



INDEPENDENT PANEL REPORT

AER Draft Rate of Return Instrument

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Contents

Executive summary	1
List of Independent Panel recommendations	7
1 Introduction	9
2 Context for the 2026 RORI Review	11
2.1 Impact of COVID-19 and other global economic impacts	11
2.2 Continuing challenges with data sets for key RORI parameters	12
2.3 Investment needed by network service providers to help Australia decarbonise	13
2.4 Cost-of-living challenge for some Australians	13
3 Independent Panel views on the AER's proposed change to equity beta	15
3.1 Introduction	15
3.2 Panel assessment of approach to estimating beta	16
3.3 Comparator set for beta estimation	19
3.4 Empirical estimates and rationale for draft decision	26
3.5 Other considerations	29
4 Independent Panel views on AER proposed change to market risk premium	30
4.1 Weighted average HER	30
4.2 Implications	31
5 Independent Panel views on other AER proposed changes	34
5.1 Trailing average approach to estimating return on debt	34
5.2 Reintroduction of the Reserve Bank of Australia yield curves using alternative swap data	35
5.3 Imputation tax credits	35
6 Independent Panel views on other matters	38
6.1 AER rationale for retaining past approaches	38
6.2 The term of the risk-free rate	38
7 Independent Panel's view on whether the draft RORI is 'supported by evidence and reasons'	42
7.1 Evidence and reasons	42
7.2 Accessibility, transparency, accuracy and consistency	43
8 Independent Panel's view on whether the draft RORI is likely to contribute to the achievement of the National Electricity Objective and National Gas Objective	44
8.1 The AER's position on the 2026 draft RORI	44
8.2 The 2026 Independent Panel view is that more work is needed	45
A National Energy Objectives	47
National Electricity Objective	47
National Gas Objective	47
B Members of the Independent Panel	48
Abbreviations	51

Executive summary

The Independent Panel was set up by the AER in May 2026 to review its *Draft 2026 Rate of Return Instrument* (RORI). The AER asked us to answer two questions:

1. In the Independent Panel's view, is the draft RORI supported by evidence and reasons, taking into account competing factors such as accuracy, consistency, accessibility and transparency?
2. In the Independent Panel's view, is the draft RORI likely to contribute to the achievement of the National Electricity Objective and National Gas Objective?

Essentially, the Panel has been asked to undertake two tasks. The first is to assist the AER in identifying any gaps or deficiencies in its analysis and to make recommendations that may help to improve the process of setting the allowable rate of return of regulated network companies.

The second task is to provide assurance to stakeholders and the broader community by checking that the review process has been effective, the AER has engaged with the material put before it with an open mind and the decisions reached are supported by the stated reasons and the information available.

Our report is given by consensus of all members of the Independent Panel.

The last RORI review was undertaken during a period of major economic uncertainty and the AER 2022 *Rate of Return Instrument: Explanatory Statement* (2022 ES) noted: 'We recognise the importance of stability and predictability of the regulatory framework for ensuring investor and consumer confidence and promoting efficient investment. For the 2022 Instrument we added criteria [that] any case for change must demonstrate there to be a clear improvement or benefit to be realised.'

We have looked closely at the AER's supporting documents and also the input by all stakeholders and experts involved in the 2026 review. Since the AER has proposed in 2026 to leave many parameters unchanged from 2022, we have also looked closely at documents and the Independent Panel reports from 2022 and 2018.

Thus, in this report we provide stakeholders with a detailed examination of the AER's reasoning in the *Draft 2026 Rate of Return Instrument: Explanatory Statement* (Draft 2026 ES) that supports the proposed reductions to the equity beta and market risk premium (MRP) estimates and the other AER draft decisions.

That examination indicates the reasoning is largely a reassessment of the efficacy of the AER's 2022 decisions regarding key parameters rather than being based on changes in the relevant time series data since the 2022 RORI review. Indeed, the changes in some of the data series that were central to the reasoning in 2022 are neutral or in the opposite direction to the proposed changes in the estimates.

Our views on each of the focus areas:

Equity beta

The AER states that in estimating beta it puts most weight on the longest historical observed beta time series. A long time series does have the advantage that it reflects a wide range of different types of economic shocks, weighted by the historic frequency of the different types. There are two issues to address though. The first issue is the extent to which investors expect the historic pattern to continue and to affect the regulated businesses in the same way as in the past. The second issue is that the forward-looking beta will also evolve over time due to the changing conditions of the sector and its regulation.

The AER's task in estimating both beta and, in relation to the first issue, the MRP, is to assess investors' expectations regarding those parameters. In the case of beta, investors' expectations regarding the probability of different types of shocks being experienced in future will determine the forward-looking rate of return investors will require (to support ongoing investment by the regulated businesses and thereby benefit consumers). On the other hand, the observed movements in share prices over any given period will reflect the actual shocks that occur.

The AER derives the average beta for the combination of the beta data of each domestic comparator – that is, the data for the period each comparator was listed between 1992 and 2025. The Draft 2026 ES does not provide any information on the effective weighting of particular firms or time periods that results from averaging over the mixture of different time periods. It does not relate this to the frequency of shocks or to the trends influencing the sector.

We suggest stakeholders will understand the AER's decisions better if the AER provides more substantive explanation of its views on the relationship between the observable historic market data versus investors' forward-looking perspective. We suggest this explanation should include a discussion of the issue of mixing time periods noted above.

The primary source of evidence available to the AER is the observed historic betas of listed firms whose main activity comprises regulated energy networks. The main issue facing the AER is that the historic beta data from Australian listed energy firms, which the AER relied on in previous reviews, is increasingly out of date. The significance of this issue was flagged in the 2022 review and the alternative options to using domestic data were considered in detail in the 2025 discussion paper.

In the draft decision, the AER has identified that international energy network comparators are the only viable alternative. It has considered the evidence from the betas of the domestic sample and from the betas of an international sample. In its assessment, it has placed more weight on the domestic evidence and it has set an equity beta value of 0.55. This is the mid-point of its identified range of 0.4 to 0.7. This represents a reduction from the 0.6 equity beta in the 2022 decision.

The Panel's conclusion on equity beta is that the reasoning for the range on the equity beta is not adequate. It follows from this that, in our assessment, the decision on the point estimate is not fully explained. We acknowledge that the AER has undertaken a detailed and reasoned approach to developing an international sample and has used the average from this sample to inform its range for the equity beta. Nevertheless, following our review we have a number of concerns.

First, the AER has identified some valid weaknesses with the relevance of the international sample. However, it has not assessed, in the same way, the weaknesses with the out-of-date domestic sample. In the absence of this, the conclusion to attach more weight to the domestic sample is not made out.

Second, to the extent that there are issues with the international sample, there is scope to investigate these empirically and qualitatively. We make recommendations on the further work that could, and should, be done with this evidence. We consider it is important to establish a reasonable range from the international evidence, and that the riskiness of the Australian network service providers (NSPs) can be related to this range. This is particularly important in developing a method that stakeholders can be confident can be applied in future reviews.

Third, the reasoning for the reduction in the point estimate does not appear to be consistent with the reasoning applied in the 2022 review. We emphasise that we have not formed a view that an equity beta of 0.55 is inappropriate. We also note that a reduction may be appropriate, even if the evidence does not support a change, if it is now accepted that the previous level was too high. However, if this is the case it is vital that the reasoning is set out clearly.

Market risk premium

In the Draft 2026 ES, the AER has proposed an estimate for market risk premium (MRP) of 6.1%, which is lower than the estimate used in 2022 (6.2%), despite that:

- the arithmetic average is higher, based on the updated estimation period
- all HER estimates increased
- the survey data (mean and median) were unchanged
- VIX and credit spreads were low relative to long-term averages, but similar to 2022 (i.e. not indicative of change).

On the other hand:

- the Dividend Growth Model (DGM) results were substantially lower
- the dividend yield data were below both long-term levels and the 2022 level.

Taken together, the application of the 2022 methodology and the updated data do not make a persuasive case for a reduction in the MRP.

In making this observation, the Panel has not formed the view that a value of 6.1% for the MRP would be inappropriate.

However, for a value of 6.1% to be appropriate would require a different and more expansive rationale, presumably relying on one or more of greater reliance on the weighted-average historical excess returns (HER), the DGM (which would be problematic without more research on the relationship between the DGM and MRP) or the (lower weight) dividend yield evidence.

Trailing average approach to estimating return on debt

The AER concluded that ‘taken together [the] evidence suggests that while a weighted trailing average approach may address certain limitations of the simple trailing average framework, on balance, there is not a strong case for changing the methodology from a simple trailing average approach at this time’.¹

The Panel agrees with the AER’s rationale and that it remains open to revisit the question should circumstances change and more NSPs become affected.

If this were to occur, the Panel would strongly favour a universal change, in preference to a targeted mechanism to apply only to (sufficiently) affected NSPs. As was broadly accepted by stakeholders, the latter approach would be arbitrary, complex and could create undesirable opportunities for gaming.

Finally, the Draft 2026 ES makes a number of references to the fact that a move towards a weighted trailing average approach would result in a higher estimate for the return on debt and therefore increase the costs for consumers.²

The general implication (or at least possible interpretation) is that this outcome is a reason to retain the current approach, but the reference on page 61 is more explicit, namely ‘[this] is a key consideration in our draft decision to retain the simple trailing average’.³ The Panel’s view is that, while cost to consumers is important, the AER should be clear that its decision is based primarily on the merits of the argument about methodology. This would help reassure all stakeholders.

Reintroduction of Reserve Bank of Australia yield curves

AER’s settled position in relation to the source of data used to determine the return on debt was complicated in November 2023 when the Reserve Bank (RBA) announced its intention to cease publication of its spread to Bank Bill series. The 2022 RORI had allowed for such a contingency and in that sense there was limited impact.

AER’s draft decision is to:

- reintroduce the RBA yield curve data alongside the existing data from Bloomberg and Refinitiv/LSEG
- utilise a spread to Commonwealth Government securities (CGS) approach to adjust for maturity mismatches.

The Panel agrees with AER that this has the benefit of maintaining multiple sources of data.

The Panel also agrees with AER that using the spread-to-CGS approach for extrapolation has the benefits of being simple, transparent and utilising publicly available data.

¹ AER, [Draft 2026 Rate of Return Instrument: Explanatory Statement](#), May 2026, p. 3.

² AER, [Draft 2026 Rate of Return Instrument: Explanatory Statement](#), May 2026, pp. 3, 52, 61, 73.

³ AER, [Draft 2026 Rate of Return Instrument: Explanatory Statement](#), May 2026, p. 61.

Imputation tax credits

In making the Draft 2026 RORI, the AER has retained the approach used in the 2022 Determination. The estimate of the key parameter (gamma) has increased marginally from 0.57 to 0.58.

By way of brief background, the AER methodology involves a post-tax framework whereby the rate of return is determined after company tax, but before personal tax. The Tax component is a separate part of the AER's building block framework and the Imputation Tax Credit is introduced as part of the Tax component.

Specifically, the estimated company tax component (ETC) is calculated as:

$$\text{ETC} = \text{ETI} \times \text{TR} \times (1 - \text{gamma}),$$

- where ETI is the estimated Taxable Income, TR is the corporate tax rate and gamma is the value of imputation tax credits.

In essence, gamma is used to modify the allowance for ETC in the building block model. Without a gamma adjustment the ETC would overstate the tax allowance because it would not take account of the extent to which some investors receive a benefit from imputation. The role of gamma is to estimate the extent of that benefit.

The AER's methodology involves estimating gamma as the product of two factors, the distribution rate (the proportion of an entity's imputation credits which is distributed to investors) and the utilisation rate (the extent to which distributed imputation credits benefit investors by reducing tax payable or generating a refund).

In the case of the Draft 2026 ES, gamma of 0.58 is a result of a distribution rate of 0.90 and a utilisation rate of 0.64.

The Panel agrees with the AER's reasoning and approach.

Other areas

The Independent Panel agrees in principle with the AER's rationale for retaining past approaches to other RORI parameters where there is no compelling new evidence for change or stakeholders have not offered any new arguments.

We have, however, examined the context and reasoning that resulted in the AER reversing its 2022 draft decision that the term of the risk-free rate should be the regulatory period. We have concluded that, based on the reasoning for reversing this draft decision as set out in the final ES, the AER should keep the issue under review.

Is the draft RORI supported by evidence and reasoning?

Overall, the Independent Panel believes that if we take account of material presented by the AER for its RORI reviews in 2022 and 2018, the AER has offered extensive reasoning and explanations for most of its decisions in the 2026 draft RORI. Since many of the parameters have been left unchanged in the 2026 draft, the AER also provides a high degree of consistency for most of its decisions.

