4 May 2018

Mr Warwick Anderson
General Manager Networks (Finance and Reporting)
Australian Energy Regulator
GPO Box 3131
Canberra ACT 2601

Via email: rateofreturn@aer.gov.au

Dear Mr Anderson,

Submission on the Rate of Return Guideline (RORG) review from the Network Shareholder Group (NSG)

Key Messages

- **Investors value a stable and predictable regulatory framework – this improves access to low cost capital and supports lower prices to customers. Conversely, a lack of stability or predictability will lead to a higher required premium.**
- **The framework for incentive-based economic regulation is working as intended, specifically where investment is made by the private sector.**
- **We support the AER's incremental review – the current models and rules should be maintained. Changes should be limited to reflect material enduring changes in estimates or improvements in transparency, predictability and accuracy.**
- **Risk has increased since the last RORG review – a pattern of government intervention has increased regulatory and sovereign risk.**
- **Unless the increased risk is reflected in the ROR, continued and new investment to enable innovation in efficiency, technology and customer behavior will be at risk.**

We represent major investors in Australian energy Network Service Providers (**NSPs**) and funds that are the custodians of the retirement and general savings for many millions of individual Australians – Spark Infrastructure, Hastings Funds Management, AustralianSuper, IFM Investors, Macquarie Infrastructure and Real Assets and AMP Capital (the Network Shareholder Group (**NSG**)).

Collectively, we have provided more than $12 billion in capital to the following energy transmission and distribution network businesses: Ausgrid, Endeavour Energy and TransGrid in NSW; SAPN and ElectraNet in South Australia; and CitiPower and Powercor in Victoria.

We have come together as a group of private investors in the sector to provide the Australian Energy Regulator (**AER**) with a single submission on the review of the Rate of Return Guideline (**RORG**). As providers of long-term capital to support the provision of reliable energy network services to customers, we seek a regulatory regime that provides ongoing enduring confidence to invest efficiently through stability and transparency of process and outcomes. This ensures that risk remains consistent with investor expectations, reduces the cost of new capital to NSPs and delivers lower prices to customers.

The regulated rate of return (**ROR**) determines a significant proportion of revenue to be earned by the NSPs over the regulatory period so getting it right is critical to attracting sufficient capital for investment. We support the National Gas and Electricity Objectives and the Revenue and Pricing Principles (**RPP**) contained in the National Energy Laws. However, we are concerned about the focus on short term prices to customers without due consideration of the longer-term impacts on both service reliability and prices to customers in an energy landscape where significant disruption is occurring, and substantial investment will be required in the near future.

The opportunity to outperform the regulated ROR through an incentive-based regime is critical to both attracting investment and driving efficiencies. This is the intended effect of the regime. These incentives are designed to ensure that the behaviour of the NSP is consistent with delivering outcomes valued by customers. Any observed higher returns from listed network owners are evidence that individual NSPs are achieving efficiencies and customers are receiving greater value than expected, and not necessarily that the regulated ROR is too high. The separation of these two concepts is fundamental to the ongoing performance of the regime in delivering services to customers at the lowest cost.

The evidence does not support that the regulatory system is not operating properly. The regulatory system works in five-year cycles and the cycles post GFC have seen network charges reducing as expected. Private ownership of network businesses is working well under the current regulatory framework and has delivered greater security of supply, lower network costs and reliability for customers.[1]

The regulated ROR was reduced considerably after the 2013 RORG review and this has been accompanied by lower capital investment than forecast reducing RAB growth.[2] However, the risk to investors in NSPs has increased further since then. This is shown in the evidence on equity betas and market risk premium. It is also intuitive and observable.

The Australian Governments have increased the actual and perceived threat of intervention in the regulatory framework. This risk is exacerbated by the disregard for the governance arrangements in the NEL, National Electricity Rules (**NER**), National Gas Rules (**NGR**) and the Australian Energy Market Agreement (**AEMA**).[3] For example, the Commonwealth took unilateral action to abolish limited merits review (**LMR**) and the COAG Energy Council Senior Committee of Officials (**SCO**) is now consulting on a proposal which will remove the ROR rules in the NER, remove the power of the Australian Energy Market Commission (**AEMC**) to make those rules and reduce rights to judicial review, without transparency of policy intent and in advance of unanimous agreement.[4]

