoenergy will adopt that approach to the return on debt in its revised regulatory proposal.

For equity and debt raising costs, Evoenergy has adopted the AER's methodology.

For imputation credits, Evoenergy has adopted the AER's preferred value, consistent with the Federal Court decision (2017).

For forecast inflation, Evoenergy has adopted the methodology specified in the post-tax revenue model (PTRM), consistent with the view of the Australian Competition Tribunal (2016c) that this is required by the Rules.

This approach results in a rate of return of 6.42 per cent (nominal vanilla), a value of 0.4 for imputation credits, and a forecast inflation rate of 2.5 per cent.

## 8.1. Introduction

In recent years there has been considerable debate and disagreement regarding the appropriate approach to estimating the rate of return, imputation credits and forecast inflation under the National Electricity Rules (Rules). These issues have been the subject of appeals to the Australian Competition Tribunal (Tribunal) and the Federal Court (Australian Competition Tribunal 2016a,b,c,d,e,f); Australian Competition Tribunal (2017); Federal Court of Australia (2017)). The appeals involved comprehensive reviews from both a merits and judicial review perspective of the AER's approach to estimating these parameters. The resulting appeal decisions are therefore important in providing guidance to industry and the AER on the approach that should be adopted going forward.

Evoenergy considers that its regulatory proposal is consistent with the Federal Court's findings of law and any guidance provided by the Federal Court or Tribunal in those appeal decisions. The key exception to this is the return on debt where Evoenergy proposes an estimation methodology that, in its opinion, departs from the AER's obligations arising from the Federal Court and Tribunal appeal decisions.

The decisions of the Tribunal (2016a as explained in 2016d) and Federal Court (2017) found error with the AER's gradual transition to the trailing average approach. In Evoenergy's opinion, the related findings in those decisions on the proper construction of the allowed rate of return objective and clause 6.5.2 of the Rules more generally operate to require the adoption of a trailing average methodology without any transition for estimation of the return on debt. Evoenergy acknowledges that the most recent Tribunal decision (2017) and Federal Court decision (2018) on debt find no error with the AER's debt estimation methodology. However, it is the earlier decisions that are determinative of the correct approach for Evoenergy in the remittal process and the present determination.

Nonetheless, Evoenergy has adopted the AER's 2013 Rate of Return Guideline (2013 Guideline) approach to estimating the return on debt in this initial regulatory proposal. Evoenergy has adopted this approach because it understands that the AER has a different view to Evoenergy on its obligations arising from the decisions of the Tribunal (2016a) and Federal Court (2017) in respect of the remaking of its 2015 decision and the making of the present determination. In addition, this issue and the resultant debt estimation methodology for the remade 2015 decision are yet to be definitively resolved.

If, however, in the remaking of Evoenergy's 2015 decision, a trailing average approach without transition is ultimately determined to be required by the allowed rate of return objective and clause 6.5.2, Evoenergy will be entitled to, and will, adopt that approach in its revised regulatory proposal.

This attachment sets out Evoenergy's approach to estimating the rate of return, equity and debt raising costs, imputation credits and forecast inflation.

## **8.2. Rate of return**

The return on capital reflects the cost that a firm incurs in financing its capital through debt and equity funds. The return on capital is one of the building blocks used to determine the annual revenue requirement for Evoenergy for each year of the regulatory control period. The return on capital for each regulatory year is calculated by applying the allowed rate of return, or weighted average cost of capital (WACC), to the regulatory asset base (RAB) at the beginning of the regulatory year.

The approach to determining the rate of return must be in accordance with the National Electricity Law (NEL) and the Rules. The Rules require the AER to publish a Rate of Return Guideline (clause 6.5.2(m)). The Rate of Return Guideline is not binding on either the AER or Evoenergy; however, departures from it must be identified and the reasons for those departures must be provided (clause 6.2.8(c) and schedule 6.1.3(9)).

This section first discusses the NEL, the Rules and the Rate of Return Guideline before setting out Evoenergy's proposed approach to estimating the return on equity, the return on debt and the total rate of return.

### **8.2.1 National Electricity Law and Rules and AER Rate of Return Guideline**

#### **8.2.1.1 National Electricity Law**

The National Electricity Objective (NEO) set out in the NEL is to promote the efficient investment in, and efficient operation and use of, electricity services for the long-term interests of consumers of electricity with respect to:

- a. price, quality, safety, reliability and security of supply of electricity; and
- b. the reliability, safety and security of the national electricity system.<sup>1</sup>

The NEL contains revenue and pricing principles which set out the costs that a network service provider should be allowed to recover in its prices for direct control network

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<sup>1</sup> NEL section 7.

services and the incentives that should be provided. Specific to the rate of return, section 7A(5) requires that:

*A price or charge for the provision of a direct control network service should allow for a return commensurate with the regulatory and commercial risks involved in providing the direct control network service to which that price or charge relates.*

The AER must perform or exercise its functions or powers in relation to the making of the determination for 2019–24 in a manner that will or is likely to contribute to the NEO and, where two or more determinations will or are likely to contribute to the NEO, to make the decision that will or is likely to do so to the greatest degree (NEL section 16(1)(a) and (d)). It must also take the revenue and pricing principles into account in determining the rate of return (NEL section 16(2)(a)).

### **8.2.1.2 National Electricity Rules**

The National Electricity Rules (Rules) set out the requirements in relation to determining the rate of return, with the overarching requirement that it achieves the allowed rate of return objective set out in clause 6.5.2(c):

*The allowed rate of return objective 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 allowed rate of return objective).<sup>2</sup>*

Clause 6.5.2(d) also specifies that the allowed rate of return for a regulatory year must be a weighted average of the return on equity and the return on debt, and must be determined on a nominal vanilla basis that is consistent with the estimate of the value of imputation credits.

Further, clause 6.5.2(e) specifies that in determining the allowed rate of return, regard must be had to:

1. *relevant estimation methods, financial models, market data and other evidence;*
2. *the desirability of using an approach that leads to the consistent application of any estimates of financial parameters that are relevant to the estimates of, and that are common to, the return on equity and the return on debt; and*
3. *any interrelationships between estimates of financial parameters that are relevant to the estimates of the return on equity and the return on debt.*

Clause 6.5.2 also includes specific rules in relation to estimating the return on equity and the return on debt, which are discussed in the relevant sections below.

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<sup>2</sup> Rules, clause 6.5.2 (c).

### 8.2.1.3 Rate of Return Guideline

Clause 6.5.2 of the Rules requires the AER to make and publish the Rate of Return Guideline which must set out the methodologies that the AER proposes to use in estimating the allowed rate of return and the estimation methods, financial models, market data and other evidence the AER proposes to take into account in estimating the return on equity, the return on debt and the value of imputation credits.

The AER published the first Rate of Return Guideline in December 2013 (2013 Guideline) and this was scheduled to be reviewed in December 2016 in accordance with Rule 6.5.2(p). However, the AER sought a rule change from the Australian Energy Market Commission (AEMC) to extend the review to December 2018 to provide the opportunity for the outcome of the Federal Court proceedings (Federal Court, 2017) to be taken into account in the next Guideline review process. The AEMC approved the rule change and introduced transitional arrangements for affected service providers (including Evoenergy) that will be part way through the regulatory determination process when the new Guideline is published.<sup>3</sup> To provide regulatory certainty, the transitional arrangements apply the 2013 Guideline to the 2019–24 regulatory determination process. Therefore, for the full 2019–24 process, the 2013 Guideline will apply, regardless of when the AER publishes the revised Guideline.