However, as highlighted above, the Panel does have significant concerns about the reasoning, transparency and consistency of the AER's decisions on beta and MRP. We

believe that a clearer explanation of the AER's reasoning and more transparency in how regulatory judgements have been applied to these parameters are vital to reassure both consumers and investor/industry stakeholders that the decisions are sound.

Is the draft RORI likely to contribute to the National Electricity Objective and National Gas Objective?

The Panel notes that the RORI must contribute to the energy objectives and that the AER says that it is satisfied that this requirement is 'met'. The AER also states that the 2022 RORI 'has generally performed well and has supported the long-term interest of consumers.'

The Panel accepts that by building on its past decisions in 2022 for most parameters, it is appropriate to highlight the performance of the 2022 RORI. However, we believe that the AER needs to do more to confirm that the 2026 RORI will contribute to the energy objectives.

Demonstrate that consumers are not overpaying.

While the AER highlights that the 2022 RORI has performed well and enabled investment, it is less successful in showing that consumers have not been overpaying and will not overpay in the period of the 2026 RORI. Given that 'price' is a parameter specifically mentioned in the national energy objectives and consumer advocates have raised concerns about the cost of living and the scale of historic financial outperformance by the sector, AER should seek to demonstrate that its final decisions on RORI will result in prices being no higher than they need to be to deliver required investment.

Clearer reasoning and more transparency on the proposed change to beta and MRP.

As we have highlighted above, we also believe that the AER needs to be much clearer in its reasoning behind changing beta and MRP. While we are not saying that the AER's decisions are wrong, we do believe the AER has not explained its reasoning sufficiently to make the case. Given the materiality of these issues to RORI, this needs to be done for the final RORI.

List of Independent Panel recommendations

Our recommendations are that the AER:

Beta – central recommendations

1. Should acknowledge that the task is to estimate investors' forward-looking beta estimate, which will be based on investors' assessment of the relative probability of different types of economic shocks. Historic averages reflect the historic frequency of different types of shocks, but investors will balance that against their assessment of the effect of changes over time in the relative likelihood of different types of shocks and in the nature of the regulated business and the share market composition. Therefore, the AER needs to explain how it has balanced the effect of changes over time versus the longest available average of beta observations.
2. Explores the differences between the risks faced by the historic domestic sample and the forward-looking risks of Australian NSPs. This includes changes in regulatory regime, the investment requirements and changes in financial market conditions.
3. Should investigate the differences between the international sample and the forward-looking risks of Australian NSPs, empirically where possible. This should involve comparing sub-samples of the international comparators, analysing different time periods (adjusting for the COVID-19 period) and adjusting for the different volatility of local market indices.

Beta – more detailed recommendations

4. Reconsiders the use of the longest possible timeframe for beta estimates, compared to an appropriate long-term horizon. This is because the forward-looking beta will evolve over time and genuine trends will be diluted if the long-term sample extends for each review period.
5. Calculates long-term beta estimates for specific periods (chosen to reflect the extreme events) for a consistent sample of firms. Looking at different long-term periods will allow the AER to assess the impact of extreme events on energy network betas and support an informed view of which time horizon(s) supports a forward-looking beta.
6. Investigates in more detail the impact of significant one-off events (such as COVID-19 or the GFC) on both short-term and long-term estimates. Consider approaches (even as a cross-check) that adjust the historic data based on the reasonable likelihood of the future occurrence of such events.
7. Explores whether there are further European networks that could be included in the sample. If minor adjustments to the filters result in including more European firms, then we consider that this is worth testing.
8. Tests whether the observed betas for the European sub-sample are different from the US (or North American) sample.
9. Compares the regulatory regimes of the countries in the international sample to Australia. Provide a reasoned basis for concluding whether the riskiness of the regulatory regime in

Australia is average, above average or below average compared to the international sample. Identify a sub-sample of comparators that most closely matches the regulatory regime in Australia and compare the betas of this sample to the international sample as a whole.

10. Uses sub-samples of the international sample to test other potential differences, e.g. the impact of vertically integrated and non-regulated activities.
11. Empirically tests the impact of different local market indices, using data on market volatilities. For example, this can be done using the approach set out by Professor Johnstone. We recommend that the AER undertakes this analysis as a cross-check and to inform the reasonable range from the international evidence.
12. Explores the evidence from cross-checks more systematically and explain how this helps to inform a decision of the point estimate from the range of domestic evidence and the range of international evidence.

Market risk premium

13. Should undertake further work to understand and explain the relationship between MRP and DGM results.
14. Provides a clearer rationale as to which HER estimates are preferred and why.
15. Provides a clearer rationale as to the choice of the proposed MRP.

Imputation tax credits

16. Should examine the reasons for the observed changes in the distribution rate used to estimate the value to investors of imputation tax credits (gamma).

Term of the risk-free rate

17. Should keep this under review.

Is the draft RORI supported by evidence and reasons?

18. Provides, as it did in 2022, a non-technical summary for consumers of its final RORI decisions, demonstrating how it has sought to balance future bills with ensuring there is sufficient investment in networks for Australia's future needs.
19. Provides much clearer reasoning and a more transparent explanation of how regulatory judgement has been applied on beta and MRP, so as to reassure both consumers and investor/industry stakeholders that these decisions are appropriate.

Is the draft RORI likely to contribute to the achievement of the National Electricity Objective and National Gas Objective?

20. Clearly states and demonstrates as far as it can in its final decisions that consumers are not overpaying, so as to address concerns about the cost-of-living and to counter concerns that regulatory generosity might be allowing financial outperformance by network companies.
21. More clearly demonstrates that changes in beta and market risk premium are appropriate. Given the materiality of these issues on the overall RORI it is important that this is done for the final RORI decisions.

1 Introduction

The Independent Panel was set up by the AER to review its *Draft 2026 Rate of Return Instrument: Explanatory Statement* (Draft 2026 ES) before the AER finalises the instrument later this year.

The AER asked the Independent Panel to answer two questions:

1. In the Independent Panel's view, is the draft RORI supported by evidence and reasons, taking into account competing factors such as accuracy, consistency, accessibility and transparency?
2. In the Independent Panel's view, is the draft RORI likely to contribute to the achievement of the National Electricity Objective and National Gas Objective?

We believe both questions are important. The answers to these questions can represent challenges to the AER where the Panel identifies issues in the AER's reasoning and the AER's conclusions based on that reasoning.

The first question seeks our views on the effectiveness of the AER's review process and whether its decisions are supported by the stated reasons and material available to the AER. This can help reassure stakeholders in the industry, among customers and other interested parties, that the AER's reasoning is sound and well explained or identify that there are gaps the AER needs to address.

The second question seeks our views on the likely efficacy of the draft RORI in practice. This requires us to identify any further work or refinement we believe is required to increase the likelihood that the RORI will contribute to providing cost-effective services to customers in the long term. However, it is not the Independent Panel's role to suggest an alternative draft RORI 'answer'.

In addressing these questions, the Independent Panel recognises that the regulated rate of return is part of a broader regulatory framework that affects the incentives faced by network companies and hence their ability to undertake the investment necessary to deliver reliable and efficient network services to consumers. We also appreciate that there are no definitive answers to some of the issues involved in the review of the RORI and that the AER must exercise its judgement in making its final determination.

In carrying out our task, the Independent Panel has taken account of work done by the AER in the past and the considerable input by stakeholders on the rate of return in previous reviews, particularly 2018 and 2022. The Panel has also considered reports of the Independent Panels in 2018 and 2022. We have carefully examined the AER's analysis and explanations of its reasoning and have found very useful submissions by stakeholders from the industry, the Consumer Reference Group (CRG) and other stakeholders and material provided by the three Eligible Experts.

In terms of the structure of our report, the Independent Panel firstly, and to provide context discusses some of the bigger challenges of the current environment that we believe to be particularly relevant to the 2026 review. These we summarise in Section 2 of this report.

Following broadly the format of the AER's Draft 2026 ES, we have considered in detail the areas of focus. We have examined the estimation of equity beta and proposed changes to the market risk premium in Sections 3 and 4, respectively. In Section 5 we give our views on other proposed changes, including the trailing average approach to estimating the return on debt, the reintroduction of the Reserve Bank of Australia yield curves using alternative swap data and imputation tax credits.

We have looked at the AER's approach to other RORI-related parameters, where the AER proposes no change and adoption of its 2022 position. In Section 6 we consider the AER's rationale for not changing these parameters and raise one issue the Independent Panel believes the AER should consider – namely, to keep the term of the risk-free rate under review.

Based on our examination of all the material available to us and our assessment of the AER's Draft 2026 ES, in Section 7 we provide our answer to the AER's first question 1 above to the Independent Panel. As well as commenting on whether the draft RORI is supported by evidence and reasons, we also give our views specifically on the accessibility, transparency, consistency and accuracy of the AER's approach.

Finally, in Section 8 we offer our views on how far we believe the draft RORI is likely to contribute to the achievement of the National Electricity Objective and National Gas Objective, the AER's second question to the Independent Panel. In this section, we also highlight any further work or refinement of parameters we believe the AER should do or provide so the answer to this important question is more conclusive.

2 Context for the 2026 RORI Review

The AER's decisions on RORI set the way rates of return are determined for regulated electricity and gas network operators. The decisions interact closely with the broader regulatory system for these companies and the wider economy. The way RORI has been set by the AER has been relatively stable since 2018. This consistent approach has continued with the AER's draft 2026 RORI. Until around 2020 the broader economy in Australia was characterised by low and stable interest rates and low inflation. That picture has changed significantly since the early 2020s and the AER has in the 2022 review and this 2026 review been setting RORI amid a continuing challenging broader environment.

2.1 Impact of COVID-19 and other global economic impacts

In 2022, when the AER last set RORI, the Independent Panel highlighted a range of issues for the AER to consider as Australia was only just emerging from the COVID-19 pandemic.⁴ There had been a rapid reduction in interest rates and unprecedented quantitative easing that had affected some of the key metrics used to determine RORI. These issues also affected the environment the energy networks operated within, as well as business and domestic consumers in Australia more generally.

The AER responded to the 2022 Independent Panel's advice as follows:

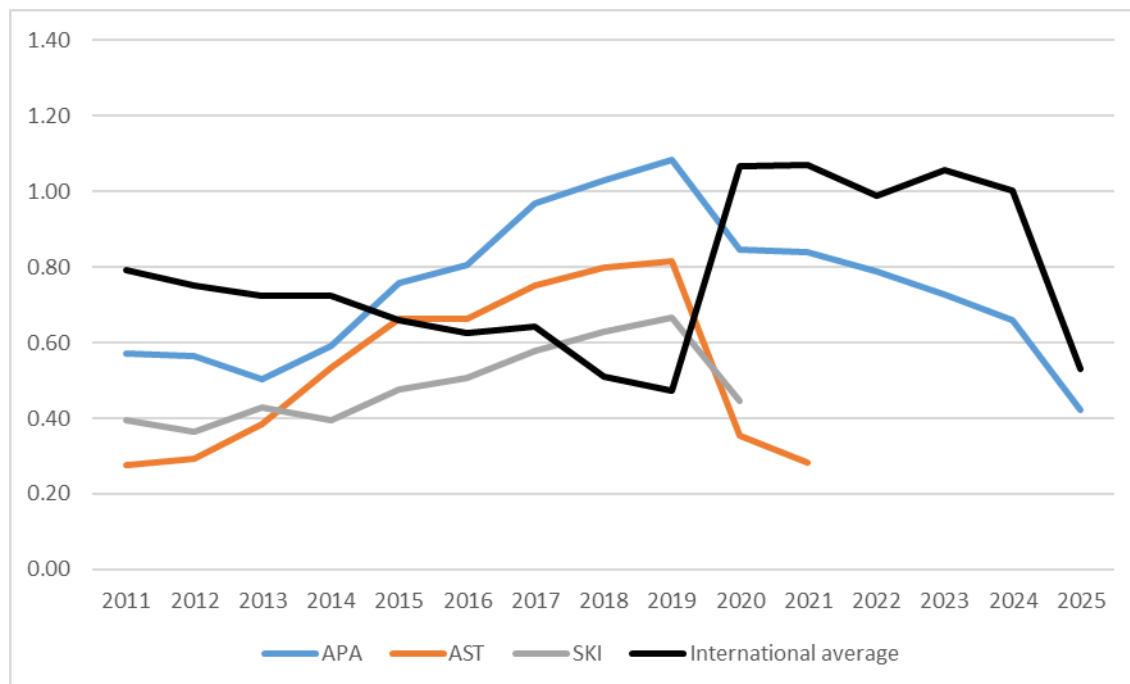
'We had planned to publish the Instrument in December 2022. However, the Independent Panel that reviewed our draft decision recommended that we seek independent advice on the extent to which some of the rate of return parameters may have been impacted by the low interest rates and quantitative easing that is now being unwound. We sought and received advice from the Australian Government Treasury at the end of October 2022 that was material to the form of the Instrument. It was important to test the Treasury advice with stakeholders, so we delayed publication of the Instrument to allow us to receive and consider submissions on the advice. While the Instrument is published in 2023, we refer to it as the 2022 Instrument as per our original intention of making this Instrument in 2022.'⁵

The AER's draft decision included setting the market risk premium as 6.5% but the final decision, informed by a further year's data, reduced this to 6.2%. The AER's discussion of this change included a methodology for weighting the arithmetic average and geometric average excess return data with the weighted average being lower than the arithmetic average. Whilst the immediate effects of COVID-19 have now played out to an extent, the impact on some data series used by the AER to set some of the RORI parameters linger, as illustrated in the following rolling 5-year average beta chart where the effect of the pandemic continues until 2025.