The Australian Infrastructure Investment Report 2017 released by Infrastructure Partnerships Australia (**IPA**) surveyed 26 market participants with more than $220 billion in infrastructure investments worldwide. The survey found that political and sovereign type risks were the greatest concern for investors with three quarters of participants agreeing that the energy sector is full of uncertainty, reflecting unilateral Federal interventions and ongoing state intervention[5] including abolition of rights to appeal:

> "*Outside of the wholesale energy market, investor confidence is also at risk, with proposals to reregulate retail markets being discussed in both NSW and Victoria. Moreover, even regulated networks businesses have seen political and sovereign type risks emerge, with the Federal Government unilaterally abolishing appropriate rights to appeal revenue determinations. Indeed, the abolition of the appeals mechanism was announced only a month after Endeavour Energy was leased.*[6]"

Investment certainty in Australia has declined and Australia's value proposition is being eroded.[7] If these risks are not reflected in the allowed ROR, there will be impacts on capital investment.

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[1] See Spark Infrastructure FY2017 Investor Presentation based on AER Annual Benchmarking Report Distribution and Transmission 2017 at https://www.sparkinfrastructure.com/investor-centre/reports-and-presentations.

[2] As per the data provided by the AER in an emailed spreadsheet to the customer reference group on 6 April 2018.

[3] These issues are outlined further in our submission to the COAG Energy Council SCO consultation process on the binding RORG legislation.

[4] COAG Energy Council Senior Committee of Officials, Bulletin, Consultation on binding rate of return amendments, March 2018.

[5] IPA, Australian Infrastructure Investment Report 2017, p. 2.

[6] IPA, Australian Infrastructure Investment Report 2017, p. 14.

[7] IPA, Australian Infrastructure Investment Report 2017, p. 14.

Uncertainty and risk increase the cost of both debt and equity investments in, and new financings of, regulated energy assets. Investors will demand higher risk premiums, thus increasing prices to customers. This is at a time when investment in energy infrastructure and future networks is critical to supporting a reliable and low-cost energy system in the future. Investors will remain obliged to deliver required standards and safety of service; however, where returns to investors are continually reduced or uncertain, capital investment to support innovation will be at risk.

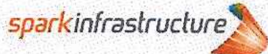
The decision of the AER in establishing allowed returns for the next 9 years[8] through the binding RORG must be taken with caution and with a full assessment of longer term impacts. The impacts could be severe and irreversible and particularly detrimental should that higher cost of capital coincide with an increased need for capital to support investment in the Integrated System Plan currently being developed by Australian Energy Markets Operator (**AEMO**).

The NSG supports the AER's incremental approach to reviewing the RORG. This provides an opportunity to improve the accuracy in estimating the allowed ROR required by investors whilst providing certainty to investors that new risks will not be introduced through the process. To achieve this, the NSG considers that the AER should:

1. Continue to implement the current approach to estimating the required return on investment consistent with the current ROR rules set out in the NER and NGR. That is to estimate the ROR that is commensurate with the efficient financing costs of a benchmark efficient entity **(BEE)** with a similar degree of risk to that of the NSPs using a weighted average cost of capital approach;
2. Mitigate the additional risk introduced by the COAG Energy Council in the proposed changes to legislation that go beyond making the RORG binding by adopting and specifying in the RORG the principles and framework for determining the ROR as outlined in the current NER and NGR including the allowed rate of return objective (**ARORO**);
3. Maintain the trailing average portfolio approach to estimating the cost of debt and the AER's foundational Sharpe-Lintner CAPM (**SLCAPM**) approach to estimating the expected return on equity;
4. Ensure that all risks are accounted for in establishing the returns required by investors whether through equity beta, cash flows or the regulatory framework;
5. Consider the overall impact of any potential change on regulatory certainty and stability and consequential impacts on other parameters, incentives and the long-term interests of customers;
6. Provide clear reasons underpinning judgement on any change to the parameters, data or methodology and explain reasons for agreement and disagreement with stated views of stakeholders and experts;
7. Establish a fixed value for gearing of 60%, equity beta of 0.7, Market Risk Premium (**MRP**) of 7% and gamma of 0.34 for the period of the RORG; and
8. Limit the triggers to re-open the RORG during the effective period and ensure the process is contained to address the identified issue only (and any consequential impacts to other parameters).