### 8.2.2 Return on equity

The Rules include two requirements specific to the return on equity:

*6.5.2(f) The return on equity for a regulatory control period must be estimated such that it contributes to the achievement of the allowed rate of return objective.*

*6.5.2(g) In estimating the return on equity under paragraph (f), regard must be had to the prevailing conditions in the market for equity funds.*

The AER's approach to estimating the return on equity, which it states is consistent with the NEL and Rules, is set out in the 2013 Guideline. In summary, the AER's approach involves the following six steps.<sup>4</sup>

1. Identify relevant material that may inform the estimate of the expected return on equity.
2. Assess the relevant material identified in step one against the AER's assessment criteria to identify what role the AER proposes relevant material to play in estimating the expected return on equity.
3. Use the Sharpe-Lintner capital asset pricing model (SL-CAPM) as the foundation model and estimate the input parameters as follows.
  - A risk free rate based on the yield of Commonwealth Government Securities with a 10-year term using an averaging period of 20 consecutive business days as close as practicably possible to the commencement of the regulatory control period.
  - A range for the equity beta based on empirical analysis using a set of Australian energy utility firms the AER considers reasonably comparable to the benchmark

<sup>3</sup> AEMC 2016, Rule Determination: National Electricity Amendment (Rate of Return Guidelines Review) Rule 16, National Gas Amendment (Rate of Return Guidelines Review) Rule 2016, October.

<sup>4</sup> See AER 2013a for further detail.

efficient entity (BEE). Select a point estimate from within the range using empirical estimates of overseas energy networks and the theoretical principles underpinning the Black CAPM. In the 2013 Guideline, this approach led to a point estimate of 0.7 for equity beta chosen from within the range 0.4 to 0.7.

- A range for the market risk premium (MRP) with regard to theoretical and empirical evidence including historical excess returns, dividend growth model estimates, survey evidence and conditioning variables. The AER will also have regard to recent decisions among Australian regulators. Estimate a point estimate for the MRP based on regulatory judgement, taking into account estimates from each of those sources of evidence and considering their strengths and limitations.
4. Estimate ranges, directional or relative information that will inform the point estimate of the expected return on equity.
  5. Evaluate the full set of material that will inform the estimation of the expected return on equity. This includes assessing the foundation model range and point estimate alongside the other information from step four.
  6. Determine the final point estimate for the expected return on equity using the foundation model point estimate as the starting point.

The AER's 2013 Guideline Explanatory Statement provides further explanation of each of these steps.

The AER used this approach to arrive at a return on equity estimate of 7.1 per cent in Evoenergy's final determination for the 2014–19 regulatory control period. In May 2015, Evoenergy and three other network service providers applied to the Tribunal for merits review of the AER's decision on the return on equity. The Tribunal did not find error in relation to the AER's return on equity methodology or estimate.

Consistent with the Tribunal's decision in relation to the return on equity, Evoenergy has adopted the AER's 2013 Guideline approach to determine the return on equity for the 2019–24 regulatory control period. Specifically, Evoenergy has adopted the SL-CAPM as the foundation model and estimated each of the inputs to the SL-CAPM using the methodology set out in the 2013 Guideline. Evoenergy's estimate for each of the SL-CAPM inputs is discussed in turn below before presenting the final estimate of the return on equity.

#### **8.2.2.1 Risk free rate**

Consistent with the 2013 Guideline, Evoenergy has estimated the risk free rate using the yield on Commonwealth Government Securities with a 10-year term over an averaging period of 20 consecutive business days. For the purposes of this regulatory proposal, Evoenergy has adopted an averaging period of 20 consecutive business days to 31 October 2017 as a proxy for the actual risk free rate averaging period that will be applied in making the 2019–24 determination. For the purposes of this regulatory proposal, the risk free rate is 2.78 per cent.

Evoenergy's proposed averaging period for estimating the risk free rate for the purposes of the final determination is provided in confidential Appendix 8.1 to this attachment.

#### **8.2.2.2 Equity beta**

To assist Evoenergy in estimating the equity beta consistent with the AER 2013 Guideline methodology, Evoenergy engaged Frontier Economics (Frontier) to undertake the following analysis:

- update the statistical estimates of the equity beta using the AER’s methodology and market data that has become available since the publication of the 2013 Guideline;
- consider the adjustments that the AER has made in the past to its statistical estimate of the equity beta to arrive at its final equity beta estimate;
- consider the latest evidence on Australian energy network businesses published by the Economic Regulation Authority of Western Australia (ERA), given that the 2013 Guideline had regard to similar evidence published by the ERA in 2013; and
- provide an expert opinion on a reasonable, current estimate of the equity beta for Australian energy network businesses.

Frontier’s report titled *An equity beta estimate for Australian energy network businesses* and dated February 2018,<sup>5</sup> is provided as Appendix 8.2 to this attachment and is summarised as follows.

- In the 2013 Guideline, the AER adopted a primary range of 0.4 to 0.7 for the equity beta of the BEE. This primary range is based on a set of domestic comparators for a regulated energy distribution business. Only three of the nine domestic comparator companies considered by the AER at the time of the 2013 Guideline remain listed today: APA Group, AusNet Services and Spark Infrastructure.
- In a series of decisions, the AER has explained that it considers the best empirical estimate of beta to be 0.5. It set the allowed beta to 0.7 based on three additional considerations:
  - international estimates—the fact that the weight of evidence from international comparators supports a beta estimate materially above the AER’s domestic starting point of 0.5;
  - consideration of the theory of the Black CAPM—the fact that the Black CAPM evidence is that the unadjusted SL-CAPM will systematically understate the required return on low-beta stocks; and
  - investor certainty—the fact that instability in equity beta allowances may cause investors to increase their assessment of regulatory risk.
- Approximately four years have elapsed since the AER’s analysis was performed, providing approximately 200 more recent weekly return observations. Using the same firms that the AER analysed and using the same estimation method, current estimates are higher than the best statistical estimate at the time of the 2013 Guideline:
  - based on weekly beta estimates over five years, the mean estimate is between 0.67 and 0.79 (depending on whether DUET, which is no longer listed, is included in the analysis);
  - the value and equally-weighted portfolio estimates are 0.71 and 0.83, respectively;
  - the mean of the two portfolio estimates is 0.77; and
  - using monthly data, the beta estimates are generally higher.

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<sup>5</sup> An earlier version of this report dated December 2017 and incorporating confidential information was originally provided to the AER on 31 January 2018. The report was republished in February 2018 at the AER’s request as the result of the AER’s intention to separately publish the original information on which the claim to confidentiality was based.

- However, it is Frontier's view that it is not possible to derive statistically reliable beta estimates using just three comparator firms. In order to obtain statistically reliable beta estimates, it is necessary to expand the sample of comparators. While energy network comparator firms from overseas could be included in the sample, the AER considers that such firms should not be used to estimate the primary equity beta range or the best empirical estimate of beta. Therefore, the only remaining way to improve the statistical reliability of beta estimates is to consider empirical estimates from listed domestic non-energy networks.
- This leads Frontier to consider a set of domestic transport-related infrastructure firms that are comparable to an energy distribution business. While not perfect comparators, they share a number of important characteristics with energy networks, which makes them useful in informing the estimate of the equity beta of Australian energy network businesses. For these firms, Frontier finds that the mean point estimate is materially above the AER's current equity beta allowance of 0.7:
  - the mean estimate based on weekly data over the last five years is 1.15;
  - the mean estimate based on monthly data over the last five years is 1.22; and
  - the means estimate based on monthly data over the last 10 years is 1.30.
- The ERA has recently updated its equity beta estimates for the BEE and concluded that the latest available data supports a best statistical estimate of 0.7 compared to the AER's 2013 Guideline best statistical estimate of 0.5. Unlike the AER, the ERA does not reflect in its final point estimate the international evidence, low-beta bias or investor certainty. Any accounting for the factors identified by the AER in the 2013 Guideline as relevant to the selection of the final point estimate would result in a higher estimate than is indicated by the statistical evidence alone.
- Based on its analysis, Frontier concludes that the application of the AER's 2013 Guideline approach to the most recently available data would support an equity beta of at least 0.7.

Evoenergy also engaged Frontier to examine the issue of low-beta bias in the SL-CAPM and provide an expert view on the quantum of the bias and the reasonableness of the AER's approach in taking it into consideration. Frontier's report titled *Low-beta bias* (December 2017) is provided as Appendix 8.3 to this attachment and is summarised as follows.