⁴ Independent Panel, [Independent Panel Report: AER Draft Rate of Return Instrument](#), July 2022, pp. 5–6.

⁵ AER, [Rate of Return Instrument: Explanatory Statement](#), February 2023, p. 5.

Figure 6.4 Comparison of domestic and international beta estimates, 5 years rolling, weekly OLS, re-levered to 60% gearing using debt beta of 0.1, as at December each year



Source: AER, *Draft 2026 Rate of Return Instrument: Explanatory Statement*, May 2026, p. 47.

As indicated in the chart, the determination of the beta estimate includes not only how the effect of the pandemic should be treated but also the complication that, due to delisting, beta data is available for only one domestic comparator (APA Group), as discussed below.

How the AER deals with these challenges in 2026 and beyond are important considerations in setting RORI and we consider the AER's response later in our report.

More broadly, the war in Ukraine and the more recent conflict in Iran have both had significant impacts on oil prices. The period since 2022 has been characterised generally by much higher inflation. The extent of the impact of the war in Iran is yet to be clear in this regard. One implication of this is that the AER needs to continue to test its decisions on RORI against the range of plausible scenarios.

2.2 Continuing challenges with data sets for key RORI parameters

As has been evident for some time, the AER has faced a challenge in setting RORI due to stock exchange delisting of most of Australia's NSPs. Current market data about Australian network businesses has become more scarce over the last 10 years and only one network business, APA Group, is now listed as illustrated in the above chart.

While there are arguments for using historic long-term domestic comparator data, which reduces the effect of extreme events including the pandemic, that assumes energy network business risk is unchanged. As discussed below, this assumption is hard to defend given the role of network capacity in reducing fossil fuel emissions. There is continuing debate over the use of domestic and overseas data to address the issue. The Independent Panel in 2022

highlighted this as a major issue⁶ and it appears not to be fully resolved for the 2026 RORI, nor for the future. We explore this issue further in Section 3 on the estimation of beta in particular.

2.3 Investment needed by network service providers to help Australia decarbonise

The importance of the AER getting the ‘right answer’ in terms of setting RORI is highlighted by the crucial role investment in electricity and gas networks will have to enable Australia to fulfil its plans for decarbonisation. It is vital that the RORI is set at a level that does not inhibit this investment.

2.4 Cost-of-living challenge for some Australians

Equally important is that the RORI is not set at such a high level that it enables network businesses to make excess profits at the expense of customers. This is always the case. But it is particularly important given the cost-of-living challenges many energy consumers are facing currently, as pointed out by Energy Consumers Australia in their evidence to the AER.

In its submission to the RORI review, the Consumer Reference Group highlighted the extent of financial outperformance by NSPs in recent years.⁷ Energy Consumers Australia has highlighted particularly the issue of inflation.⁸ One consequence of higher inflation, as well as its impact on consumers and businesses across Australia, is that it can have a significant effect on raising actual rates of return of energy network service providers. The AER has shown in its performance reports on the sector how inflation and regulatory incentives have contributed to this strong financial outperformance.

We agree with the AER that inflation is an issue out of scope of the review of RORI. We also believe that if financial outperformance has been due to inflation and regulatory incentives, any generosity in these regards should be dealt with separately.

Systematic generosity in the regulatory system will normally result in regulated company valuations being materially higher than their regulated asset bases (after adjusting for non-regulated businesses) and might distort the observed beta based on David Johnstone’s analysis.⁹

The takeovers of AusNet Services (AST) and Spark Infrastructure (SKI), in 2020 and 2021, respectively, at prices significantly higher than their regulated asset bases (after adjusting for their non-regulated business), are strong evidence that investors have confidence that the legislative and procedural framework for the determination and updating of the AER’s RORI will continue to result in returns that clearly meet investors’ required return.

The limited recent data about Australian network companies, resulting from the takeovers reducing the number of listed domestic comparators to just APA Group, unfortunately limits

⁶ Independent Panel, [Independent Panel Report: AER Draft Rate of Return Instrument](#), July 2022, pp. 7, 10.

⁷ CRG, [Submission to AER Rate of Return Instrument Review discussion paper](#), December 2025, pp. 9–10.

⁸ Watkinson G and Orme S, [Report for Energy Consumers Australia’s Submission to the AER’s 2026 Rate of Return Instrument Review](#), Electricity Market Advisory Services, December 2025, pp. x–xii, 12–15.

⁹ [2026 Rate of Return Instrument review: Eligible Experts’ joint report](#), AER, November 2025, p. 14.

the ability to quantify the extent to which recent allowed rates of return may have exceeded investors' required return.

The Independent Panel believes that the AER should not set RORI according to any cost-of-living considerations or drivers. But in the context of the cost-of-living problem, and given consumers' concerns about NSP outperformance as well as any possible questions about credibility of the regulatory system more broadly, the AER could do more. We think that it is important that the AER demonstrates in its final decisions that RORI is set no higher than it needs to be, and customers' bills will be no higher than they need to be, to deliver required investment.

3 Independent Panel views on the AER's proposed change to equity beta

3.1 Introduction

The equity beta is the component of the cost of equity formula that captures the risk of the activity relative to the market of risky assets as a whole. In line with its guiding principles, the AER aims to identify investors' *expectation of the* equity beta of regulated Australian NSPs that will be experienced during the review period. The standard assumption is that investors' expectation for beta will be based on a probability weighted average of the different types of economic shocks that affect share prices.¹⁰

The task that the AER faces is to estimate investors' forward-looking beta estimate, which will be based on investors' assessment of the relative probability of different types of economic shocks. Historic averages reflect the historic frequency of different types of shocks, but investors will balance that against their assessment of the effect of changes over time in the relative likelihood of different types of shocks and in the nature of the regulated business and the share market composition.

The primary source of evidence available to the AER, and to other energy regulators generally (and to investors), is the observed historic betas of listed firms whose main activity comprises regulated energy networks. The observed betas for any given period reflect the shocks that occur in that period. In using historic beta evidence to estimate a forward-looking beta, the AER has to consider the appropriate timeframe of the historic evidence, i.e. the weight to be attached to shorter-term versus longer-term estimates. Both shorter-term and longer-term estimates can be distorted by the occurrence of actual shocks not representative of the nature and frequency of future shocks. Shorter-term estimates are more susceptible to this and are inherently more volatile. On the other hand, recent shorter-term estimates can capture the impact of trends in the sector.

In addition, to the assessment of timeframe the issue facing the AER in the 2026 RORI is that the historic beta data from Australian-listed energy network firms, that the AER relied on in previous reviews, is increasingly out of date. From an original sample of nine firms, eight have been delisted. Furthermore, the remaining company (APA Group) has a significant proportion (around 90%) of its revenue from other energy infrastructure activities, making it a materially weaker source of evidence.

In the draft decision, the AER has considered the evidence from the historic betas of the domestic sample and also considered the evidence from the historic betas of an international sample of regulated energy networks. In its assessment it has placed more weight on the domestic evidence and it has set an equity beta value of 0.55. This is the mid-point of its identified range of 0.4 to 0.7 and close to the mean of the domestic comparator set over the longest time period, which is 0.56. This point estimate represents a reduction from the 0.6

¹⁰ The pandemic dramatically increased betas for some activities such as airlines. Arguably, investors' expected betas for such companies will include the observed high pandemic betas weighted by the probability of a pandemic during the regulatory period.

equity beta in the 2022 RORI decision and represents the most material change from the 2022 RORI.

The remainder of this section provides:

- a summary of our assessment and recommendations
- our assessment of the AER's approach to the comparator set
- our assessment of the evidence and reasoning for the draft decision to set the equity beta at 0.55
- our review of the other considerations in setting the equity beta.

3.2 Panel assessment of approach to estimating beta

Overall framework

The AER's approach to estimating beta fits within its overall decision-making framework. This is set out in Section 3.2 of the draft decision, which states '[o]ur guiding principle is that the expected rate of return should be an unbiased estimate of the expected efficient return, consistent with the relevant risks involved in providing regulated network services'.¹¹

Section 4 of the Draft 2026 ES explains the principles of the decision-making framework. These are:

- 'alignment with sound economic and finance principles and market information
- fitness for purpose, given the regulatory task
- consistency with good practice in implementation
- use of quantitative modelling that is robust and free from arbitrary filtering
- reliance on market data that is credible, verifiable, comparable, timely and clearly sourced
- flexibility to adapt to changing market conditions and new information
- the materiality of any proposed change from the previous RORI
- the sustainability and longevity of new arrangements over time.'¹²

The aim is to ensure that the AER's 'approach is transparent, consistent with economic and financial principles and suited to the regulatory context'.

The Independent Panel agrees that these principles provide an appropriate framework for estimating the equity beta. We have reproduced them here because they have been helpful in informing our assessment against the two questions we have been asked to address.

¹¹ AER, [Draft 2026 Rate of Return Instrument: Explanatory Statement](#), May 2026, p. 11.

¹² AER, [Draft 2026 Rate of Return Instrument: Explanatory Statement](#), May 2026, p. 14.

Core elements of beta estimation methodology

In terms of the beta estimation methodology, the AER has consistently applied some core elements, which are set out on page 20 of the Draft 2026 ES. These relate to using OLS estimation, weekly data and so on. The Panel agrees that this constitutes a reasonable method for estimating beta. We also highlight the value of applying a consistent method over time.

Time horizon: long-term and short-term evidence

The AER attaches more weight to longer-term beta estimates compared to short-term estimates. As indicated above, the aim is to produce an accurate estimate of the forward-looking beta. The question of the appropriate time horizon, and how to weight longer-term versus shorter-term estimates, should be assessed against this aim.

Longer-term averages reflect a wider range of types of economic shocks weighted by their historic frequency. We agree that short-term estimates can be volatile and should be interpreted with care. We also agree that, in many cases, longer-term estimates will be a better guide to the forward-looking beta. However, we have two concerns with the AER's method: i) we do not agree that the longest possible estimate will always be better than an alternative long-term time horizon, particularly since energy network roles are changing; ii) significant one-off events (such as COVID-19 or the GFC) should be properly investigated, because they also impact on longer-term estimates. This is explored further below.

Comparator set for beta estimation

The main issue that the AER has had to address is the loss of current domestic comparators and how to use data on international comparators. As a result, this is considered in detail in the next section.

In summary, our view is that more can be done, and should be done, to investigate and evaluate the merits of international evidence relative to the domestic evidence. We consider that the AER should undertake the following steps:

1. Explore the differences between the risks faced by the historic domestic sample and the forward-looking risks of an Australian NSP. This includes changes resulting from climate change policy,¹³ the regulatory regime, the investment requirements and changes in financial market conditions.
2. The draft decision has identified valid differences between the international sample and the Australian sample. The AER should test these potential differences empirically. This should involve comparing sub-samples of the international comparators, analysing different time periods (adjusting for the COVID-19 period) and adjusting for the different volatility of local market indices.

¹³ For example, the 2022 Independent Panel report highlighted that 'more frequent climate emergencies have, however, reshaped the broad economic environment in ways that will present challenges for the energy industry, energy consumers and energy regulators going forward'.

The result would be a richer set of evidence, including a range of reasonable values based on international data, and reasoning that would support the selection of a point estimate in relation to that international range.

Our concern with the current reasoning in the draft decision is that it does not provide enough clarity on how beta will be assessed in future periods, when the domestic data is even more out of date and increasingly lack credibility as a basis for beta estimation. As such, our view is that more should be done to satisfy the principles of the framework referred to above, notably:

- reliance on market data that is credible, comparable and timely
- flexibility to adapt to changing market conditions and new information
- sustainability and longevity of new arrangements over time.