The NSG would like to acknowledge the benefits of the concurrent evidence sessions and Expert Report. These sessions provided a valuable opportunity to investigate alternative views and the Expert Report clarified agreed positions and highlighted issues to be investigated. This process has revealed that there is considerable agreement amongst experts on many fundamental principles and we consider our views presented in this submission are consistent with the shared agreed positions. We have highlighted these shared agreed positions and commented on areas of disagreement where appropriate in the attached submission.

[8] The term of the RORG will be 4 years. However, a determination made in the last year will be in effect for a further 5 years.



However, the process also demonstrated that the investment community's approach to risk and capital structure management is not universally understood by regulatory experts and other stakeholders, and we would welcome the opportunity to engage more regularly to share our perspectives. In this regard, we welcome the AER's initiative to establish the Investor Reference Group (**IRG**) and look forward to opportunities for continued interaction between the AER, the NSG and IRG to share information and test substantive issues.

Please contact Sally McMahon, Economic Regulatory Advisor with Spark Infrastructure (phone: 0421 057 821) for further discussion or questions.

Yours sincerely,

Rick Francis
Managing Director & CEO
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Andrew Faber
CEO
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Nik Kemp
Head of Infrastructure
AustralianSuper

Michael Hanna
Head of Infrastructure – Australia
IFM Investors

Francis Kwok
Co-Head of Asia-Pacific
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Attachment: Further information on the positions of the Network Shareholder Group (NSG) on the review of the AER's Rate of Return Guideline (RORG)

1. Opening comments

We encourage the AER to consider and settle issues through this review process with the following in mind:

- **Transparency and predictability provides investment certainty** which is critical to attracting the right amount of efficient investment at the right time and at the lowest cost. The RORG must enable investors and NSPs to understand the regulated ROR that would apply at a point in time given prevailing market conditions. This is critical given the significant capital investment by NSPs requires ongoing access to a variety of global capital markets and where investment (capital expenditure) is made for the long-term (40-50 years) but rates of return on equity are re-set every five years. Hence, the objectives of transparency and predictability must extend over many regulatory periods.
- **The framework for incentive-based economic regulation is working as intended**, specifically where investment is made by the private sector. The incentives to deliver outcomes consistent with economic efficiency are working well for profit motivated businesses; costs are lower, and services are improved and will continue to improve further. Incorporating measures of financial performance in assessing a reasonable ROR is in many cases an "ex post" exercise and has the potential to weaken the incentives – penalising businesses for delivering outperformance and burdening customers with underperformance.
- **Material instability in Australian energy markets means investor certainty is at an all-time low.**[9] Considerable uncertainty in energy policy, significant changes in the way energy networks are being used, high propensity for governments to intervene inconsistently, and at will, together with abnormally low levels of inflation are not appropriately accounted for in past performance. A ROR commensurate with the efficient financing costs of a BEE with a similar degree of risk must also be able to accommodate forward looking changes in markets and risk.
- **The concept of the BEE is a critical element of the incentive framework** and establishing the regulated ROR. The opportunity to outperform the benchmark and realise a ROR greater than the regulated ROR is a necessary component of attracting investment to the sector and encouraging NSPs and their owners to take a prudent level of risk, run the business as efficiently as possible and critically identify and foster innovation in future service delivery. Any changes to the benchmark will not only risk an adverse change in behaviour but also break a fundamental principle behind the entire framework.
- **The concurrent evidence sessions have provided a valuable forum to clarify and test views** of experts and identify areas of agreement and areas for further investigation. We believe that considerable weight should be put on the agreed views and reasons that the AER may reject an agreed view (or accept a dissenting view) should be clearly stated.
- **Any change to the benchmark parameters, methodology or data should meet a high threshold**, be accompanied by appropriate changes to interdependent parameters to maintain a risk-equivalent outcome and have detailed reasons for the changes. This also ensures that underperformance impacts on the returns to NSPs and does not result in higher costs to customers.
- **The ROR is set on the basis that investors earn a return on efficient investment included in the Regulatory Asset Base (RAB)**. The value of the RAB is rolled forward in accordance with the rules and only efficient investment can be added to the RAB. To the extent that the value of the RAB is re-visited ex-post, because of a change in the regulatory framework or policy, the ROR and the BEE will need to be re-visited so that the ROR continues to provide a return commensurate with the risks. Such a change

[9] See commentary on investor confidence and uncertainty in the energy sector in Infrastructure Partnerships Australia (**IPA**), Australian Infrastructure Investment Report 2017 at http://infrastructure.org.au/wp-content/uploads/2017/10/Australian-Infrastructure-Investment-Report-2017-FINAL.pdf

would reduce the incentives to invest and increase the cost of capital as is outlined in work undertaken by the Energy Networks Association (**ENA**).[10]

To be clear, we are contributing to this review on the basis that there is no change to the treatment of the RAB or ROR from the current NER, or fundamental change to the regulatory framework or policy. Should there be such a change, the ROR and the input parameters will need to be re-examined.