- Low-beta bias is the term that is used to summarise one of the main results of empirical tests of asset pricing models—the SL-CAPM systematically understates the returns on stocks with beta estimates less than one.<sup>6</sup> The evidence of low-beta bias is so consistent and well-accepted that it is now discussed in standard finance courses and textbooks.
- The majority of studies support an estimate of the zero-beta premium (the additional return, over and above the SL-CAPM forecast for an asset with a beta of zero) of between two per cent and four per cent.
- The AER's selection of an equity beta of 0.7 takes into account three considerations, one of which is low-beta bias. Even if the AER's selection of the equity beta was

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<sup>6</sup> The existence of low-beta bias was also accepted by the Tribunal in 2016a (as explained in 2016d paragraphs 779 and 731).

entirely attributable to low-beta bias, it would be at the lower end of the range of empirical estimates.

- Consequently, Frontier concludes that the AER's approach does not appear to fully correct for low-beta bias.

Significantly, the Tribunal's finding of no error in the AER's 2013 Guideline approach to estimating the return on equity is premised on the Tribunal's acceptance of the existence of low-beta bias and, further, that low-beta bias is exacerbated in the prevailing conditions of low government bond rates and a high MRP.<sup>7</sup>

Evoenergy has taken a conservative approach to equity beta and adopted a value of 0.7. This is consistent with the value reported in the 2013 Guideline and the value used by the AER in recent decisions. However, it is below the value that would be determined by applying the AER's 2013 Guideline methodology using updated data and giving consideration to international evidence, low-beta bias and investor certainty.

### 8.2.2.3 Market risk premium

To assist Evoenergy in estimating the MRP consistent with the AER 2013 Guideline methodology, Evoenergy engaged Frontier to undertake the following analysis:

- explain where the estimation of the MRP fits within the AER's regulatory framework;
- explain the approach to estimating the MRP that the AER set out in its 2013 Guideline and contrast that approach in the Explanatory Statement with the AER's approach to the MRP in recent decisions;
- summarise the evolution of the relevant evidence and empirical estimates since 2013;
- explain the implications of applying a constant MRP to contemporaneous estimates of the risk-free rate; and
- provide a reasonable, current estimate of the MRP.

Frontier's report titled *The market risk premium* (December 2017) is provided as Appendix 8.4 to this attachment and is summarised as follows.

- Within the SL-CAPM, the MRP is a parameter that reflects the additional return, over and above the risk free return, that investors would require from an investment of average risk. The AER has recognised that the MRP varies over time and that it seeks to estimate the prevailing market risk premium, which is a forward-looking estimate of the market risk premium. Frontier agrees that the regulatory task is to estimate, for an asset of average risk, the forward-looking required return on equity that is commensurate with the prevailing conditions in the market for equity funds.
- The AER's 2013 Guideline approach involves establishing a range derived by combining historical excess returns evidence and dividend growth model (DGM) evidence, and then choosing a point estimate that 'lies between the historical average range and the range of estimates produced by the DGM'.<sup>8</sup> The AER's Guideline material states that it would also give some consideration to survey evidence and limited consideration to other evidence (including conditioning variables and other regulators' estimates of the MRP). The worked example in the 2013 Guideline

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<sup>7</sup> Tribunal 2016a, as explained in Tribunal 2016d at paragraphs 731, 749-750 and 779.

<sup>8</sup> AER 2013b: 97.

material settled on a point estimate very close to the mid-point between the historical excess returns range and the DGM range.

- However, in recent decisions, the AER has departed from the 2013 Guideline approach without explanation. Specifically, the AER has identified a 'baseline' estimate of the MRP using only historical excess returns, with the DGM estimates as only directional evidence to assess whether the final point estimate should sit above or below the baseline estimate. Other evidence, such as surveys and conditioning variables, are then used to support the AER's contention that the MRP is relatively stable and that its estimate is not inconsistent with surveys or other regulatory determinations.
- Since the publication of the 2013 Guideline, relevant evidence and empirical estimates have evolved.
  - The AER's excess return estimates have increased somewhat to support a range of 6.0 per cent to 6.5 per cent.
  - DGM estimates have increased substantially to support a range of 7.14 per cent to 8.18 per cent.
  - Recent decisions by other Australian regulators have been almost exclusively above 7.0 per cent. The Independent Pricing and Regulatory Tribunal's August 2017 Biannual Weighted Average Cost of Capital update determined a MRP estimate of 7.7 per cent, the ERA's October 2017 WACC Final Decision for WA rail networks determined a MRP estimate of 7.2 per cent and the Queensland Competition Authority's November 2017 Draft Decision on bulk water charges for Seqwater concluded that the best empirical estimate of the MRP at the present time is 7.0 per cent.
  - The most recently available Fenandez survey, on which the AER placed primary regard in its 2013 Guideline, supports a MRP estimate well in excess of 7.0 per cent.
  - Cross-checked evidence in the form of recent reports from valuation experts and estimates derived from the Wright approach provide strong directional evidence that the MRP in prevailing market conditions is materially higher than 7.0 per cent.
- Despite the relevant evidence and updated empirical estimates since the publication of the 2013 Guideline, the AER has not changed its estimate of the MRP. Given that the AER determines the return on equity by adding its constant MRP estimate to the contemporaneous government bond yield, the consequence is that the allowed return on equity falls one-for-one with falls in the government bond yield. Since government bond yields have fallen sharply since the 2013 Guideline (in fact, the three years since the Guideline have produced the three lowest government bond yields in history), the AER's allowed return on equity has also fallen—by more than 13 per cent since 2013. This occurs in spite of the evidence presented in Frontier's report, including the AER's own DGM estimates, that the required return on equity has remained remarkably stable since the Guideline.
- To determine a reasonable current estimate of the MRP, Frontier applied the methodology set out in the 2013 Guideline material to the latest data available. Specifically, the approach used was to:
  - update the historical excess returns range;
  - update the DGM range based on the AER's specification and parameter estimates;

- construct a combined range using the historical excess returns and DGM evidence; and
- select a point estimate considered to be reasonable from within the combined range.
- This approach produces a current estimate of at least 7.0 per cent. Frontier notes that its proposed estimate is conservative in that:
  - the AER’s historical excess returns estimates have increased since 2013;
  - the AER’s DGM estimates have increased since 2013, and are currently above 7.0 per cent;
  - a number of other regulators are currently adopting MRP estimates above 7.0 per cent;
  - the most recent survey evidence suggests that the MRP has increased since 2013, and is currently above 7.0 per cent;
  - the AER’s Wright estimates have increased since 2013 and are currently above 7.0 per cent; and
  - the effective MRP estimates being used by independent valuation experts are currently above 7.0 per cent.

Based on Frontier’s MRP report, Evoenergy has adopted a MRP of 7.0 per cent.

#### **8.2.2.4 Total return on equity**

Under the SL-CAPM, the return on equity is calculated as the risk free rate (2.78 per cent) plus the product of the equity beta (0.7) and MRP (7.0 per cent). Based on the proxy averaging period of 20 consecutive business days ending 31 October 2017, Evoenergy’s estimate of the return on equity is 7.7 per cent.

### **8.2.3 Return on debt**

#### **8.2.3.1 Rules on return on debt**

Consistent with the return on equity, the Rules specify that the return on debt for a regulatory year must be estimated such that it contributes to the achievement of the allowed rate of return objective (clause 6.5.2(h)). The Rules allow the return on debt to be estimated using a methodology that results in either a return on debt that is the same for each regulatory year of the regulatory control period or different (or potentially different) for different regulatory years in the regulatory control period (clause 6.5.2(i)). If the latter approach is adopted then the Rules require that a resulting change to the Distribution Network Service Provider’s (DNSP’s) annual revenue requirement must be effected through the automatic application of a formula that is specified in the distribution determination (clause 6.5.2(l)).