We recognise that there is a limit to how much additional analysis can be undertaken between now and the final decision. However, we consider that it is important that the AER makes progress in this direction, to provide more confidence to stakeholders about the method for future reviews.

Benchmarking against other regulators' approaches

One aspect of the AER's method is to use comparisons to other regulators to inform parts of the methodology, but not to inform the assessment of a range or point estimate. The draft decision states '[o]ur view has long been to not use other regulators' decisions to directly inform our estimates'.¹⁴

While the Panel agrees that the AER needs to form its own view on the beta and not be bound by other regulators, we consider that there is some inconsistency in the AER's approach.

The Panel considers that there is value in the AER considering regulatory comparisons of the beta range and point estimate (adjusted for gearing as appropriate), as a cross-check. We also consider that the value of this will increase over time, as the AER will be increasingly relying on an international set of comparators similar to those used by other regulators.

Rationale for point estimate

The draft decision proposes reducing the beta from 0.6 in 2022 to 0.55. We review the evidence and reasoning for this change in more detail below. However, the view of the Independent Panel is that the reasons stated in the draft decision for reducing the beta value from the 2022 level are not sufficiently compelling and that there appears to be some inconsistency between the reasoning applied in 2022 and the reasoning in the draft decision.

To be clear, we have not formed a view that an equity beta of 0.55 is inappropriate and it is not our role to provide an alternative estimate. We also note that the proposed figure may be appropriate, even if the evidence does not support a change, if the evidence does now indicate that the previous level was too high. However, the AER has not made this case.

¹⁴ AER, [Draft 2026 Rate of Return Instrument: Explanatory Statement](#), May 2026, p. 50.

We would recommend that the AER reviews the reasoning for this reduction, ideally including the further consideration of the international evidence referred to above. We emphasise that clarity and consistency in reasoning, and in the application of regulatory judgement, is vital to satisfying the AER's principles in the decision-making framework.

3.3 Comparator set for beta estimation

In this section we set out our assessment of the draft decision's approach to the comparator set for beta estimation.

3.3.1 Background: addressing the delisting of domestic comparator set

The main issue on RORI that the AER has faced in recent years is how to deal with the delisting of the previous domestic comparator set and what weight to give to international energy network comparators.

2022 RORI Explanatory Statement

The importance of this issue was well understood, as the delisting of the domestic comparator set had been apparent over a number of years. In the Final Explanatory Statement to the 2022 RORI the AER stated:

'We recognise that our proposed approach may not best satisfy the criteria for sustainability and flexibility for changing market conditions in the future, because 8 of the 9 firms in our comparator set have now been delisted. We aim to further explore ways to use other comparators in future reviews.'¹⁵

2025 Discussion Paper

The Discussion Paper published in 2025¹⁶ summarised the AER's emerging position on the comparator set. The AER considered a number of alternatives to relying only on the domestic comparator set:

1. International energy firms
2. Domestic non-energy infrastructure firms
3. Other domestic firms
4. Estimating accounting beta for non-listed energy networks.

The AER concluded that, of the four alternatives, the international energy firms was the only one that was potentially viable. In addition, the AER described the three challenges to the use of international comparators.

1. Differences between international and Australian energy firms – differences in regulatory frameworks, markets, geography, etc.
2. Differences in capital structure.

¹⁵ AER, [Rate of Return Instrument: Explanatory Statement](#), February 2023, p. 175.

¹⁶ AER, [Rate of Return Instrument: Review discussion paper](#), August 2025.

3. Differences in home stock market indices.

The AER considered that the domestic data still provided the best source of evidence but consulted on whether to make greater use of international comparators, attempting to address the above three challenges.

3.3.2 Approach to comparator set in the draft decision

Based on the responses from stakeholders to the Discussion Paper and the views of the Eligible Experts, the AER has adopted the following approach in the draft decision.

- a) Using evidence from international energy firms alongside the domestic sample. The remaining three alternatives were not considered.
- b) To manage the issue of potential differences between international energy firms and Australian NSPs, the AER applied a number of filters in selecting the international sample. The filters were: i) operating in a developed country; ii) operating in energy sectors; iii) majority of revenue from regulated networks; iv) have been listed for a minimum number of years; v) a market capitalisation above a minimum level; and vi) a bid-ask spread below a certain level.
- c) To address differences in gearing, the AER applied a debt beta assumption of 0.1 in calculating the equity betas. The assumption of 0.1 was supported by a comparison of other regulators' approaches.

This resulted in a sample of 48 firms (38 from the United States, 5 from Canada, 3 from Italy, 1 from the UK and 1 from Spain).

The draft decision then evaluates the merits of the domestic and international evidence and the AER concludes that:

'We consider it appropriate to use both domestic and international data to develop an appropriate range, but to not rely solely on either because both samples have their limitations. Overall, we consider that domestic data's relative merits outweigh those of international data.'¹⁷

In the section below, we provide our assessment of the AER's approach and the analysis in the draft decision.

3.3.3 Panel assessment of approach to beta evidence

Underlying considerations

Our assessment is informed by three underlying considerations. We consider that these are consistent with the AER's objectives and decision-making framework.

The first consideration is that the aim is to estimate an appropriate *forward-looking* beta for the Australian NSPs. Even up-to-date evidence from a domestic sample, if it existed, is not a perfect proxy for the forward-looking beta. Therefore, there will always be a need to exercise some regulatory judgement and also always value in considering evidence from different sources.

¹⁷ AER, [Draft 2026 Rate of Return Instrument: Explanatory Statement](#), May 2026, p. 39.

The second consideration is the forward-looking beta for NSPs will evolve over time. We tend to agree with the AER statement that '[w]e consider the equity beta of regulated energy networks is likely to be stable over the long term.'¹⁸ However, it is our clear view 'stable' does not mean 'static'. In the section below we consider this further, but we consider that it is vital that the AER's approach to assessing beta enables it to evaluate trends in the forward-looking beta and also to be able to assess these trends on a consistent basis from one review to the next.

The third consideration is that one of the key aims of a regulatory approach to beta should be to minimise regulatory risk, subject to other objectives. One of the main risks that an NSP is exposed to, and therefore a key driver of the forward-looking beta, is regulatory risk. This point was emphasised by Professor Johnstone when he said, 'the fact can't be escaped that stock market betas of regulated entities are largely what the regulator's regulations make them'.¹⁹ In our view, the principles of the decision-making framework set out on page 15 of the draft decision are well-aligned to minimising regulatory risk in estimating beta. We also note the importance that regulatory judgements on beta are well-explained and, where possible, applied consistently over time.

Time horizon and trends in equity beta

The draft decision notes that short-term beta estimates are often volatile and can be influenced by economic cycles and one-off events.²⁰ Therefore, the AER attaches more weight to longer-term beta estimates.

The Panel agrees that short-term estimates can be volatile and should be interpreted with care. We also agree that longer-term estimates can be a better guide to the forward-looking beta.

At the same time, we make the following observations.

1. First, we do not agree that the *longest possible* estimate will generally be a better approach than a specific long-term time horizon (e.g. 10 or 15 years). One reason for this is that the forward-looking beta will evolve over time and genuine trends will be obscured in a very long sample. For example, APA Group was listed in June 2000 and by the next review will have a sample period of nearly 30 years.
2. Second, significant one-off events (such as COVID-19 or the GFC) should be properly investigated. In part because these events can also impact on the longer-term estimates but also recognising that the forward-looking beta will reflect investors' perceptions of the future occurrence of these events.

In our view, the assessment of appropriate time horizon needs to take account of two considerations. First, the occurrence of extreme events in the historic sample and how this relates to a forward-looking view. Second, factors that are expected to drive changes in the forward-looking beta over time.

¹⁸ AER, [Rate of Return Instrument: Review discussion paper](#), August 2025, p. 15.

¹⁹ [2026 Rate of Return Instrument review Eligible Experts' joint report](#), AER, November 2025, p. 15.

²⁰ AER, [Draft 2026 Rate of Return Instrument: Explanatory Statement](#), May 2026, p. 38.

On the first point, we note that some regulators have adopted approaches that estimate the impact on historic beta of extreme events such as COVID-19 and then estimate forward-looking betas based on an assessed probability of such events occurring in the future.²¹ Clearly there is an element of judgement involved in assessing the future probabilities, but this approach has advantages over other approaches, such as:

1. removing the extreme event from the sample (which implicitly assigns a future probability of zero), or
2. making no adjustment (which will tend to overstate the future probability), or
3. basing the beta estimate on a short time period post the extreme event (which may bias beta estimate downwards because it reflects only a very limited range of economic shocks).

The regulatory judgement needs to ensure as far as possible the beta value adopted reflects the wide range of types of economic shocks on which investors will base their forward-looking beta view utilising a probability weighting.

Furthermore, the AER clarified, in response to our data request, that its approach to calculating the longer-term estimates (both domestic and international) is to include all available beta data from May 1992 to the current time. This means that the start date and, in the case of the domestic sample, the end date varies from firm to firm in the sample. This is not ideal in terms of a consistent sample period to evaluate the impact of historic event. For example, the longest possible sample will include the impact of the 'Dotcom bubble' for some firms but not others, the GFC for some but not others, and so on.

The Panel recommends that the AER calculates long-term beta estimates for specific periods (chosen to reflect the extreme events) for a consistent sample of firms. Looking at different long-term periods will allow the AER to assess the impact of extreme events on energy network betas and support an informed view of which time horizon(s) supports a forward-looking beta.

On the second point, the potential for the forward-looking beta to evolve over time is central to the assessment of the draft decision. The concerns raised by the AER about relying on an increasingly out-of-date domestic sample show that it is aware of this potential.

In our view, an assessment of why the equity beta can evolve over time, even a qualitative assessment, is important in assessing the relative merits of historic domestic data against more recent international data. For example, and purely as an illustration, the following factors could inform that assessment.

- a) Changes to energy sector demand and cost conditions (investment to meet decarbonisation objectives, climate change resilience, distributed generation, EVs, etc).
- b) Changes in market index composition (e.g. towards technology and service sectors).
- c) Changes in investor risk perceptions of energy sectors.

²¹ See for example, the [Civil Aviation Authority in the UK](#).

- d) Changes to regulatory regimes and risk mitigations.
- e) Changes to perceived regulatory and political risk.

This list is not meant to be definitive or comprehensive. Nevertheless, in our view, it illustrates two important points that should be part of the assessment of beta. First, that it should not be assumed that out-of-date domestic evidence is a good guide to the forward-looking equity beta. When evaluating the weight to be attached to such evidence, it is important to consider whether factors such as these have changed (or are expected to change) and the impact of these changes. This recognises that the assessment of impact will not be precise, may be qualitative and will require the exercise of regulatory judgement that should be clearly explained.

Second, the list of factors would include some where trends in the forward-looking beta for an Australian NSP are likely to be reflected in an international sample (e.g. climate-related investment and changes in investor risk perceptions). But it would also include some factors (e.g. changes to regulatory risk mitigations in Australia) that would not be reflected in an international comparator set. This is a challenge for a regulator in using international evidence.

The Panel recommends that the AER undertakes an assessment of factors that are likely to drive changes to the forward-looking beta of NSPs. We recognise that this would be a largely qualitative exercise and would involve the exercise of regulatory judgement. However, there is a benefit in setting out the reasoning for these judgements. As it stands, the draft decision provides a detailed assessment of reasons why the international sample may not be a good guide to the equity beta of NSPs. It does not consider in anything like the same level of detail whether there are reasons why the historic domestic sample may not be a good guide for the forward-looking beta. Given the weight attached to the sample of 5 'majority regulated' firms, and the fact that the average delisting date for this group was 10 years ago, we consider that this is a notable omission.

Challenges in using international comparators

The Panel agrees that the three challenges identified in the discussion paper and draft decision (i.e. country/operational differences, gearing differences and local markets) are the right issues to focus on.

Filters, sample size and composition

For the country and operational differences, we also agree that using filters is the right approach. In our view, the AER's choice of filters is reasonable and justified by the reasons set out in the draft decision.

Our main observation or concern on the sample that results from the filtering process is that it is very focused on North America (38 from the United States and 5 from Canada, compared to 5 from Europe). In our view there are two elements of concern with this. First, given the size of the respective economies, it is unduly weighted to North America. Second, to the extent that there are differences in regulatory regime between developed economies, our perception is that the regime applied by the AER is more similar to that in Europe than to the United States. This is an area that would merit further investigation.

We would recommend the following further analysis.