2. Ensuring new risks are not introduced

Key messages

- **Investors accept that the RORG will be binding. However, the changes being proposed through the COAG Energy Council's consultation process go much further and introduce new and heightened risks.**
- **The effect of the proposed changes is to de-stabilise the regulatory framework, increase regulatory and sovereign risk and increase the cost to customers.**
- **This risk must be mitigated to the extent possible. At a minimum, the AER must adopt the current ROR rules and the allowed rate of return objective (ARORO) in the RORG.**

The COAG Energy Council Senior Committee of Officials (**SCO**) is currently consulting on legislative amendments to implement a binding RORG. The proposed amendments go much further; removing the rules about the ROR and the rule making power of the AEMC in relation to ROR. The amendments elevate the RORG to the status of subordinate legislation and make the RORG effective even if the AER does not follow the substantive or procedural legislative requirements. An unprecedented level of regulatory discretion will be established with no realistic ability to seek judicial review on ROR matters.

The proposed legislative changes, if adopted in their current form, will undermine what has traditionally been considered a stable and transparent regulatory environment, increase regulatory and sovereign risk and consequently increase the cost of both debt and equity investments in, and new financings of, regulated electricity assets. It would inevitably result in investors seeking higher risk premiums as compensation for reduction in good governance and accountability, increasing prices to customers at the same time as reducing investment incentives. The risk is likely to be severe and irreversible and could be particularly detrimental should that higher cost of capital coincide with an increased need for capital to support investment in the Integrated System Plan currently being developed by AEMO.

We have provided a submission to the COAG Energy Council's consultation process outlining our views that the legislative amendments should be limited to the changes required to make the RORG binding and not alter the powers of existing Australian energy institutions, or the current ROR rules. Effective access to judicial review is critical to investors and customers to ensure that errors affecting significant economic value can be corrected, and strong incentives remain for the regulator to deliver quality decisions and ensure regulatory accountability.

The AER can mitigate this new risk by including the current ROR rules and the ARORO in the RORG. The AER has indicated that the RORG is being developed within the existing framework captured in the NER and the NGR so including the ARORO and the ROR rules in the RORG should not alter the considerations or outcomes of this review.

The AEMC undertook a comprehensive and transparent review process in 2012 to develop the current ROR rules. The AEMC carefully considered the benefits of providing guidance in the NER and NGR balancing flexibility and certainty for stakeholders. These rules contain fundamental principles of the BEE and the right to earn a return commensurate with risk that is critical to an effective incentive-based regulatory framework and attracting low cost capital. These principles work together to ensure that customers are provided with the desired level of service at lowest long-term cost.

[10] Energy Networks Association, Written Down Value? Assessing proposals for electricity network write-downs, August 2014.

The ROR rules have been tested extensively by the Australian Competition Tribunal and the Federal Court. Important and valuable precedent has been established. Accordingly, the current rules provide certainty for investors about the return to be earned on investment and how the allowed regulated return may change over time and in line with prevailing market conditions.

As far as investors are aware, there has been no policy change, or change in circumstances considered by the AEMC to warrant a change in the rules. In any event, if changes to the rules are warranted, they should be properly considered through the AEMC's well developed and transparent process rather than becoming an opaque process that is not subject to any external accountability.

The AER has indicated that the ARORO and the ROR rules are merely a subtle difference in terminology and subordinate detail to the NEO, NGO and RPPs.[11] However, we consider that the ROR rules provide a foundation for the approach to estimating the ROR and certainty that this approach will remain, except where an independent and transparent review determines otherwise, is of considerable importance to investors. If the AER identifies problems with the rules or considers that the ARORO or the ROR rules constrain it from achieving an outcome consistent with the NEO and NGO, then those issues should be outlined and explained.