Clause 6.5.2(j) specifies that the methodology adopted to estimate the return on debt may, without limitation, be designed to result in the return on debt reflecting:

1. *The return that would be required by debt investors in a benchmark efficient entity if it raised debt at the time or shortly before the making of the distribution determination for the regulatory control period;*

2. *The average return 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; or*
3. *Some combination of the returns referred to in subparagraphs (1) and (2).*

Clause 6.5.2(k) requires that in estimating the return on debt, regard must be had to the following factors:

1. *The desirability of minimising any difference between the return on debt and the return on debt of a benchmark efficient entity referred to in the allowed rate of return objective;*
2. *The interrelationship between the return on equity and the return on debt;*
3. *The incentives that the return on debt may provide in relation to capital expenditure over the regulatory control period, including as to the timing of any capital expenditure; and*
4. *Any impact (including in relation to the costs of servicing debt across regulatory control periods) on a benchmark efficient entity referred to in the allowed rate of return objective that could arise as a result of changing the methodology that is used to estimate the return on debt from one regulatory control period to the next.*

### **8.2.3.2 Rate of Return Guideline**

The AER's 2013 Guideline proposes to estimate the allowed return on debt using a trailing average portfolio approach where:

- the length of the trailing average would be 10 years;
- equal weight would be applied to all elements of the trailing average; and
- the trailing average would be automatically updated every regulatory year within the regulatory control period.

Importantly, the 2013 Guideline also sets out transitional arrangements. These involve gradually moving:

- from the 'on the day' approach to calculating the cost of debt in the first year of the regulatory period;
- to the trailing average approach to calculating the cost of debt over a period of 10 years.

The AER implemented this approach to estimate the return on debt in Evoenergy's final determination for the 2015–19 regulatory control period. Together with the return on equity issues discussed above, Evoenergy applied for merits review of the AER's decision in relation to the return on debt. The issue on appeal was whether to gradually transition to the trailing average approach (the approach adopted by the AER) or to implement the trailing average approach immediately (the approach advocated by Evoenergy).

### 8.2.3.3 Tribunal and Federal Court decisions

The Tribunal found that grounds for review had been made out by Evoenergy in relation to the estimate of the return on debt, set aside the AER's determination and referred the matter back to the AER, and directed the AER to make its constituent decision on the return on debt in relation to the introduction of the trailing average approach in accordance with the Tribunal's reasons. While the AER sought judicial review of this decision by the Federal Court, the Federal Court dismissed the AER's appeal insofar as it related to the return on debt. The AER has not yet remade its 2015 decision for Evoenergy.

In Evoenergy's view, the Federal Court's findings of law, like the Tribunal's direction, operate to require a trailing average approach without transition for Evoenergy, as only this approach conforms to the requirements of clause 6.5.2 of the Rules as construed by the Full Court and in the Tribunal's reasons. Evoenergy's position is explained further in Box 8.1.

#### **Box 8.1. Evoenergy's position on the Tribunal (2016a) and Federal Court (2017) decisions**

The Tribunal's direction (2016a) requires the AER 'to make the constituent decision on return on debt in relation to the introduction of the trailing average approach in accordance with [its] reasons for decision'.

The direction requires the AER to make a decision on return on debt in its remade 2015–19 determination for Evoenergy that is premised on the introduction of a trailing average approach. The only matter that it is open to the AER to decide on remittal, at least in respect of the debt methodology to be used, is whether a transition ought to be applied to the trailing average approach, and the AER must decide that matter in accordance with the Tribunal's reasons.

The Tribunal found two reviewable errors in respect of the AER's debt decision, being that:<sup>9</sup>

- the AER's selection or identification of the BEE as a regulated entity involved a wrong exercise of discretion in all the circumstances and its decision on debt was thus unreasonable in all the circumstances; and
- the AER's exercise of discretion to apply the characteristics of its selected regulated BEE to the transition process in the case of Networks NSW and Evoenergy is erroneous and its decision on the transition process was unreasonable in all the circumstances.

The Full Court observed that the first of these findings could be stated more directly: the AER erred by misconstruing the allowed rate of return objective in rule 6.5.2(c).<sup>10</sup>

The Tribunal's reasons for making its two findings of reviewable error by the AER require the following:

- the selection of a BEE that has a similar degree of risk to that of the particular service provider for which the return on debt is to be estimated for the purpose

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<sup>9</sup> Tribunal, 2016d: [938].

<sup>10</sup> Federal Court, 2017: [539].

of applying the allowed rate of return objective and clause 6.5.2(k)(4) of the Rules;<sup>11</sup>

- the determination of the ‘efficient financing costs’ of that BEE by reference to the debt management practices that would be adopted by that BEE where it supplies the Standard Control Services in a competitive market;<sup>12</sup>
- in the case of a changed methodology, the determination of whether that BEE (being one apposite to the particular service provider) would suffer any impacts as a result of the changed methodology;<sup>13</sup>
- this determination is to be made and the ‘starting point’ for any transition under clause 6.5.2(k)(4) of the Rules ascertained by reference to the debt portfolio and financing costs that the particular service provider should hold at the commencement of the relevant regulatory control period as a consequence of efficiently structuring its debt portfolio under the former regulatory approach to estimating the return on debt applying in the preceding period;<sup>14</sup>
- this assessment should be realistic and have particular regard to the actual debt portfolio and financing costs adopted by that particular service provider in response to that former approach; fictions should not be imposed when the service provider has already implemented a debt structure that satisfies a required aspect of the BEE’s ‘efficient financing costs’.<sup>15</sup>

It follows from the above that:

- the BEE for the purpose of applying the allowed rate of return objective and clause 6.5.2(k)(4) of the Rules in estimating the return on debt for Evoenergy holds no debt;
- the return on debt for Evoenergy must be commensurate with ‘efficient financing costs’ determined by reference to the debt management practices that would be adopted by the BEE where it supplies the Standard Control Services in a competitive market—that is, the trailing average methodology;
- as the BEE does not hold debt, it could not be said to suffer any impacts as a result of a change of methodology from the on-the-day approach to the trailing average approach, with the result that no transition process is needed.

It follows that the Tribunal’s direction operates to require the AER to proceed on remittal on the basis that only a trailing average approach without transition conforms with the requirements of clause 6.5.2 of the Rules.

The focus of the AER’s case on appeal was whether the Tribunal had erred in its construction and application of the allowed rate of return objective referred to in clause 6.5.2 of the Rules, and clause 6.5.2(k)(4) which pertains to the need for the

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<sup>11</sup> Tribunal, 2016d: [916] and [922].

<sup>12</sup> Tribunal, 2016d: [914]. The reference to ‘those services’ in the first sentence of [914] is properly understood to be a reference to the ‘standard control services’ referred to in the preceding sentence (i.e. the last sentence of [913]). See also Tribunal, 2016d: [921].

<sup>13</sup> Tribunal, 2016d: [922] and [933].

<sup>14</sup> Tribunal, 2016d: [934].

<sup>15</sup> Tribunal, 2016d: [935].

AER to have regard to impacts arising from any change in the methodology used to estimate the return on debt from one regulatory period to another.<sup>16</sup>

In dismissing the AER's appeal in respect of the Tribunal's decision, the Full Court (2017) made a number of findings of law on the proper construction and application of clause 6.5.2(c) and (k)(4) of the Rules that form part of the ratio of its decision.

The key findings of the Full Court are as follows.

- The issue in dispute before the Tribunal was 'the question of the proper construction and application of r 6.5.2 of the *NER*, in particular the proper construction and application of the allowed rate of return objective specified in r6.5.2(c)'.<sup>17</sup>
- The issue raised by the network respondents and determined by the Tribunal did not relate to the characteristics of the BEE in isolation.<sup>18</sup> Rather, the issue raised and determined was whether the efficient financing costs of a BEE appropriate to their circumstances required any transition to the trailing average approach. Reference to whether the BEE is a regulated or unregulated entity is a shorthand way of referring to this broader issue.
- One and the same BEE is engaged by both the allowed rate of return objective and clause 6.5.2(k)(4) and, significantly, it must be one that is apposite to the particular service provider.<sup>19</sup>
- The 'efficient financing costs' of the BEE are to be ascertained by reference to the debt management practices of a BEE operating in a workably competitive market.<sup>20</sup>
- The BEE has a similar degree of risk to that of the particular service provider attributed to it; that is, the BEE must be apposite to the particular service provider.<sup>21</sup>
- The AER expressly eschewed the notion that transitional arrangements should be specific to individual service providers' debt financing practices,<sup>22</sup> but, plainly enough, the BEE must be one that is apposite for the service provider in question.<sup>23</sup>
- Regard should be had to the actual circumstances, including debt management practices, of the particular service provider in ascertaining the efficient financing costs of the BEE in accordance with clause 6.5.2(c) of the Rules.<sup>24</sup>
- In applying clause 6.5.2(c) to estimate the return on debt, and in considering whether impacts of the kind referred to in clause 6.5.2(k)(4) exist, fictions

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<sup>16</sup> Federal Court, 2017: [387].