- a) First, explore whether there are further European networks that could be included in the sample. We note that the following additional firms are included in samples used by European regulators – SNAM and Italgas in Italy, Redeia in Spain, Elia in Belgium and REN in Portugal. It may be there are valid reasons, based on the filters, why these firms have not been included. However, if minor adjustments to the filters results in including more European firms, then we consider that this is worth testing.
- b) Second, empirically test whether the observed betas for the European sub-sample are different from the US (or North American) sample. The results would be more likely to be robust if the European sample can be expanded (point a) above) but even if that is not possible it would be a worthwhile exercise.
- c) Third, compare the regulatory regimes in more detail to Australia. We note that the Council of European Energy Regulators (CEER) publishes detailed information on the regulatory regime applied in each country.²² This comparison could be useful in two respects:
 - i) identifying a sub-sample of comparators that mostly closely matches the regulatory regime in Australia and then comparing the betas of this sample, and/or
 - ii) providing a reasoned basis for concluding whether the riskiness of the regulatory regime in Australia is average, above average or below average compared to the international sample.

Interpretation of remaining differences

The AER is concerned that the filters do not control for all of the country and regulatory differences. We have discussed the regulatory differences above. There is another point that is not explicitly covered in the draft decision. That is the size of the sample. With a sample of nearly 50, what matters most is not whether there are remaining differences, but whether these differences result in a bias. If the differences between the international sample and the true risk of an Australian NSP are random then, with a sample of nearly 50, the international sample can provide an unbiased estimate based on current market data and the concern would not be justified.

The recommendations above provide a suggestion on how to test whether differences in regulation result in a bias. We would recommend that the AER also assess whether other differences result in a bias. In the absence of evidence of bias, it is not clear to us why the AER considers that the existence of differences would point to attaching more weight to the domestic sample, given that differences will also exist between the historic domestic sample and the forward-looking beta. Our view is that this would be a matter to be assessed and explained.

Furthermore, with a sample of around 50 it should be possible to test for some bias. For example, the suggestion that the international sample have more vertically integrated and non-regulated activities. The sample could be divided in two in terms of vertical integration (higher exposure and lower exposure) and tested to see the impact on the beta estimate.

²² CEER, [Report on Regulatory Frameworks for European Energy Networks](#), January 2026.

We note that there is a general theme of our assessment to the effect that the AER could do more to extract relevant evidence from the international sample. For example, by looking at sub-samples of the overall comparator set in order to test specific issues or concerns.

Gearing differences

To address the differences in gearing between the international sample and the AER's gearing assumption, the draft decision proposes to correct for this using a positive debt beta of 0.1. We agree with this approach and consider that this adequately addresses the concern. The figure of 0.1 is consistent with the evidence presented. We consider though it would be reasonable to test the sensitivity of results to a debt beta range of 0.075 to 0.125.

Local market indices

There are two issues around market indices for international comparators. First, whether to use a global index instead of a local market index, i.e. to apply an 'international CAPM'. We agree with the draft decision, and with the views of stakeholders and the Eligible Experts, that the 'international CAPM' is not appropriate.

Second, how to interpret the fact that there are differences in the composition of local market indices compared to Australia. The draft decision presents data on the market composition of the different indices and observes that the differences between the indices is greater than the differences in the composition of the Australian index over time. The draft decision concludes that 'the difference between the Australian and other countries' market indices can make international beta estimates (using local indices) less useful for our purposes.'²³

The Independent Panel recommends that further work is undertaken to test/support this reasoning.

- a) First, the point above about whether the result of the difference is biased or unbiased is relevant on this issue too. The AER has identified differences in local market composition but does not provide any evidence that this would introduce a bias. In our view the draft decision would have benefited from an in-depth discussion of the implications of the difference in composition of the share market indices.
- b) Second, the approach set out by Professor Johnstone for transforming international betas to Australian betas²⁴ would provide a method for testing this bias. We recommend that the AER undertakes this analysis and includes the results in its assessment of the international data.
- c) Third, we also note that CEG on behalf of the ENA undertook some analysis of the returns and volatility of different market indices and we consider that this is also relevant evidence that could be built upon by AER.²⁵

²³ AER, [Draft 2026 Rate of Return Instrument: Explanatory Statement](#), May 2026, p. 35.

²⁴ [2026 Rate of Return Instrument review: Eligible Experts' joint report](#), AER, November 2025, p. 12. The formula is set out in para 77.

²⁵ CEG, [Using international comparators to estimate the benchmark Australian equity beta](#), July 2024, pp. 21–22.

3.3.4 Summary on international comparator set

In summary, our view is that more can be done, and should be done, to investigate and evaluate the international evidence. The draft decision has identified valid differences between the international sample and the Australian sample but, in our view, it should undertake the following steps.

1. Explore the differences between the risks faced by the historic domestic sample and the forward-looking risks of an Australian NSP. This includes changes in regulatory regime, the investment requirements and changes in financial market conditions.
2. The draft decision has identified valid differences between the international sample and the Australian sample. The AER should test these potential differences empirically. This should involve comparing sub-samples of the international comparators, analysing different time periods (adjusting for the COVID-19 period) and adjusting for the different volatility of local market indices.

The result would be a richer set of evidence, a range of reasonable values based on international data, and reasoning that would support the selection of a point estimate. Our concern with the current reasoning in the draft decision is that it does not provide enough clarity on how beta will be assessed in future periods, when the domestic data is even more out of date.

3.4 Empirical estimates and rationale for draft decision

3.4.1 Empirical evidence presented in the draft decision

Section 6.4 of the draft decision provides the following empirical analysis.

First, it presents individual beta figures for the domestic sample for the longest sample period up to delisting date. Betas are re-levered to 60% gearing and presented based on a debt beta of 0.1 (proposed approach) and of 0 (previous approach). This shows that the domestic betas are not sensitive to the debt beta assumption.²⁶ For APA Group, only the latest 5-year estimate is also presented. The long-term average for the sample is presented as mean and median, with the mean being higher than the median.

Second, a comparison of international sample estimates is provided. The AER 2026 sample is compared to the previous AER samples and to those of other regulators (NZCC, ERAWA, QCA) and stakeholders (ENA and ECA). For each sample, the mean and median are presented, over the longest sample and past 5 years, and assuming a debt beta of 0.1²⁷ and 0. There are consistent results across the samples. The long-term mean (debt beta = 0.1) varies between 0.66 and 0.78 with a mean of 0.70. The 5-year betas are lower than the long-term betas and the betas with zero debt are slightly higher than those with a debt beta of 0.1.

Third, the draft decision includes charts showing: i) trends in the longest sample period for the proposed AER international sample and the domestic sample; ii) trends in 5-year beta for

²⁶ This is to be expected given that the gearing assumption of 60% is based on the actual gearing of Australian network firms.

²⁷ In Table 6.2 the debt beta is labelled as =1, but this is a typographical error.

the international sample, APA Group, AusNet Services and Spark Infrastructure; and iii) the trends in the 5-year beta across the different international samples. The main observation from these charts is that international betas rose at the start of the COVID-19 pandemic and have then fallen as this increase dropped out of the sample.

3.4.2 Point estimate

The draft decision is proposing to reduce the value of the beta from 0.6 in 2022 to 0.55. This is based on the following evidence.

- For the domestic comparator set, the longest time period average is 0.56.
- The estimate of the 5 majority regulated firms in the domestic sample is 0.4.
- The international sample has a long-term average of 0.68. The AER identify a range from the evidence of 0.4 to 0.7, and the mid-point is 0.55.
- The 5-year estimate of both APA Group and the international sample are below the long-term values.

The view of the Independent Panel is that the reasons stated in the draft decision for reducing the beta value from the 2022 level are not sufficiently compelling and that there appears to be some inconsistency between the reasoning applied in 2022 and the reasoning in the draft decision.

Looking back to the last review, the final 2022 ES concluded:²⁸

‘We maintain our point estimate of 0.6 from the Draft Instrument, primarily because we continue to see stability in the longest period estimates, which we give most weight.’

‘Having considered the available data and their strengths and weaknesses, we consider that a case for change has not been established. We do not consider the evidence for a higher or lower value is sufficiently strong and therefore we should continue with a value of 0.6 for equity beta.’

We would make the following specific observations about the reasoning in the draft decision compared to the 2022 decision.

1. Figure 6.3 in the draft decision shows that the longest period estimates for both domestic and international samples have been stable. The international sample beta rose (due to the impact of COVID-19) but the impact of this is reducing. This evidence has not changed since 2022.
2. There is no new evidence in the domestic sample due to the delisting of the comparators. We agree that the evidence from the 5 majority regulated firms points to an equity beta well below 0.6. However, this sample is increasingly out of date, with an average date of delisting across the 5 firms of July 2016. The evidence from this sample has not changed since 2022, when it was not considered sufficient to change the point estimate.

²⁸ AER, [Rate of Return Instrument: Explanatory Statement](#), February 2023, p. 172.

3. Although the AER has stated concerns regarding the comparability of the international sample, we would note that the AER has undertaken considerable work to refine and develop the sample since 2022. The AER's data shows that the beta of the refined sample (0.68) is lower than its previous sample (0.73).
4. Given the domestic sample is more out of date now, and the AER has done the further work on the international sample, we consider that the appropriate weight to be applied to the international evidence (whatever it may be) must have increased since the 2022 review. This evolution of weights between domestic and international evidence does not point to a reduction from 0.6.
5. Finally, the draft decision refers to the short-term evidence on APA Group and the international sample. Given that APA Group's activities are primarily non-regulated and that the short-term international betas are (as far as we can tell) distorted by COVID-19, combined with the AER's stated approach of favouring the long-term data, we do not consider that the AER should attach material weight to these trends.

In summary, if we compare the situation in 2022 with the draft decision: i) the primary source of evidence, the long-term samples, are effectively the same; ii) in both cases, there is some unclear short-term evidence. However, in 2022, the AER concluded that the evidence for a higher or lower value is not sufficiently strong, whereas in the draft decision the evidence is considered sufficient for a reduction to 0.55. Add to this our view that the weighting should increasingly favour the international sample, then we feel that there is a concern regarding the consistency of the reasoning across the two decisions.

To be clear, we have not formed a view that an equity beta of 0.55 is inappropriate and it is not our role to provide an alternative estimate. We also note that the proposed figure may be appropriate, even if the evidence does not support a change, if the evidence does now indicate that the previous level was too high. However, the AER has not made this case.

We would recommend that the AER reviews the reasoning for this reduction. We also consider that the other recommendations we have made in this section would provide the AER with a richer evidence base in order to make its reasoned assessment. We emphasise that clarity and consistency in reasoning, and in the application of regulatory judgement, is vital to satisfying the AER's principles in the decision-making framework.

We also recommend that the AER incorporates evidence from cross-checks into its assessment of the point estimate. In addition to the analysis in section 14 of the Draft 2026 ES, we consider the following evidence could be relevant:

- A comparison of other regulators' decisions on equity beta (adjusted for gearing).
- A comparison of other regulators' decision on the overall risk premium on equity (i.e. equity beta multiplied by MRP). This is useful as a cross-check on both parameters.
- Another cross-check on the beta and MRP is to evaluate trends in debt spreads for Australian NSPs. It is not straightforward to relate the level of debt spread to a level of equity risk premium, but the trend can provide relevant evidence. For a given gearing level, if the debt spread is falling, it is more likely that the equity risk premium is falling.

In our view, none of these cross-checks, nor the RAB multiple or financeability assessment checks, can be definitive in deciding a point estimate. However, we do consider that they assist in providing a reasoned basis for choosing a point estimate from a range.

3.5 Other considerations

In Section 6.3 of the draft decision, the AER addresses some 'other considerations' for the estimation or implementation of the equity. Overall, we consider that the positions set out in the draft decision on these matters are reasonable and well-evidenced.

We make a few brief observations on these considerations.

- **Conceptual analysis and a priori reasoning:** We agree that conceptual analysis and a priori reasoning would indicate that the equity beta of the NSPs, at 60% gearing, should be less than 1. We also agree that this, beyond that observation, does not assist in locating the point estimate within the empirical range identified by stakeholders and the AER.
- **Addressing financial outperformance:** We agree that persistent financial outperformance should be addressed at source and not through a reduction in RORI parameters.
- **Single beta for gas and electricity:** We consider that the AER's position, to apply a single beta for both sectors, is reasonable. In relation to potentially higher stranding risk in gas our understanding of the AER's position is that it will mitigate this risk through other instruments, e.g. an accelerated depreciation profile.
- **Greenfield projects:** The position in the draft decision to apply the same equity beta to greenfield projects appears reasonable and evidenced.
- **Non-systematic risks:** We consider that the draft decision not to adopt Professor Johnstone's specific recommendation with regard to the estimation non-systematic risks is reasonable. We agree that such an approach would be hard to implement and is not clearly superior to existing methods. At the same time, we do agree with Professor Johnstone's underlying point that all risks (systematic and non-systematic) can affect required investor returns. Finally, we agree that these wider risks should be identified and managed through the design of wider regulatory mechanisms, rather than through the RORI process.