3. Compensating for risk

Key messages

- **All risks should be identified and attributed to elements of the framework such that investors are appropriately compensated for risk.**
- **It is accepted that systematic risk is compensated for in the equity beta. However, non-systematic risk and emerging risk must also be addressed.**
- **Forward looking risk is also increasing because of the propensity of Australian governments to adopt sub-standard governance on important legislation and rules and intervene in the regulatory framework to deliver political pricing objectives.**
- **If return allowances to investors continue to decrease despite clear evidence that the required returns are increasing, the profile of network investment will be impacted which will ultimately impact on energy customers.**

Most experts agreed that it is helpful to confirm that the ARORO remains the working objective and it would be useful to transfer other 'guidance' from the rules.[12] Indeed, the dissenting view that there is no need to refer to a benchmark entity[13] demonstrates that the NEO and NGO alone are not sufficient to ensure that the current approach of considering the efficient financing cost of a BEE would continue in the absence of the ARORO. The Consumer Challenge Panel (CCP)'s stated concern with the ARORO is that it may be perceived to be grounded in finance theory and practice.[14] Unlike the CCP, the NSG considers that it is appropriate for the approach to determining the ROR to be grounded in finance theory and practice, as this is fundamental to how real life investment decisions are made, and to the extent that the ARORO and the ROR rules provide clarity that this should be the case, they should be retained in the RORG.

[11] AER, Submission to the draft legislation to create a binding rate of return instrument, 13 April 2018, p. 4.

[12] CEPA, Rate of Return Guideline Review – Facilitation of Concurrent Expert Evidence, Expert Joint report, 21 April 2018, p. 14-15.

[13] CEPA, Rate of Return Guideline Review – Facilitation of Concurrent Expert Evidence, Expert Joint report, 21 April 2018, p. 15.

[14] Consumer Challenge Panel, Advice to the AER regarding COAG Energy Council draft legislation and rule changes for a binding rate of return Instrument, 5 April 2018, p. 3.

3.1. The framework for compensating for risk

The NSG supports the view of experts that all risks – both systematic and non-systematic – must be compensated for and that the AER should elaborate on the implicit classification of risks and identify where the allowance for each relevant risk is accounted for within the regulatory framework.[15]

We agree with the experts that the SLCAPM estimates the expected return on equity and that where non-systematic asymmetric risk is identified the allowed return on equity should be adjusted to reflect this.[16] We also agree that the AER should measure the systematic risk of the BEE in beta. However, the choice of point estimate for beta should also consider emerging systematic risk that may not be captured in historical market data.

The asymmetric non-systematic risks could be captured elsewhere in the regulatory framework, for example in operating expenditures (self-insurance), the form of regulation (revenue vs price cap) or in depreciation schedules (technology risk). If not captured elsewhere, they should be compensated in setting the allowed rate or return.[17]

If return allowances continue to decrease, despite clear market evidence that the required returns are increasing amid rising risks, there will be impacts on investment profiles of network businesses and ultimately on customers – services and prices. These impacts will not be revealed in the short term, but when they occur they will be significant and irreversible. A see-sawing effect on returns of overcorrecting through the RORG process will be just as detrimental as increased uncertainty and maybe more so given the increased volatility of prices and returns. In the absence of reliable measures to monitor the impact of changes to the regulated returns, and confidence that these changes will not embed higher future costs to consumers, a conservative approach should be adopted.

3.2. Changes in risk

The risk to investors has increased since the 2013 RORG was established. This is evidenced by higher equity betas and market risk premiums demanded by investors. It is also intuitive and observable, particularly in relation to the risk of regulatory intervention and low inflation.

Australian Governments have increased the actual and perceived threat of intervention in the regulatory framework, thus increasing the political and sovereign risk of investing in Australian utilities.[18]

We have observed:

- the Commonwealth act unilaterally to remove limited merits review;
- proposals by the ACCC to investigate writing down asset bases that had previously been approved by the AER; and
- as discussed in the previous section, the proposed sweeping changes to the ROR framework by the COAG Energy Council that have a potential to significantly impact on the economic circumstances of investors who have allocated capital to Australian networks in the belief that they were investing in a stable and predictable environment.

These changes are not being consulted on transparently but rather being proposed in the absence of any stated policy position or investigation of net benefits and impacts on the long-term interests of consumers.

A further risk that has increased since the last RORG is the inflation forecast error risk.

Spark Infrastructure provided a submission to the AER's Discussion paper on the regulatory treatment of inflation in June 2017. That submission outlined the view that there are errors in the regulatory framework because of a mismatch between the AER's method for estimating the efficient cost of debt and the compensation provided for

[15] CEPA, Rate of Return Guideline Review – Facilitation of Concurrent Expert Evidence, Expert Joint report, 21 April 2018, p. 24.