<sup>17</sup> Federal Court, 2017: [415].

<sup>18</sup> Federal Court, 2017: [483], [484] and [486].

<sup>19</sup> Federal Court, 2017: [570].

<sup>20</sup> Federal Court, 2017: [533] and [537].

<sup>21</sup> Federal Court, 2017: [536].

<sup>22</sup> Federal Court, 2017: [568].

<sup>23</sup> Federal Court, 2017: [570].

<sup>24</sup> Federal Court, 2017: [571].

should not be imposed when the provider has already implemented a debt structure that satisfies the requirements of the intended benchmark efficiency.<sup>25</sup>

As a consequence, the Federal Court concluded that:<sup>26</sup>

- Even though [Evoenergy] held no debt, it was nonetheless necessary for the AER to arrive at an estimate for its return on debt in accordance with the allowed rate of return objective in clause 6.5.2(c) so as to achieve the purposes of the return on capital building block.
- Even so, there was no meaningful relevant impact on the benchmark efficient entity apposite for ActewAGL that could be said to have arisen from the change in methodology for estimating its allowed rate of return. The occasion or need for a transition simply did not exist.

As is plain from the above, the issue in dispute before the Tribunal, and thus before the Full Court on appeal, was not, as the AER had suggested,<sup>27</sup> confined to whether the AER erred in adopting a regulated BEE and a 'one size fits all' BEE for the purpose of its 2015 decision. The Full Court expressly rejected the AER's narrow characterisation of the issue in dispute and articulated that issue in terms that made plain it raised broader issues of construction for the Tribunal's and the Court's determination.

Further, the Tribunal did not, as the AER has suggested,<sup>28</sup> find only that once the step is taken of starting with a BEE which has the characteristics of a participant in a competitive market, the AER's approach to transitioning the return on debt estimate and the application of clause 6.5.2(k)(4) must be reconsidered. Nor did the Court, as the AER has also suggested,<sup>29</sup> find only that the allowed rate of return objective does not posit the BEE as either a regulated entity or an unregulated entity and that clause 6.5.2(k)(4) contemplates the possibility that there may not be a single BEE.

The Court's conclusion that no transition was warranted for Evoenergy was premised on its own findings on the proper construction of the allowed rate of return objective and clause 6.5.2(k)(4), which findings were required for the determination of the issue in dispute before it. That conclusion was not premised on any AER conceptualisation of 'efficient financing costs'.<sup>30</sup>

The Full Court's findings of law, like the Tribunal's direction, operate to require a trailing average approach for Evoenergy without transition, as only this approach conforms with the requirements of clause 6.5.2 of the Rules as construed by the Full Court.

Since the Federal Court decision (2017), two further decisions by the Tribunal (2017) and Federal Court (2018) have been published concerning the estimation of the return on debt. Neither of these decisions support the application of the AER's approach to

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<sup>25</sup> Federal Court, 2017: [571].

<sup>26</sup> Federal Court, 2017: [573].

<sup>27</sup> AER, 2017e: [14].

<sup>28</sup> AER, 2017e: [14].

<sup>29</sup> AER, 2017e: [15] and see also [25].

<sup>30</sup> Cf. AER, 2017e: [15].

estimating the return on debt in remaking its 2015 decision for Evoenergy or making the present determination.

The Tribunal (2017) decision found no reviewable error in the AER's approach to estimating the return on debt. However, the findings of the Tribunal in this later decision cannot be reconciled with the findings of the Federal Court or the Tribunal in their earlier decisions on the proper construction and application to Evoenergy of the allowed rate of return objective and clause 6.5.2(k)(4) of the Rules, and in any event is not binding on the AER in remaking its 2015 decision or the present determination.

In contrast, the Federal Court decision (2017) and the Tribunal's earlier reasons (by reason of its direction) are binding on the AER in remaking its 2015 decision, and the Federal Court's findings of law are also binding on the AER in making the present determination.

In the Federal Court (2018) decision, the Federal Court determines only the particular allegations of judicially reviewable error identified by SA Power Networks' grounds of review.<sup>31</sup> As a consequence, the decision falls far short of establishing that it is open to the AER to apply its transition approach on the basis of its 'revenue neutrality' principle, particularly in the factual circumstances apposite to Evoenergy.

The Court's findings on Rules construction are expressly said to be confined to those required to determine the issues raised by SA Power Networks' grounds.<sup>32</sup> There is no clear and comprehensive statement on the proper construction and application of the allowed rate of return objective and clause 6.5.2(h) and (k)(4) of the Rules.

The Court makes no finding on the correctness or reasonableness of the AER's approach to estimating the return on debt for SA Power Networks (let alone for Evoenergy) as this was not a question raised by the judicially reviewable errors identified by SA Power Networks' grounds of review.<sup>33</sup> In making an observation to this effect, however, the Court acknowledges that the reasoning in the earlier Federal Court decision for Evoenergy may support the proposition that the AER's transition was not the correct or preferable approach for SA Power Networks.<sup>34</sup>

The Court distinguishes the findings in the Federal Court's earlier decision for Evoenergy and the NSW distributors by reference to the differing debt management practices of SA Power Networks,<sup>35</sup> as well as the differing issues before the Court in the earlier decision.<sup>36</sup> Against this background, it observes that there is no 'necessary inconsistency' between the determination in the Federal Court's earlier decision of the particular questions of construction of clause 6.5.2(k)(4) then before it and the particular questions of construction determined in the present case.<sup>37</sup>

The Court provides no guidance on how its findings on the construction of the allowed rate of return objective and clause 6.5.2(h) of the Rules should be reconciled with the Federal Court's earlier finding that the efficient financing costs of the BEE referred to in

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<sup>31</sup> See, for example, Federal Court, 2018: [256] and [289].

<sup>32</sup> See, for example, Federal Court, 2018: [292].

<sup>33</sup> Federal Court, 2018: [289]. See also [256].

<sup>34</sup> Federal Court, 2018: [288].

<sup>35</sup> Federal Court, 2018: [282].

<sup>36</sup> Federal Court, 2018: [290].

<sup>37</sup> Federal Court, 2018: [292].

the allowed rate of return objective are to be ascertained by reference to the debt management practices and costs of a BEE operating in a workably competitive market.<sup>38</sup>

It observes that it does not regard the earlier Federal Court decision for Evoenergy as confining the 'impacts' to which the AER may have regard in applying clause 6.5.2(k)(4) of the Rules (to impacts in the form of hedging contracts that needed to be unwound).<sup>39</sup> Even assuming the Court is correct in this, however, it is silent on whether and how other, unspecified 'impacts' would operate to authorise the application of the AER's transition in Evoenergy's particular circumstances, having regard to the findings of the Federal Court in its earlier decision on the construction and proper application in those circumstances of the allowed rate of return objective and clause 6.5.2(h) and (k)(4) of the Rules. This was simply not the question before the Federal Court.

As a consequence, the Federal Court decision (2018) provides little guidance on how the findings on Rules construction in the two Federal Court decisions should be reconciled and applied to a provider in the circumstances of Evoenergy.

In any event, the Tribunal's reasons in its earlier decision for Evoenergy (2016d) are, by reason of its direction, binding on the AER in remaking its 2015 decision.