4 Independent Panel views on AER proposed change to market risk premium

The market risk premium (MRP) compensates investors for the systematic (non-diversifiable) risk of investing in the market. It is measured by comparing the expected return on a market portfolio with the return on the risk-free rate.

The product of the MRP and the estimated equity beta determines the equity risk premium (ERP). The sum of the ERP and the estimated risk-free rate determines the allowed return on equity, which is a fundamental component of the RORI.

In previous Explanatory Statements, the AER has outlined its methodology, which is to consider a range of indicators of MRP, but to rely primarily on the arithmetic average of historical excess returns (HER), calculated over the period since the introduction of tax imputation (1988). In the Draft 2026 ES, the AER notes that its 'methodological approach is settled'.²⁹

The Draft 2026 ES compares HER estimates using both different time periods and arithmetic and geometric averages (refer Table 4.1).

Table 4.1: Historical excess returns (10-year term as at December 2025)

Sampling period	Arithmetic average	Geometric average	Weighted average
1883–2025	6.4%	5.1%	6.3%
1937–2025	6.1%	4.4%	6.0%
1958–2025	6.6%	4.5%	6.3%
1980–2025	6.6%	4.7%	6.2%
1988–2025	6.3%	5.0%	6.0%

Source: Draft 2026 ES, Table 10.1.

4.1 Weighted average HER

In the 2022 ES, the AER introduced the concept of a weighted average of the arithmetic and geometric means. The methodology is based on Indro/Lee³⁰ and involves:

$HERWA = X * HERA + (1-X) * HERG$, where

- HERWA is the weighted average HER

²⁹ AER, [Draft 2026 Rate of Return Instrument: Explanatory Statement](#), May 2026, p. 4.

³⁰ Indro, Daniel C., and Wayne Y. Lee. 'Biases in arithmetic and geometric averages as estimates of long-run expected returns and risk premia.' *Financial Management*, 1997, pp. 81–90.

- HERA is the arithmetic average for the investment horizon
- HERG is the geometric average for the investment horizon
- X is determined by the ratio of the estimation period: sample period.

Given that the sample period is long relative to the estimation period, the weight of the arithmetic mean dominates. In the case of AER's preferred sample period (1988–2025), the arithmetic mean attracts a weight of 75%.

The results shown in the final column of Table 4.1 illustrate the point that the longer the sample period, the closer the weighted average is to the arithmetic.

4.2 Implications

The estimates for the various HER-based estimates and other parameters both in relation to the Draft 2026 ES and previous Explanatory Statements, are summarised in Table 4.2.

In the Panel's view, this is an important set of data, not just in relation to the 2026 RORI, but because it puts the certainty of the AER's decisions into a longer-term context.

Table 4.2: Market risk premium: decisions and relevant indicators

	Final 2018		Draft 2022		Final 2022		Draft 2026	
	Rate	Period	Rate	Period	Rate	Period	Rate	Period
Decision	6.1%	–	6.5%	–	6.2%	–	6.1%	–
HER								
Arithmetic	6.1%	1988–17	6.5%	1988–21	6.2%	1988–22	6.3%	1988–25
Geometric	4.6%	1988–17	5.1%	1988–21	4.9%	1988–22	5.0%	1988–25
Weighted average	n.a.	n.a.	6.1%	1988–21	5.9%	1988–22	6.0%	1988–25
Survey								
Mean	6.6%	2018	6.4%	2021	6.3%	2022	6.3%	2025
Median	7.1%	2018	6.3%	2021	6.0%	2022	6.0%	2025
DGM								
2 stage (12-month average)	7.5%	Sep 2018	–	–	5.8%	Dec 2022	4.0%	Feb 2026
3 stage (12-month average)	7.3%	Sep 2018	6.1%	2021	5.3%	Dec 2022	4.3%	Feb 2026
VIX		–		–	Below long-term average and		Below long-term average and	

	Final 2018		Draft 2022		Final 2022		Draft 2026	
	Rate	Period	Rate	Period	Rate	Period	Rate	Period
					around the same level as in 2018		around the same level as in 2022	
Credit spreads		–		–	State government credit spreads (3 years) increased in recent months and above 2018 levels, but around pre-GFC levels and significantly lower than in 2013.		State government credit spreads (3 years) low relative to historical averages, but similar to 2022	
Dividend yield		–		–	Have not changed significantly since 2018 and are slightly higher than long-term average		Below long-term averages and 2022 levels	

Source: 2018 ES, Draft 2022 ES, 2022 ES, Draft 2026 ES

The table illustrates the consistency of methodology in the 2018 and 2022 outcomes, in terms of:

- the adopted MRP estimate is in all cases equivalent to the arithmetic mean
- changes in the adopted MRP are consistent with changes in the other variables.

In the Draft 2026 ES, the AER has proposed an estimate for MRP of 6.1%, which is lower than the estimate used in 2022 (6.2%), despite the fact that:

- The arithmetic average is higher, based on the updated estimation period.
- All HER estimates over the preferred (post 1988) sample period increased.
- HER estimates over all sample periods either increased or remained unchanged; none declined.
- The survey data (mean and median) were unchanged.
- VIX and credit spreads were low relative to long-term averages, but similar to 2022 (i.e. not indicative of change).

On the other hand:

- The DGM results were substantially lower.
- The dividend yield data were below both long-term levels and the 2022 level.

Taken together, the application of the 2022 methodology and the updated data do not make a persuasive case for a reduction in the MRP.

In making this observation, the Panel has not formed the view that a value of 6.1% for the MRP would be inappropriate.

But it would require a different and more expansive rationale, presumably relying on one or more of greater reliance on the weighted average HER, the DGM (which would be problematic without more research on the relationship between the DGM and MRP) or the (lower weight) dividend yield evidence.

5 Independent Panel views on other AER proposed changes

5.1 Trailing average approach to estimating return on debt

The approach to the return on debt has changed in recent years from an on-the-day approach to a simple trailing average. In the 2022 Explanatory Statements, the AER introduced the possibility of a weighted-average approach. The weighted average has advantages over the simple average in circumstances where interest rates and investment patterns are variable over time. In its review in 2022, the Independent Panel recommended that the AER look further at the possible methodologies, should the circumstances arise where the AER might see merit in moving in the future. The AER has undertaken that work and, in the process, has sought and obtained substantial input from others.

The Draft 2026 ES explores the issue in some detail and discusses not only methodology, but also the costs and benefits of a potential change to a weighted-average approach. The Independent Panel regards the AER's reasoning was sound and supported the draft decision which is to retain the simple trailing average approach.

In particular, AER concluded that 'taken together [the] evidence suggests that while a weighted trailing average approach may address certain limitations of the simple trailing average framework, on balance, there is not a strong case for changing the methodology from a simple trailing average approach at this time'.³¹

The Panel makes the following additional points:

1. We agree with AER's position that it remains open to revisit the question should circumstances change and more NSPs become affected.
2. If this were to occur, the Panel would strongly favour a universal change, in preference to a targeted mechanism to apply only to (sufficiently) affected NSPs. As was broadly accepted by stakeholders, the latter approach would be arbitrary, complex and could create undesirable opportunities for gaming.

The Draft 2026 ES makes a number of references to the fact that a move towards a weighted trailing average approach would result in a higher estimate for the return on debt and therefore increase the costs for consumers.³²

The general implication (or at least possible interpretation) is that this outcome is a reason to retain the current approach, but the reference on page 61 is more explicit, namely '[this] is a key consideration in our draft decision to retain the simple trailing average'.³³

³¹ AER, [Draft 2026 Rate of Return Instrument: Explanatory Statement](#), May 2026, p. 3.

³² AER, [Draft 2026 Rate of Return Instrument: Explanatory Statement](#), May 2026, pages 3,52,61,73.

³³ AER, [Draft 2026 Rate of Return Instrument: Explanatory Statement](#), May 2026, p. 61.

The Panel's view is that, while cost to consumers is important, the AER should be clear that its decision is based primarily on the merits of the argument about methodology. This would help reassure all stakeholders.

5.2 Reintroduction of the Reserve Bank of Australia yield curves using alternative swap data

AER's settled position in relation to the source of data used to determine the return on debt was complicated in November 2023 when the Reserve Bank of Australia (RBA) announced its intention to cease publication of its spread to Bank Bill series. The 2022 RORI had allowed for such a contingency and in that sense there was limited impact.

The AER's draft decision is to:

- Reintroduce the RBA yield curve data alongside the existing data from Bloomberg and Refinitiv/LSEG
- Utilise a spread to Commonwealth Government securities (CGS) approach to adjust for maturity mismatches.

The Panel agrees with the AER that this has the benefit of maintaining multiple sources of data.

The Panel also agrees with the AER that using the spread-to-CGS approach for extrapolation has the benefits of being simple, transparent and utilising publicly available data.

5.3 Imputation tax credits

In making the Draft 2026 RORI, the AER has retained the approach used in the 2022 RORI. The estimate of the key parameter (gamma) has increased marginally from 0.57 to 0.58.

By way of brief background, the AER methodology involves a post-tax framework whereby the rate of return is determined after company tax, but before personal tax. The tax component is a separate part of the AER's building block framework and the imputation tax credit is introduced as part of the tax component.

Specifically, the estimated company tax component (ETC) is calculated as

$$\text{ETC} = \text{ETI} \times \text{TR} \times (1 - \text{gamma}),$$

- where ETI is the estimated taxable income, TR is the corporate tax rate and gamma is the value of imputation tax credits.

In essence, gamma is used to modify the allowance for ETC in the building block model. Without a gamma adjustment, the ETC would overstate the tax allowance because it would not take account of the extent to which some investors receive a benefit from imputation. The role of gamma is to estimate the extent of that benefit.

The AER's methodology involves estimating gamma as the product of two factors, the distribution rate (the proportion of an entity's imputation credits which is distributed to investors) and the utilisation rate (the extent to which distributed imputation credits benefit investors by reducing tax payable or generating a refund).

In the case of the Draft 2026 RORI, a gamma of 0.58 is a result of a distribution rate of 0.90 and a utilisation rate of 0.64.

The methodology is both transparent and widely accepted as meeting the objective of the exercise.

Distribution rate

The distribution rate is estimated by reference to large listed Australian corporations. Specifically, the distribution rate used by the AER is the calculated proportion of imputation distributions to company tax payments for the top 50 companies on the Australian Securities Exchange (ASX). The same approach was applied in the 2018 and 2022 RORIs, based on data from the period 2000 to 2021 and resulting in an estimate of 0.888 and 0.879, respectively. The estimate has been updated using more recent data (to 2025), resulting in a very similar outcome of 0.899 (refer to Table 5.1).

Table 5.1: Distribution rates for ASX top 50

ASX Top 50	2018 RORI	2022 RORI	2026 RORI
	2000–17	2000–21	2000–25
Imputation distribution (\$m)	235,970	346,008	481,646
Tax payments (\$m)	265,770	393,786	535,927
Distribution rate	0.888	0.879	0.899

Source: AER 2026 RORI, Table 13.1.

The reasons for the dip in 2022 and the increase in 2026 are better illustrated in Table 5.2, which indicates:

- a modest decline in the distribution rate in the period 2018–2021 compared to previous years
- solid growth in imputation distributions in the period 2022–2025
- an increase in the distribution rate in the period 2022–2025, compared to both the previous 4 years and the longer-term results.

Table 5.2: Distribution rates for ASX top 50: 2018–21 and 2022–25

ASX Top 50	Sub-periods	
	2018–2021	2022–2025
Imputation distribution (\$m)	110,038	135,638
Tax payments (\$m)	128,016	142,141
Distribution rate	0.860	0.954

Source: Derived from Table 5.1.

Notwithstanding this recently observed lift in the distribution rate, the Panel regards the long-term estimate used by the AER (0.8987) as appropriate for determining gamma for the draft 2026 RORI.

Both the methodology and the apparent stability of the outcome suggest that the AER approach has merit.

Utilisation rate

The AER's preferred approach is to estimate the weighted average proportion of investors in the Australian equity market who are 'domestic' and therefore eligible to apply any imputation credits received to reduce tax payments or generate offsetting refunds. The corollary is that foreign investors are assumed to have a utilisation rate of zero. This was the same as the approach used in the 2018 and 2022 RORIs.

The AER uses national accounts data from the Australian Bureau of Statistics (ABS) for this purpose. The estimates generated are quite stable based on 10-year averages (refer Table 13.2) and even on an annual basis the outcomes are reasonably well-behaved (in the range 62-70% over the period 2000 to 2025). Thus, the AER's choice of a point estimate of 0.6417 based on the ABS data is defensible.