[16] CEPA, Rate of Return Guideline Review – Facilitation of Concurrent Expert Evidence, Expert Joint report, 21 April 2018, p. 23.

[17] CEPA, Rate of Return Guideline Review – Facilitation of Concurrent Expert Evidence, Expert Joint report, 21 April 2018, p. 23-24.

[18] Political risk and sovereign risk of investing in Australian infrastructure has risen by 27% and 20% respectively between 2016 and 2017 See IPA, Australian Infrastructure Investment Report 2017 at http://infrastructure.org.au/wp-content/uploads/2017/10/Australian-Infrastructure-Investment-Report-2017-FINAL.pdf

the efficient cost of debt through the post-tax revenue model (**PTRM**) and the roll-forward model (**RFM**) that gives rise to unnecessary forecasting error risk.[19]

The AER and its consultants have acknowledged that there is a problem with the interaction between the PTRM and RFM that results in equity holders bearing the risk of the AER's forecast of expected inflation being inaccurate and that the impact could be substantial.[20]

However, the AER considers that no change to the forecasting method or regulatory framework was required because the overall inflation compensation is appropriate.[21] A key consideration of the AER was that actual inflation reverts to the mid-point rapidly (within 1-2 years).[22] However, the period of assessment was between 2000 to 2010.[23] It is not clear why the AER did not assess the most recent 10-year period. Actual inflation has not reverted to the mid-point of the RBA's range rapidly during this period[24] and this is the period more relevant to the current review of the RORG.

Ofgem in the United Kingdom recognised this risk in its 2014 review of returns. Ofgem outlines that there is additional risk to equity holders when debt is incurred in nominal terms in low inflation environments and modified the prima facie the downward adjustment to the return on equity as a result. Ofgem reduced the return on equity by 0.3% rather than 0.8% to reflect this additional risk.[25]

The AER provided assurances that the risk is captured in the current overall ROR (and potentially equity beta) under the current approach to estimating the required ROR. However, if there is no change in equity beta to reflect the increases since the last RORG, this emerging risk may not be captured. If not captured in equity beta then the AER should identify where it is captured in the regulatory framework particularly if the AER chooses to place less weight on forward looking estimates of the market risk premium (**MRP**).

The 2013 RORG was followed by reductions in the allowed ROR for all NSPs. This reduction in allowed RORs has been accompanied by lower capital investment compared to forecast allowances and flattening of growth in RAB.[26] This would not be the case if the regulated ROR was too high. Continued reductions in the ROR will further impact on the funds available for capital investment.

The NSG considers that overall investors face more risk now than they did at the time of the last RORG review and the outcome of the RORG review should reflect this.

These risks increase the cost of both debt and equity investments in, and new financings of, regulated energy assets. Investors will seek higher risk premiums, thus increasing prices to customers. This is at a time when investment in energy infrastructure and future networks is critical to facilitating a reliable, low-cost future energy system and transition to a lower emission environment. Ensuring that energy networks can support the changing patterns of use and new technology will be fundamental to unlock the opportunities for more innovative delivery solutions and efficient matching of demand with supply. Investors will remain obliged to deliver required standards and safety of service; however, where returns to investors are continually reduced or uncertain, capital investment to support innovation will be at risk.

In any event, we note that all experts except one agreed that NSPs have not become less risky since the last guideline.[27]

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[19] Spark Infrastructure, Submission to the AER's Preliminary Position on the regulatory treatment of inflation, 9 November 2017.

[20] AER, Regulatory treatment of inflation, Preliminary position, October 2017, p. 77 and SAPERE, Efficient allocation and compensation for inflation risk, 25 September, p. 17.

[21] AER, Regulatory treatment of inflation, Final position, December 2017, p.16.

[22] AER, Regulatory treatment of inflation, Preliminary position, October 2017, p. 77 and SAPERE, Efficient allocation and compensation for inflation risk, 25 September, p. 13.

[23] AER, Regulatory treatment of inflation, Preliminary position, October 2017, p. 77 and SAPERE, Efficient allocation and compensation for inflation risk, 25 September, p. 14.

[24] Spark Infrastructure, Submission to the AER's discussion paper on the regulatory treatment of inflation, 29 June 2017.

[25] Ofgem, Decision on our methodology for assessing the equity market return for the purpose of setting RIIO-ED1 price controls, February 2014, p. 12.