In contrast to the Federal Court decision (2018), whether the AER's transition is the correct or preferable approach to the introduction of the trailing average approach for a provider in Evoenergy's circumstances was in issue before the Tribunal in making its decision (2016d). As already explained, Evoenergy considers the Tribunal's direction and reasons of themselves operate to require the AER to adopt a trailing average approach without transition for Evoenergy in applying the allowed rate of return objective and clause 6.5.2(h) and (k)(4) of the Rules.

Also, in contrast to the Federal Court decision (2018), whether a consideration of the NPV-0 principle, and gains or losses arising as a 'side-effect' of changing the debt estimation methodology, is consistent with the allowed rate of return objective and clause 6.5.2(h) and (k)(4) of the Rules was an issue raised by the AER before and considered by the Tribunal. The Tribunal:

- nonetheless adopted a Rules construction (discussed in Box 8.1) that precludes a consideration of these matters in ascertaining the 'impacts' of a change in methodology and the 'starting point' for any transition under the allowed rate of return objective and clause 6.5.2(h) and (k)(4) of the Rules; and
- concluded that gains or losses arising as a 'side-effect' of the change of methodology and any resultant alteration to that 'starting point' for transition would need to be considered by the AER, if at all, under section 16(1)(d) of the NEL (provided section 16(1)(d) permits this, which was not decided by the Tribunal).<sup>40</sup>

Even if the Federal Court decision (2018) is correct to conclude that the earlier Federal Court decision (2017) does not in any way confine the 'impacts' to which the AER may have regard when applying clause 6.5.2(k)(4) of the Rules, the Tribunal's reasons (by reason of its direction) do confine those 'impacts'.

It follows that the AER would fall into error if it were to apply its own transition in remaking its 2015 decision for Evoenergy or making the present determination, in reliance on the Tribunal's or Federal Court's more recent decisions.

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<sup>38</sup> Federal Court, 2017: [533] and [537].

<sup>39</sup> Federal Court, 2018: [295].

<sup>40</sup> Tribunal, 2016d: [939] to [943].

Nonetheless, given the AER is yet to remake its 2015 decision for Evoenergy, Evoenergy has adopted the approach set out in the 2013 Guideline. If a different approach is ultimately adopted in remaking Evoenergy's 2015 decision, Evoenergy will adopt the revised approach in its revised regulatory proposal.

#### **8.2.3.4 Evoenergy's approach to the return on debt**

As discussed above, Evoenergy has adopted the 2013 Guideline approach to estimating the return on debt. Evoenergy has calculated the trailing average return on debt for the first year of the 2019–24 regulatory period by assuming 2019/20 is the sixth year in the gradual transition. Under the AER's gradual transition methodology, this approach assigns a weight of 50 per cent to the 2014/15 prevailing rate of debt and 10 per cent to the prevailing rate for each of the following five years.

To calculate the prevailing rate of debt for each year from 2014/15 to 2019/20, Evoenergy has used the following approach.

- For 2014/15 and 2015/16, the prevailing rates are set consistently with the values used by the AER in its 2015 Final Determination.
- For 2017/18, the prevailing rate is calculated using the estimation procedure set out in the AER's 2015 Final Determination (which is, in turn, consistent with the 2013 Guideline) including in particular the average of the Reserve Bank of Australia (RBA) and Bloomberg estimates for the averaging period set in the AER's 2015 Final Determination.<sup>41</sup>
- For 2018/19, the averaging period in the AER's 2015 Final Determination has not yet occurred and, therefore, the 2017/18 return on debt has been adopted in this regulatory proposal as a proxy for the 2018/19 return on debt and will be updated after the occurrence of the averaging period.
- For 2019/20, the first year of the 2019–24 regulatory period, the averaging period is not yet known and will not occur prior to the submission of the regulatory proposal. Therefore, again, the 2017/18 return on debt has been adopted in this regulatory proposal as a proxy for the return on debt in 2019/20. The return on debt will need to be updated before the AER makes its regulatory determination.

The resulting annual prevailing return on debt estimates are presented in Table 8.1. The trailing average return on debt for 2019/20, which is calculated as 50 per cent of the 2014/15 rate plus 10 per cent of the rates for each year from 2015/16 to 2019/20, is 5.57 per cent.

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<sup>41</sup> The choice of data series and approach to interpolation and conversion to effective annual rates is consistent with the approach set out in AER 2015.

**Table 8.1 Prevailing rates and trailing average return on debt estimates**

Year	Return on debt estimate
2014/15	6.12%
2015/16	4.43%
2016/17	5.55%
2017/18	5.10%
2018/19	5.10%
2019/20	5.10%
<b>Trailing average return on debt</b>	<b>5.57%</b>

For years beyond 2019/20, the AER's 2013 Guideline approach requires annual updates to the return on debt which will result in the return on debt (and consequently the allowed rate of return) being, or potentially being, different for different regulatory years in the regulatory control period (see clause 6.5.2(i)(2) of the Rules). Given this approach, the Rules require the resulting change to Evoenergy's annual revenue requirement to be effected through the automatic application of a formula that is specified in the distribution determination (clause 6.5.2(l)). Evoenergy proposes to use the same methodology to annually update the return on debt as set out in the AER's 2015 decision.<sup>42</sup> Specifically, for years beyond 2019/20 Evoenergy proposes the allowed return on debt to be calculated as follows:

- $2020/21 = 40\% * PR_{2014/15} + 10\% * PR_{2015/16} + 10\% * PR_{2016/17} + 10\% * PR_{2017/18} + 10\% * PR_{2018/19} + 10\% * PR_{2019/20} + 10\% * PR_{2020/21}$
- $2021/22 = 30\% * PR_{2014/15} + 10\% * PR_{2015/16} + 10\% * PR_{2016/17} + 10\% * PR_{2017/18} + 10\% * PR_{2018/19} + 10\% * PR_{2019/20} + 10\% * PR_{2020/21} + 10\% * PR_{2021/22}$
- $2022/23 = 20\% * PR_{2014/15} + 10\% * PR_{2015/16} + 10\% * PR_{2016/17} + 10\% * PR_{2017/18} + 10\% * PR_{2018/19} + 10\% * PR_{2019/20} + 10\% * PR_{2020/21} + 10\% * PR_{2021/22} + 10\% * PR_{2022/23}$
- $2023/24 = 10\% * PR_{2014/15} + 10\% * PR_{2015/16} + 10\% * PR_{2016/17} + 10\% * PR_{2017/18} + 10\% * PR_{2018/19} + 10\% * PR_{2019/20} + 10\% * PR_{2020/21} + 10\% * PR_{2021/22} + 10\% * PR_{2022/23} + 10\% * PR_{2023/24}$

Where PR<sub>x</sub> is the prevailing rate entered into in year x, maturing in year x + 10.

Evoenergy proposes that the procedure for estimation of the prevailing annual return on debt in each regulatory year of the period 2019–24 will be the same as that set out in the AER's 2015 decision (which, in turn, is consistent with the 2013 Guideline). This includes, for example, the proposed choice of data series, their weighting and the approach to extrapolation and interpolation. Evoenergy's proposed averaging periods for estimating the prevailing annual return on debt in each regulatory year of the period 2019–24 are provided in confidential Appendix 8.1 to this attachment.

<sup>42</sup> AER, 2015: 3-546-3-556.

## 8.2.4 Total rate of return

The total rate of return (nominal vanilla) for 2019/20 based on the parameter estimates discussed above is 6.42 per cent. The individual parameters are summarised in Table 8.2.

**Table 8.2** Rate of return parameters

Parameter	Value	Methodology
Risk free rate	2.78%	2013 Guideline
Return on debt	5.57%	2013 Guideline
Equity beta	0.7	2013 Guideline
MRP	7.00%	2013 Guideline with point estimate updated to reflect market movements
Gearing	60%	2013 Guideline
Return on equity	7.7%	2013 Guideline
Nominal vanilla WACC	6.42%	

## 8.3. Equity and debt raising costs

Evoenergy has estimated the transaction costs associated with raising debt and equity using the AER's methodology. The AER includes debt raising costs in the operating expenditure (opex) forecast because these are regular and ongoing costs which are likely to be incurred each time service providers refinance their debt. The AER includes equity raising costs in the capital expenditure (capex) forecast because these costs are only incurred once and would be associated with funding the particular capital investments.