The Panel recommends that the AER should examine the reasons for the observed changes in the distribution rate used to estimate the value to investors of imputation tax credits (gamma).

6 Independent Panel views on other matters

6.1 AER rationale for retaining past approaches

The Independent Panel agrees in principle with the AER's rationale for retaining past approaches to other RORI-related parameters. The AER proposes no change and adoption of its 2022 position on those matters where it does not identify any compelling new evidence for change or arguments for change in stakeholders' submissions.³⁴ This approach in general seems reasonable given the amount of analysis that the AER and stakeholders have conducted in reviews prior to and including 2022.

There are a number of benefits from retaining past approaches in this way, compared to 'zero basing' every review and looking in detail at all issues:

- the RORI process is far less burdensome on stakeholders and the AER itself.
- the RORI system provides greater regulatory consistency.
- focus can be applied by all stakeholders and the AER on areas where attention is needed, particularly where these have a material impact on RORI.

There is a potential risk in this approach that an issue is considered 'settled' inappropriately. However, the AER's approach to the RORI reduces this risk by including:

- multiple stages in its RORI review, involving papers, forums and significant stakeholder involvement and submissions.
- stakeholders having a number of opportunities to raise issues, including the chance to comment on the AER's draft RORI.
- the presence of groups designed to challenge the AER's approach, including the panel of three Eligible Experts, the Consumer Reference Group (CRG) and the Independent Panel.

6.2 The term of the risk-free rate

While the Independent Panel supports the general principle that the AER has adopted in continuing with its 2022 approach, we believe there is one issue the AER should keep under review based on the AER's reasoning in 2022.

In the 2022 RORI review, the AER's draft decision was that the term of the risk-free rate (in the calculation of the cost of equity) should match the regulatory period i.e., the time between resets of the allowed revenue, being either 4 years or 5 years.

The 2022 Independent Panel concluded:

'The AER have responded comprehensively to the recommendation of the 2018 Independent Panel regarding the need for a full consideration of the issues regarding the equity term. The

³⁴ AER, [Draft 2026 Rate of Return Instrument: Explanatory Statement](#), May 2026, p. 4.

ES fully details the evidence and reasoning supporting the draft RORI's revision of the equity term. The case some stakeholders assert against the revision is outlined and the reasoning for rejecting those submissions is spelt out.'

The AER reversed its draft decision in its final 2022 RORI decision (which was issued in February 2023).

Since stakeholders have not had an Independent Panel analysis regarding the final 2022 decision, this report comments on the reasoning in the following extract from final 2022 ES section 6.3.1.4:³⁵

'In coming to our draft decision to match the equity term to the length of the regulatory control period, our key consideration was the relationship between the reset frequency of the return on equity allowance and the benchmark equity term. We made the following observations:³⁶

- Our task is to set a revenue allowance for the regulatory period for an efficient benchmark. At the start of each regulatory period, the revenue allowance (and therefore prices and cashflows) is reset using updated market data.
- Our practice of resetting the allowed rate of return on equity at each regulatory determination affects the profile and riskiness of regulatory cash flows. In turn, this impacts the expected return investors require.
- Matching the term of the allowed return on equity to the length of the regulatory period better aligns our regulatory allowance with the efficient costs of providing regulated services and risks borne by the investors.

We also considered that matching the equity term to the length of the regulatory control period would both better achieve the NPV=0 condition and bring consistency to our approach. The latter is because we also relied on the NPV=0 condition in our decision on the term of the expected inflation.

Further, we considered the argument in favour of a 10-year term based on a standard commercial practice put to us by investor and network stakeholders.³⁷ The argument runs as follows. The NPV=0 principle requires that the regulatory allowance should match the return that is required by investors. This criterion is centred around the returns that real-world investors might reasonably require on the capital they invest. Investments in regulated infrastructure are long term and the standard practice of valuation professionals and market practitioners is to use a 10-year risk-free rate as an input to the CAPM when valuing such investment projects. Therefore, the return real-world investors require is based on a 10-year term.'

³⁵ AER, [Rate of Return Instrument: Explanatory Statement](#), February 2023, pp.113–114.

³⁶ AER, [Draft Rate of Return Instrument: Explanatory Statement](#), June 2022, pp. 93–94.

³⁷ AER, [Draft Rate of Return Instrument: Explanatory Statement](#), June 2022, pp. 105–110.

However, the return on a regulated investment has the specific characteristic that the regulated entity's revenue is constrained to an allowable level that is reset every 4 or 5 years. The RORI process determines the return that the regulated entity is allowed to earn and thus contributes to whether NPV=0 is achieved. Since the revenue path is determined by the resets, which have no parallel for an unregulated entity, it follows that 'standard commercial practice' is less relevant than an understanding of how the investment term for NSPs relates to the reset period.

The fundamental issue is one that the 2022 Independent Panel explained as follows:

'It is also true that investors will likely consider there is a risk that the reset will not in fact replicate the cost of capital that will be faced over future regulatory periods. It is not however obvious that a 10-year term for the cost of equity addresses this risk.'

Table 6.1 in the final 2022 ES indicates that averaged over the period 2010–2022, a 10-year term rather than a 5-year term increases the rate of return by 25 basis points.

The AER concluded its explanation for the reversal of its draft decision as follows:

'We recognise the importance of stability and predictability of the regulatory framework for ensuring investor and consumer confidence and promoting efficient investment.³⁸ For the 2022 Instrument we added the following 2 assessment criteria closely related to the CRG's 'high bar for change' criterion:³⁹

- the materiality of any proposed change
- the longevity or sustainability of new arrangements.

We noted that these additional criteria ensure that change is not to be adopted lightly in the absence of compelling evidence. Further, we noted that any case for change must demonstrate there to be a clear improvement or a benefit to be realised.⁴⁰

Applying these criteria to our decision about the equity term, we conclude that the bar for change has not been met at this time. Therefore, our final decision is to maintain our current approach of using the 10-year term of return on equity. While for this decision we are maintaining our current approach, we are open to reconsidering the issue in future.'

Thus, the reversal of the draft decision reflected the priority accorded to assuring investors in the highly uncertain economic conditions of 2022 (which also resulted in the decision not to change the beta estimate in the 2022 review).

For the period 2010 to 2022, the choice of a 10-year rather than a 5-year term increased the average rate of return by an amount equivalent to the effect of a 0.04 higher beta estimate –

³⁸ AER, [Draft Rate of Return Instrument: Explanatory Statement](#), June 2022, p. 31.

³⁹ AER, [Rate of return – Final omnibus paper](#), December 2021, pp. 11–14.

⁴⁰ AER, [Rate of return – Overall rate of return draft working paper](#), July 2021, p. 22.

e.g. 0.59 rather than the proposed 0.55 level, or a market risk premium of 6.5% rather than the proposed 6.1%.⁴¹ Therefore, it is appropriate to keep the choice of the term under review.

⁴¹ On page 113 of the final 2022 RORI Review Explanatory Statement, the AER reported that the effect of a 10-year rather than 5-year term for the risk-free rate over the period 2010 to 2022 averages 25 basis points. An increase in beta of 0.04 multiplied by a market risk premium of 6.1% is 24.4 points and an increase of 40 basis points in the market risk premium multiplied by a beta of 0.55 is 22 basis points.

7 Independent Panel's view on whether the draft RORI is 'supported by evidence and reasons'

This section answers the first of the AER's questions to the Independent Panel. In it, we will address the effectiveness of the AER's review process and comment on whether the AER's decisions are supported by stated reasons and the material available to the regulator. We will also give our views of the accessibility of the AER's material and reports and the AER's level of transparency throughout the RORI process. We will comment on the level of accuracy and consistency that the AER has demonstrated. Throughout this section we will highlight where we believe the AER needs to do more in any of these respects to improve the final RORI decision in 2026 or its approach in future.

Overall, the Independent Panel believes that if we take account of material presented for RORI reviews in 2022 and 2018, the AER has provided extensive reasoning and explanations for most of its decisions in the 2026 draft RORI. Since many of the parameters have been left unchanged by the AER, the 2026 draft also provides a high degree of consistency by relying heavily on this previous work.

However, as we highlight in Sections 3 and 4 earlier in this report, the Panel does have significant concerns about the reasoning and explanations, transparency and consistency of the AER's draft decisions on beta and MRP.

7.1 Evidence and reasons

The Panel notes that the AER, in its 2026 draft RORI, is building on significant work done in previous RORIs, particularly 2018 and 2022. In that sense, we as a Panel are not assessing the answer to this question from the AER with reference only to the 2026 review in isolation. This is important since the amount of evidence and reasoning from the past RORI processes since 2018 has been extensive and in turn provides much of the basis for draft decisions in 2026.

As we said in Section 6 above, we accept the AER's rationale in most cases for using its 2022 position where nothing seems to have changed or there have been no new arguments from stakeholders. Looking at material from past RORI reviews, particularly those in 2018 and 2022, indicates that the AER has provided extensive and thorough evidence and reasoning for its draft decisions on most unchanged matters. This has also included significant input from stakeholders and experts on these topics. The reasoning and explanations on MRP and beta in the Draft 2026 ES are in the Panel's view much less clear. On beta, the Panel believes that the reasoning for the AER's draft decision is inadequate and not fully explained. In the case of the MRP, we believe that the AER has not made a persuasive case for reduction.

7.2 Accessibility, transparency, accuracy and consistency

Overall, the Panel believes that the AER in its reviews of 2018, 2022 and 2026 has produced clear documents and presents its decisions and documents in a logical and transparent way. The AER's documents, although lengthy and often technical in nature, are reasonably accessible to most audiences. The actual draft Rate of Return Instrument document itself is necessarily an exception due to complexity of numerous algebraic formulae used to calculate the rate of return.⁴² The AER's Explanatory Statements over recent reviews address this complexity well by explaining clearly how the parameters of the draft decision work and how and why the AER has arrived at its decisions. The Draft 2026 ES, though still lengthy at around 150 pages, is much shorter than previous ones. As with previous reviews, the Draft 2026 ES is logically laid out and is straightforward to understand for anyone who is reasonably familiar with regulatory finance and its terminology.

We note efforts made by the AER in 2022 to provide a non-technical summary for consumers and other non-specialist audiences with its final RORI decisions,⁴³ as recommended by the Independent Panel in 2022. We believe this is useful to address anyone with an interest in likely bill trends and the adequacy of future investment, and how the AER has sought to strike the right balance between the two.

The regulatory system needs high levels of trust to retain confidence of stakeholders and ultimately legitimacy. High levels of continuing transparency are important to build and retain this trust. From what the Panel can see, we believe that the AER has demonstrated a high level of transparency in its process. Stakeholders have been provided with good documentation and have had a number of opportunities to engage the AER and provide their own input. This seems to have been true in 2018, 2022 and generally in 2026. We believe that the AER should be more transparent in how it has arrived at its draft decisions on MRP and beta. This is important to help maintain the trust of stakeholders in its 2026 decisions but also to help reduce uncertainty for the future.

The AER also typically demonstrates high levels of accuracy in its presentation of data that underpins most of its decisions. This also builds confidence.

One of the features of the AER's RORI approach has been the increasing level of consistency in reviews from 2018 to 2026. The focus in 2026 on a small number of issues for focus has reinforced this characteristic. Consistency of approach where this is appropriate is valued by investors, companies and customers, and can give them greater certainty and confidence about the future. This reinforces the need for the AER to explain apparent inconsistency in its draft 2026 decisions on beta compared to 2022.

The Panel believes that, overall, the draft RORI in 2026 is supported by evidence and reasoning, transparently and consistently applied. The AER's draft decisions on beta and MRP fall short of that standard. We believe that a clearer and more transparent explanation of reasoning and how regulatory judgement has been applied on these parameters is vital to reassure both consumer and investor/industry stakeholders.

⁴² AER, [Draft 2026 Rate of Return Instrument](#), 29 May 2026.

⁴³ AER, [Rate of return: Overview for consumers](#), February 2023.

8 Independent Panel's view on whether the draft RORI is likely to contribute to the achievement of the National Electricity Objective and National Gas Objective

In this section, the Independent Panel addresses the second question the AER has asked us.

The NEO and NGO, which are contained in Appendix 1, aim to promote efficient energy services for the long-term interest of consumers in terms of price, quality, safety, reliability and security supply and the achievement of targets for reducing Australia's greenhouse gas emissions. The RORI must contribute to the achievement of these legislative objectives.