[26] As per the data provided by the AER in an emailed spreadsheet to the customer reference group on 6 April 2018.

[27] CEPA, Rate of Return Guideline Review – Facilitation of Concurrent Expert Evidence, Expert Joint report, 21 April 2018, p. 25.

4. Estimating the required rate of return

Key messages

- **The current approach for estimating the rate of return is well-established and understood – and should be maintained.**
- **We support an incremental approach so that modifications are applied symmetrically and consistently, reflect material movements in updated estimates and evidence, demonstrable improvements in forecasting accuracy or improved transparency and simplicity where accuracy can be maintained.**
- **The AER must consider the interdependency of any changes on other elements of risk and the approach to estimating the allowed rate of return.**
- **We consider there is no role for profitability, RAB multiples or cross checks in estimating the allowed rate of return.**

4.1. Rate of return principles and guidance

We consider that the RORG should expressly adopt and specify the principles and framework for determining the ROR as outlined in the current NER and NGR. Given absence of policy and the uncertainty regarding legislation that will underpin this and future RORGs, this approach will anchor decisions on the ROR to the current rules and approach and establish precedent to guide future RORGs. This approach was supported by all experts.[28]

The NSG supports the current principles underpinning the calculation of the required return on investment - to estimate the ROR that is commensurate with the efficient financing costs of a BEE with a similar degree of risk to that of the NSPs using a weighted average cost of capital approach. Maintaining these important principles supports lower cost capital for NSPs and ensures that customers pay no more than the efficient financing costs regardless of the ownership, corporate structure, tax position or diversification of any NSP.

We also support maintaining the trailing average portfolio approach to estimating the cost of debt and the foundation SLCAPM approach to estimating the return on equity. These approaches have been tested, are well understood by investors and widely applied in practice in assessing investment opportunities. To the extent that changes to the regime are proposed, there must be a clear explanation of how judgement has been exercised and reasons for adopting or rejecting views of stakeholders and experts.

4.2. An incremental approach and the use of judgement

Investors support an incremental approach taken to establishing the RORG. This will maintain investor certainty and mitigate increasing risks.

The RORG should:

- Establish a high threshold for change;
- Limit regulatory judgement and clearly provide where and how judgement will be used;
- Specify well-defined and transparent processes for estimating parameters;
- Apply well-understood and market-accepted models, approaches and methods;
- Demonstrate a preference for simplicity and replicability but not at the expense of accuracy;
- Be based on easily observable market data; and
- Be free from actual or perceived political influence.

[28] CEPA, Rate of Return Guideline Review – Facilitation of Concurrent Expert Evidence, Expert Joint report, 21 April 2018, p. 14-15.

To ensure a high threshold for change, prior to varying the approach, methodology, parameter or data, the AER should assess the overall impact on the regulatory framework, including:

- The impact of making a change on investor certainty and incentives for investment - an increased likelihood that there will be a change for each new guideline will dampen incentives to invest and increase the cost of capital as investors expect a higher premium to cover the risk that future returns could vary considerably due to influences that are not related to market conditions; and
- Any consequential impacts to other parameters in the ROR framework - for instance, changes to parameters which imply a change to the risk profile of the BEE should be accompanied by appropriate adjustments to equity beta.

Further, the NSG considers that any changes to the value of parameters should only occur where there has been a clear and material movement in the value. Investors accept that there may be no 'right answer' in all circumstances and that a level of judgement may be required from time to time. However, certainty can be heightened by ensuring that changes are observable, linked to market conditions and evidence, applied symmetrically and consistently, only occur when material and not simply because the change is in a less desirable direction. All stakeholders benefit from certainty and stability in the regulatory system, both in process and outcomes.

The NSG agrees with experts that where the AER to use judgement it needs to be held accountable and where there is scope for discretion, there needs to be transparency on how the discretion is applied and a process to ensure that the application is reasonable. The AER should clearly explain reasons for why it exercised judgement, including why it accepted or rejected views of stakeholders and experts. Where criteria are applied, explanations should be provided and be consistent.[29]

4.3. Cost of debt

We agree that the trailing average approach is consistent with the ARORO and market funding practice.[30][31] We also agree that changing the approach so soon after it has been implemented and when many businesses are part way through the transition arrangements increases regulatory risk and uncertainty. This is more likely to increase the costs paid by customers than reduce it.