### 8.3.1 Debt raising costs

Debt raising costs are transaction costs incurred each time debt is raised or refinanced. These costs may include arrangement fees, legal fees, company credit rating fees and other transaction costs. Debt raising costs are an unavoidable cost of raising debt that would be incurred by a prudent service provider.<sup>43</sup>

The AER's standard approach to forecasting debt raising costs is based on the approach in a report from the Allen Consulting Group (ACG), commissioned by the Australian Competition and Consumer Commission in 2004 (ACG 2004). However, the AER has since relied on updated market data contained in a report by PricewaterhouseCoopers (PWC) submitted during the 2013 Guideline process (PWC 2013).

The ACG method involves calculating the benchmark bond size, and the number of bond issues required to rollover the benchmark debt share (60 per cent) of the RAB. The AER amortises the upfront costs that are incurred using the relevant nominal vanilla WACC over a 10-year amortisation period. This is then expressed in basis points per annum

<sup>43</sup> AER 2015: 3-558.

(bppa) as an input into the PTRM. This rate is multiplied by the debt component of the RAB to determine the debt raising cost allowance.

Table 8.3 presents each of the transaction cost items and updated values from the PWC report. Evoenergy has converted these values to bppa using the nominal WACC set out in Table 8.2 of 6.42%. Given the opening value of Evoenergy's RAB and the benchmark gearing ratio of 60 per cent, three bond issues of \$250 million would be required. The resulting debt raising cost is 8.71 bppa.

This has been included in Evoenergy's PTRM for distribution and transmission, with the resulting debt raising costs of \$2.55 million (\$2018–19 real) over the full regulatory period. The annual breakdown and the split between distribution and transmission are presented in Table 8.4. Evoenergy's calculations for debt raising costs are provided in the modelling appendix.

**Table 8.3 Benchmark debt raising costs**

Cost Item	Unit	Value	Bonds issued	
			1 \$250 million	3 \$750 million
Arrangement fee (basis points)	per annum per issue	8.5	7.24	7.24
Credit rating agency – initial credit rating	up-front	\$77,500	0.43	0.14
Credit rating agency – annual surveillance	per annum	\$35,500	0.14	0.05
Legal counsel – Master program	per 10 years	\$56,250	0.31	0.10
Legal counsel – Issuer's	per issue	\$15,625	0.09	0.09
Credit rating agency – up front bond issue (basis points)	per issue	5.2	0.72	0.72
Registrar – up-front	per 10 years	\$20,850	0.12	0.04
Registrar – annual	per annum per issue	\$7,825	0.31	0.31
Investment bank's out-of-pocket expenses	per issue	\$3,000	0.02	0.02
<b>Total (basis points per annum)</b>			<b>9.37<sup>1</sup></b>	<b>8.71</b>

1. This differs from PWC's estimate of 10.8 bppa as a result of reducing the discount rate from 10% as used by PWC to the nominal WACC presented in Table 8.2 of 6.42%.

**Table 8.4 Debt raising costs**

\$m (2018/19)	2019/20	2020/21	2021/22	2022/23	2023/24	Total
Distribution	0.41	0.42	0.42	0.42	0.42	2.09
Transmission	0.09	0.09	0.09	0.09	0.09	0.46
<b>Total</b>	<b>0.50</b>	<b>0.51</b>	<b>0.51</b>	<b>0.51</b>	<b>0.51</b>	<b>2.55</b>

Note: Figures may not add to the total because of rounding.

### 8.3.2 Equity raising costs

Equity raising costs are transaction costs incurred when service providers raise new equity from outside the business. The AER's equity raising cost benchmark allows for the costs of dividend reinvestment plans and seasoned equity offerings. Equity raising costs are an unavoidable aspect of raising equity that would be incurred by a prudent service provider acting efficiently.<sup>44</sup>

The AER's approach to determining benchmark equity raising costs was initially based on ACG (2004) and was refined in the AER's final decision for Powerlink (2012). The AER applies the cash flow analysis in the PTRM to determine the required benchmark equity raising costs associated with forecast capex. This involves identifying a hierarchy of three methods for equity raising, with differing equity raising costs and availability for each method.<sup>45</sup>

- First, firms use retained earnings as a source of equity. Annual retained earnings are calculated as the residual of internal cash flows less dividends to shareholders. Retained earnings for each year are converted to real dollar terms and totalled to determine retained earnings for the entire regulatory control period.
- Second, firms use dividend reinvestment plans. The amount of equity raised in this manner is capped. It is assumed that a maximum of 30 per cent of dividends paid are returned to the business via a dividend reinvestment plan. The total of reinvested dividends required for the regulatory control period is therefore determined as the minimum of the sum of the real reinvested dividends for each year and the shortfall in retained earnings required to fund the equity component of forecast capex.
- Third, firms use seasoned equity offerings encompassing both rights issues and placements. The requirement for external equity funding via seasoned equity offerings is the shortfall, if any, in retained earnings required to fund the equity component of forecast capex and the total of reinvested dividends.

Based on the need for any dividend reinvestment plans and seasoned equity offerings, the AER assigns transaction unit costs for each form of equity funding. These figures are based on the AER's empirical review in assessing the benchmark costs for raising equity finance:

- retained earnings – 0 per cent;
- dividend reinvestment plans – 1 per cent of total dividends reinvested; and
- seasoned equity offerings – 3 per cent of total external equity required.

Application of the AER's approach results in total equity raising costs of \$0.18 million (\$2018/19) as set out in Table 8.5. The AER's PTRM amortises the benchmark equity raising costs over the weighted average standard asset life of the RAB to provide the equity raising cost allowance associated with forecast capex in the regulatory control period.

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<sup>44</sup> AER 2015: 3-557.

<sup>45</sup> For further detail see AER 2012: 107-108 and 145-152.

**Table 8.5 Equity raising costs**

\$m 2018/19	Distribution	Transmission	Total
Equity component	226.82	34.96	261.78
Retained cash flow available for reinvestment	208.35	44.89	253.25
Equity required	18.47	-9.93	8.54
Dividends reinvested	25.40	3.97	29.36
Dividend reinvestment plan required	18.47	0.00	18.47
Seasoned equity offerings required	0.00	0.00	0.00
Cost of dividend reinvestment plan	0.18	0.00	0.18
Cost of seasoned equity offerings	0.00	0.00	0.00
<b>Total equity raising costs</b>	<b>0.18</b>	<b>0.00</b>	<b>0.18</b>

## 8.4. Imputation credits

Under the Australian taxation system, tax credits (imputation credits) created by an Australian company may be redeemed by domestic shareholders. An imputation credit is created for each dollar of eligible tax paid by companies. Imputation credits are distributed to shareholders through the payment of franked dividends. Imputation credits therefore represent a benefit to domestic shareholders for their investment in the company in addition to dividends.<sup>46</sup>

For the purposes of estimating the cost of corporate income tax to include in the annual revenue requirement, the Rules (clause 6.5.3) require that tax expenses be reduced by the value of imputation credits in accordance with the following formula:

$$ETC_t = (ETI_t * r_t)(1 - \gamma)$$

where:

$ETI_t$  is an estimate of the taxable income for the regulatory year that would be earned by a benchmark efficient entity as a result of the provision of Standard Control Services if such an entity, rather than the DNSP (here, Evoenergy), operated the business of the DNSP estimated in accordance with the PTRM;

$R_t$  is the expected statutory income tax rate for that regulatory year; and

$\gamma$  (gamma) is the value of imputation credits.

Gamma is always less than one, reflecting the following factors:

- companies, on average, do not distribute all profits as dividends;
- foreign investors cannot redeem imputation credits;

<sup>46</sup> Imputation credits are of no value to foreign shareholders and not all credits distributed to domestic shareholders are redeemed.