8.1 The AER's position on the 2026 draft RORI

In the Draft 2026 ES, the AER says it is satisfied that this requirement is met.⁴⁴

The AER points at the detail it provided in its 2022 RORI to explain how it contributed to the energy objectives. Most decisions in the draft 2026 RORI remain unchanged, although the AER points out the reductions in the MRP and equity beta parameters. The AER suggests that the reasoning behind its 2022 assertion that the RORI would contribute to the energy objectives still stands⁴⁵ and that its reasoning on the changed RORI parameters is set out in its Draft 2026 ES.⁴⁶

In 2022, the Independent Panel said that there was 'nothing contained in the draft RORI and the AER's own analysis that would suggest it is inconsistent with achievement of the NGO and NEO'.⁴⁷ However, the Panel did make a number of recommendations. In particular, it said in relation to the NEO and NGO, that the Draft 2022 ES did not demonstrate the efficacy of RORI decisions and did not conclude as to whether the regulatory system had delivered appropriate levels of investment and hence had been effective in achieving the energy objectives.⁴⁸

The AER has gone some way to address the 2022 Panel's questions about the efficacy of the RORI. It has highlighted in its cross-check section that RAB multiples identified from recent transactions involving stakes in Endeavour Energy and Transgrid, at around 1.57 to

⁴⁴ AER, [Draft 2026 Rate of Return Instrument: Explanatory Statement](#), May 2026, p. 10.

⁴⁵ AER, [Draft 2026 Rate of Return Instrument: Explanatory Statement](#), May 2026, p. 11.

⁴⁶ AER, [Draft 2026 Rate of Return Instrument: Explanatory Statement](#), May 2026, p. 13.

⁴⁷ Independent Panel, [Independent Panel Report: AER Draft Rate of Return Instrument](#), July 2022, pp. 24.

⁴⁸ Independent Panel, [Independent Panel Report: AER Draft Rate of Return Instrument](#), July 2022, p. 25.

1.58, suggest that returns are attractive to investors.⁴⁹ The AER says also financeability has not emerged as an issue in this RORI.⁵⁰

The AER also shows that its RORI decisions are resilient to a number of broader economic scenarios, including changes to inflation and interest rates and economic growth.⁵¹

The AER says that it believes that historical profitability, investment trends, other regulators' rate of return and analysts' discount rates should not be used to inform the overall rate of return.⁵²

The AER asserts that the 2022 RORI has 'performed well and has supported the long-term interest of consumers'.⁵³

8.2 The 2026 Independent Panel view is that more work is needed

As we point out in Section 6, we largely accept the AER's approach to building on the 2022 RORI as the basis for the 2026 draft decisions. With many of the RORI parameters unchanged, we believe that past consideration of the RORI's contribution to national energy objectives in 2022 (and indeed 2018) is not unreasonable. However, we believe that the AER needs to do more in two respects to confirm that the 2026 RORI will contribute to the achievement of the NEO and NGO.

1. Demonstrate that consumers are not overpaying.

The AER shows in the ES that the 2022 RORI has been effective in providing sufficient investor confidence so as not to constrain investment. It is less successful however in showing consumers are not overpaying and will not overpay in the period of the 2026 RORI. Since price is a stated component in the national energy objectives, this would seem to be a significant gap. The AER itself emphasises the importance of achieving an 'unbiased' rate of return that neither disadvantages investors nor consumers.⁵⁴

The AER says it places no weight on historical profitability as a cross-check on the forward-looking overall rate of return. However, since the AER continues to leave many RORI parameters unchanged from 2022, more examination of the efficacy of the 2022 RORI might help reassure consumers and consumer advocates. We note that the CRG raised concerns about this issue.

In its commentary on the regulated businesses' historic profitability, the AER illustrates the overall scale of actual versus allowed returns and comments on the reasons for this outperformance.⁵⁵ But it does not for example break down the components of the

⁴⁹ AER, [Draft 2026 Rate of Return Instrument: Explanatory Statement](#), May 2026, p. 128.

⁵⁰ AER, [Draft 2026 Rate of Return Instrument: Explanatory Statement](#), May 2026, p. 130.

⁵¹ AER, [Draft 2026 Rate of Return Instrument: Explanatory Statement](#), May 2026, pp. 134–139.

⁵² AER, [Draft 2026 Rate of Return Instrument: Explanatory Statement](#), May 2026, p. 126.

⁵³ AER, [Draft 2026 Rate of Return Instrument: Explanatory Statement](#), May 2026, p. 15.

⁵⁴ AER, [Draft 2026 Rate of Return Instrument: Explanatory Statement](#), May 2026, p. 11.

⁵⁵ AER, [Draft 2026 Rate of Return Instrument: Explanatory Statement](#), May 2026, p. 133.

outperformance as it does in its performance reports for the sector.⁵⁶ This could help illustrate the scale of the outperformance drivers.

The AER could also ‘reframe’ evidence from its cross-check analysis to demonstrate that its decisions in the round will strike the right balance between customers not overpaying and at the same time enabling required investment. Any further work the AER could do to demonstrate that consumers are not overpaying due to RORI would be helpful to address both consumer concerns and this aspect of the NEO and NGO.

2. More clearly demonstrate that changes in beta and MRP are appropriate.

As we have pointed out in Sections 3 and 4 earlier in this report, we believe the AER needs to do more to demonstrate its reasoning behind changing beta and the MRP. The AER points out that, together, these changes would reduce consumers bills by A\$1.1 billion, all other things being equal.⁵⁷ As we have explained earlier, we have not formed the view that the AER’s draft decisions on beta and MRP are inappropriate, but we do believe that the regulator has not explained its reasoning sufficiently to make its case. Given the materiality of these issues on the overall RORI, it is important that this is done for the final RORI decisions.

⁵⁶ AER, [Electricity and gas networks performance report 2025](#), December 2025, pp. 78–79.

⁵⁷ AER, [Draft 2026 Rate of Return Instrument: Explanatory Statement](#), May 2026, p. 5.

A National Energy Objectives

National Electricity Objective

The objective of this Law is to promote 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; and
- c) the achievement of targets set by a participating jurisdiction—
 - i) for reducing Australia's greenhouse gas emissions; or
 - ii) that are likely to contribute to reducing Australia's greenhouse gas emissions.

National Gas Objective

The objective of this Law is to promote efficient investment in, and efficient operation and use of, covered gas services for the long term interests of consumers of covered gas with respect to—

- a) price, quality, safety, reliability and security of supply of covered gas; and
- b) the achievement of targets set by a participating jurisdiction—
 - i) for reducing Australia's greenhouse gas emissions; or
 - ii) that are likely to contribute to reducing Australia's greenhouse gas emissions.

B Members of the Independent Panel

Pat Duignan

Pat Duignan has wide executive and advisory experience in economic regulation, corporate finance, economic policy decision making and investment management governance.

His experience includes the roles of Finance and Economics Expert Lay Member of the New Zealand High Court under the Commerce Act 1986, Commissioner at the New Zealand Commerce Commission, General Manager Finance for the Telecommunications Corporation of New Zealand, Director in the Investment Banking Division of CS First Boston (NZ), Treasurer of the New Zealand Debt Management Office, Director of Policy Coordination and Development at the New Zealand Treasury, First Secretary Economic at the New Zealand London High Commission and long-time membership of the New Zealand Accident Compensation Corporation Board Investment Committee.

Pat served as a Commissioner at the New Zealand Commerce Commission from 2010 to 2015. The Commission regulates energy and telecommunication networks and airports, and implements competition and consumer protection regulation.

Pat was an expert member of the Accident Compensation Corporation (ACC) Investment Committee for 14 years. The Committee is responsible for oversight of the management of the NZ\$35B portfolio that finances the future costs of past accident claims.

Prior to 2001, Pat managed the corporate finance, treasury and taxation areas as General Manager Finance for Telecom Corporation of New Zealand Ltd ("Telecom").

Earlier, Pat was responsible for management of New Zealand's public debt (at that time totalling NZ\$46B) as Head of the New Zealand Debt Management Office ("NZDMO"). He also has experience as an Investment Banker (with Credit Suisse First Boston NZ) and as Director of Policy Coordination and Development for the Treasury.

Pat is a chartered member of the New Zealand Institute of Directors.

Geoff Frankish

Financial markets and public policy professional with over 40 years experience in private and public sectors. An extensive view of the financial world from a number of different vantage points. Experience in a range of industry sectors, including transport, energy, water and communications and embracing both competitive markets and regulated assets. This

involved working as a portfolio manager for two separate infrastructure funds, investing in both Australian and offshore assets. More recently, activities have focused on acting in a number of non-executive director roles.

Key Skills and Experience

- Financial Markets – extensive experience in Australian and global markets, both equity and debt.
- Corporate Relationships – high level interaction with boards and senior management of a wide range of corporates, both listed and unlisted. Hands-on involvement with corporate governance issues.
- Public Policy – detailed interaction with Governments and regulators in corporatisation, privatisation, pricing policy and economic regulation covering a range of industry sectors.
- Areas of expertise – Equity Research, Portfolio Management, Financial Modelling and Valuation, Negotiation, Asset Sales, Economic Forecasting and Analysis, Strategic Planning, Regulation Policy and Practice, Price Determination, Energy Policy, Corporate Governance, Debt Markets, Mentoring, Business Development

Tony Smith

Tony has 30 years senior experience of regulation in utilities, as a consumer advocate, regulator and as a company director. He recently retired as Chief Executive of the Consumer Council for Water (the statutory water consumer body in England and Wales), where he led the transformation of the water sector and regulation to improve its focus on customers and value for money and produce a 70% reduction in customer complaints. During the 14 years in this job, Tony advised governments and regulators in the UK and overseas on consumer issues and regulation and played a central part on behalf of customers in three regulatory price reviews using his knowledge of regulation to help regulatory authorities deliver credible results with high customer acceptance.

Before his role with the Consumer Council for Water, he was Director responsible for consumer issues at water regulator Ofwat, playing a full part in the 2004 price review and prior to that was heavily involved in regulation as a Director of a water utility in Scotland and with a UK electricity utility. In 2020 he was chosen for a prestigious UK Utility Industry Champion award for his “outstanding commitment and passion” and “having made a unique and positive impact on the utilities industry and those it serves.”

He now consults on the future of regulation and utility consumer issues with multiple clients in the UK, US and Asia. Tony’s early career was in strategy and marketing, implementing turnarounds in oil, aerospace, automotive and fast moving consumer goods businesses. He has a first class degree and an MBA.

Rob Francis

Rob has over 30 years of experience as a professional economist, specialising in regulation and competition issues. He has advised clients on the full range of issues in the regulation of natural monopolies. This includes: cost assessment and asset valuation; rate of return; incentive mechanisms; financial modelling and financeability; and tariff setting.

The issue of rate of return and cost of capital has been a core part of his work in the past 25 years. For many years he led the regulatory finance team at Frontier Economics Europe and advised regulators and regulated companies on rate of return across all of the utility sectors and in many countries.

In the 2000s he led the team advising the energy regulator in the Netherlands (then called DTe) on the methodology for estimating the cost of capital and setting the rate of return. In 2015 he acted as adviser to CRE, the energy regulator in France, on appropriate cost of capital for electricity and gas network sectors. In 2018 he was also part of the research team for an independent report to the UK Regulators Network on the appropriate methodology for estimating the cost of capital and setting rates of return for regulated industries.

Between 2005 and 2013 Rob was a Lecturer (part-time) at Imperial College Business School, London, responsible for the course, Finance of Regulated Industries, as part of the MSc in Finance. The course covered: asset valuation and depreciation, cost of capital, financeability and capital structure, and financial analysis in competition cases.

From 2009 to 2017, Rob was a Trustee of a Citizens Advice Bureau, representing consumers in north London. The CAB provided free impartial advice on all consumer issues (including utility payment and debt issues) and contributed to advocacy services to the national CAB organisation.

Abbreviations

Term	Definition
ABS	Australian Bureau of Statistics
AER	Australian Energy Regulator
APA	APA Group
ASX	Australian Securities Exchange
CAPM	Capital Asset Pricing Model
CEER	Council of European Energy Regulators
CGS	Commonwealth Government Securities
CRG	Consumer Reference Group
DGM	Dividend Growth Model
ECA	Energy Consumers Australia
ENA	Energy Networks Australia
ERP	Equity risk premium
ES	Rate of Return Instrument: Explanatory Statement
ETC	Estimated company tax component
GFC	Global financial crisis
HER	Historical excess returns
MRP	Market risk premium
NEO	National Electricity Objective
NGO	National Gas Objective
NPV	Net present value
NSP	Network service provider
RAB	Regulatory Asset Base
Regulatory period	Regulatory control period and/or access arrangement period
RBA	Reserve Bank of Australia
RORI	Rate of Return Instrument