- some Australian investors cannot use imputation credits;
- shareholders entitled to use imputation credits do not always do so; and
- shareholders that do use imputation credits may not value them at the full face amount.<sup>47</sup>

Evoenergy continues to hold the view that a market value approach to estimating gamma is appropriate as it ensures that the *value* investors obtain from imputation credits is removed from the total revenue requirement so that investors are not over or undercompensated and hence investment decisions are not distorted. In addition, the market value approach is, in Evoenergy's view, required by the Rules for consistency with the required rate of return in the PTRM and is consistent with the determination of all other parameters in the nominal WACC.

Evoenergy also disagrees with some aspects of the AER's approach in more recent decisions on gamma, including the following.

- In recent decisions, the AER has had regard to higher distribution rates for listed equity only and for the top 20 ASX-listed firms.<sup>48</sup> In Evoenergy's view, the use of a distribution rate based on listed equity or the top 20 ASX-listed firms will not provide a reasonable approximation for the distribution rate of the benchmark efficient entity relevant to Evoenergy.
- In recent decisions, the AER has questioned the reliability of using tax statistics to inform the estimate of theta and states that it applies limited weight to such estimates.<sup>49</sup> In Evoenergy's view, the AER's concerns regarding the use of tax statistics are irrelevant, as gamma can be calculated directly from Australian Taxation Office statistics without the need to estimate theta.

However, consistent with the approach taken to the rate of return parameters, Evoenergy has followed the outcome of the recent Federal Court (2017) and Tribunal (2017) decisions, both of which upheld the AER's utilisation approach to estimating gamma. Evoenergy has therefore adopted the AER's preferred value for gamma of 0.4.

## 8.5. Forecast inflation

In October 2016, the Tribunal made a decision in relation to forecast inflation following an appeal by South Australia Power Networks of the AER's final determination (Australian Competition Tribunal, 2016c). The Tribunal found that because the Rules direct that the PTRM must establish a method that the AER determines is likely to result in the best estimates of expected inflation, and the PTRM is binding on a DNSP (in preparing a regulatory proposal) and the AER (in making its regulatory determination), the AER cannot consider inflation outside the PTRM.

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<sup>47</sup> Reasons for this include the time value of money associated with the delay between receiving the credit and obtaining the benefit, transaction costs associated with redeeming imputation credits and portfolio effects where investors may secure the benefit of imputation credits at the expense of increased portfolio concentration and risk (see Australian Competition Tribunal, 2016b: 269-294).

<sup>48</sup> See, for example, AER, 2016: 4-31-4-33; AER, 2017c: Attachment 4-31-4-33. The distribution rate for the top 20 ASX-listed firms was developed by Lally, 2016. The 'top 20 ASX-listed companies' are the 20 largest companies (by market value) listed on the Australian Stock Exchange (ASX).

<sup>49</sup> See, for example, AER 2017c: 4-14; AER 2017d: 4-15.

Consistent with the Tribunal's decision, Evoenergy proposes that inflation be forecast using the approach to forecast inflation contained in the PTRM as in force at the time of the AER's regulatory determination.

Under the PTRM as currently in force, this involves calculating a single forecast inflation rate for the full regulatory period by taking the geometric average of:

- the midpoint of the RBA's short-term inflation forecasts (midpoint of RBA's forecast range as published in its Statement on Monetary Policy) for the period forecasted by RBA; and
- the midpoint of the RBA's inflation targeting band.

Given that the RBA's Statement on Monetary Policy providing forecasts for the first two years of Evoenergy's regulatory control period is not yet available, Evoenergy has adopted a placeholder of 2.5 per cent in each year. Evoenergy will update this estimate in its revised regulatory proposal.

In summary, while Evoenergy has estimated revenues in this regulatory proposal using an estimate for forecast inflation of 2.5 per cent, this estimate will need to be updated for the RBA's Statement on Monetary Policy prior to the AER's determination.

## Shortened forms

<b>Term</b>	<b>Meaning</b>
<b>2013 Guideline</b>	AER's 2013 Rate of Return Guideline
<b>ACG</b>	Allen Consulting Group
<b>AEMC</b>	Australian Energy Market Commission
<b>AER</b>	Australian Energy Regulator
<b>ASX</b>	Australian Stock Exchange
<b>BEE</b>	benchmark efficient entity
<b>bppa</b>	basis points per annum
<b>capex</b>	capital expenditure
<b>CAPM</b>	capital asset pricing model
<b>DGM</b>	dividend growth model
<b>DNSP</b>	Distribution Network Service Provider
<b>ERA</b>	Economic Regulation Authority (Western Australia)
<b>MRP</b>	market risk premium
<b>NEL</b>	National Electricity Law
<b>NEO</b>	National Electricity Objective
<b>NER</b>	National Electricity Rules
<b>NSW</b>	New South Wales
<b>opex</b>	operating expenditure
<b>PTRM</b>	post-tax revenue model
<b>PWC</b>	PricewaterhouseCoopers
<b>RAB</b>	regulatory asset base
<b>RBA</b>	Reserve Bank of Australia
<b>Rules</b>	National Electricity Rules
<b>SL-CAPM</b>	Sharpe-Lintner capital asset pricing model
<b>Tribunal</b>	Australian Competition Tribunal
<b>WACC</b>	weighted average cost of capital

## References

Author	Title	Date
AER	Final Decision, Powerlink Transmission Determination 2012-13 to 2016-17	2012
AER	Rate of Return Guideline	2013a
AER	Rate of Return Guideline Explanatory Statement	2013b
AER	Attachment 3, Rate of return, ActewAGL Final Decision 2015–19	2015
AER	Final Decision ActewAGL Distribution Access Arrangement 2016 to 2021, Attachment 4, Value of imputation credits	2016
AER	Draft Decision, Ausnet Services Gas Access Arrangement 2018–22, Attachment 4, Value of Imputation Credits	2017c
AER	Draft Decision, TransGrid Transmission Determination 2018–23, Attachment 3, Rate of Return	2017d
AER	Supplementary Submissions of the Australian Energy Regulator in ACT 3 to 8 of 2016	2017e
AEMC	Rule Determination: National Electricity Amendment (Rate of Return Guidelines Review) Rule 16, National Gas Amendment (Rate of Return Guidelines Review) Rule 2016	2016
Allen Consulting Group	Debt and equity raising transaction costs: Final report	2004
Australian Competition Tribunal	Application by ActewAGL Distribution [2016] ACompT 4	2016a
Australian Competition Tribunal	Application by Jemena Gas Networks (NSW) Ltd [2016] ACompT 5	2016b
Australian Competition Tribunal	Application by SA Power Networks [2016] ACompT 11	2016c
Australian Competition Tribunal	Applications by Public Interest Advocacy Centre Ltd and Ausgrid [2016] ACompT 1	2016d
Australian Competition Tribunal	Applications by Public Interest Advocacy Centre Ltd and Endeavour Energy [2016] ACompT 2	2016e
Australian Competition Tribunal	Applications by Public Interest Advocacy Centre Ltd and Essential Energy [2016] ACompT 3	2016f
Australian Competition Tribunal	Application by ActewAGL Distribution [2017] ACompT 2	2017
Federal Court of Australia	Australian Energy Regulator v Australian Competition Tribunal (No 2) [2017] FCAFC 79	2017
Federal Court of Australia	SA Power Networks v Australian Competition Tribunal (No 2) [2018] FCAFC 3	2018
Frontier	Issues in the estimation of gamma	2016
Handley	Advice on the NERA Report: Estimating Distribution and Redemption Rates from Taxation Statistics - May	2015

Lally	Gamma and the ACT Decision	2016
Lally	Issues in the Estimation of Gamma	2017
NERA	Estimating Distribution and Redemption Rates from Taxation Statistics: A report for Jemena Gas Networks, Jemena Electricity Networks, AusNet Services, Australian Gas Networks, CitiPower, Ergon Energy, Powercor, SA PowerNetworks and United Energy	2015
PricewaterhouseCoopers (PWC)	Energy Networks Association: Debt financing costs	2013