A change to the approach to the cost of debt was not identified in the AER's discussion papers and is not consistent with taking an incremental approach to the review of the RORG. To re-open this issue would be inconsistent with providing stability and predictability in process and outcomes. More importantly, any changes to the approach to estimating the cost of debt will have significant practical implications on network businesses:

- NSPs will likely need to adjust their capital structure to minimise exposure to future changes in market condition - for instance, changes in refinancing or hedging strategy to more closely match the financing profile of the benchmark); and
- financing structure is a risk decision for the NSPs – changes to refinancing and hedging strategy will impact the risk profile of the NSP, which may impact other ROR parameters.

It is not clear to the NSG what the approach to estimating the efficient cost of debt would be under the expert dissenting view[32] and we consider that this reflects a misunderstanding of the current AER approach and incentive-based framework. The trailing average portfolio approach to estimate debt costs does not, as is claimed[33], guarantee an NSP recovery of historical actual debt costs. Rather, it provides an NSP with an opportunity to recover the efficient costs of debt consistent with the NEO, NGO, ARORO and RPPs. If an NSP has entered into historical

[29] CEPA, Rate of Return Guideline Review – Facilitation of Concurrent Expert Evidence, Expert Joint report, 21 April 2018, p. 21.

[30] CEPA, Rate of Return Guideline Review – Facilitation of Concurrent Expert Evidence, Expert Joint report, 21 April 2018, p. 5.

[31] CEPA, Rate of Return Guideline Review – Facilitation of Concurrent Expert Evidence, Expert Joint report, 21 April 2018, p. 81.

[32] The dissenting view merely refers to the cost of debt being calculated at the time of a price control determination rather than a method. See p. 5 of CEPA, Rate of Return Guideline Review – Facilitation of Concurrent Expert Evidence, Expert Joint report, 21 April 2018.

[33] CEPA, Rate of Return Guideline Review – Facilitation of Concurrent Expert Evidence, Expert Joint report, 21 April 2018, p. 81.

arrangements that result in higher debt costs, these higher costs are absorbed by investors and not passed on to customers.

4.4. Return on equity

The NSG supports the AER's foundation model framework for estimating the return on equity which gives primacy to the SLCAPM, with evidence from other relevant models to inform estimates of individual CAPM parameters as per the 2013 RORG. This was also agreed by most experts[34] and is consistent with an incremental approach.

Although not perfect, the SLCAPM provides a framework to estimate the impact of risk on the BEE and a platform to make transparent and appropriate adjustments to capture non-systematic risk and address low beta bias. These adjustments are required because the model consistently underestimates returns and requires an adjustment to calibrate the predictive capacity to reflect variances between forecast returns from the model with actual returns.

All risks should be identified and mapped to the regulatory framework and compensation and any adjustments to the expected rate of return estimate from the SLCAPM to set the allowed return (positive or negative) should be transparent.

4.5. Information that is not relevant to estimating the allowed rate of return

In the discussion papers and concurrent evidence sessions, three issues were raised that we consider have no role in estimating the allowed rate of return:

- the use of profitability and RAB multiples;
- the use of cross checks; and
- the use of cash flow analysis.

We agree with experts that neither profitability data nor EV/RAB multiples[35] contain any information that would assist in estimating the allowed rate of return[36]. We have previously outlined our views on the difficulty with decomposing this information and ensuring comparability and consistency as well as our concerns about how this information might be used in a relevant and consistent manner across NSPs.[37] We maintain that difficulties with comparability across NSPs and over time would need to be resolved before this information is used at all. We also note that the RAB multiples referred to in more recent sale processes are likely to have included assumptions about the outcome of merits and judicial review processes. LMR is no longer available and under the COAG Energy Council proposed legislative changes, access to judicial review will be removed in practice.

There is no role for this information in the framework for compensating for risk. It is not an input into the SLCAPM, nor can it be legitimately used to make changes to the parameters, operating allowances or depreciation profiles. To the extent that it is used to assess the performance of the regulatory framework, and support changes to the framework, the impact on the strength of incentives for NSPs to continually improve efficiency to lower costs to customers whilst maintaining levels of service over the longer term must also be assessed.

In relation to the role of 'cross-checks' in estimating the allowed rate of return, we agree with the view of most experts that there is no objective basis for the application of an overall test of the reasonableness (or 'cross-check') of the AER's ROR determination[38]. We agree with the experts' reasons for this view also - all evidence relevant to a parameter should be considered together rather than being reserved for a cross-check and the concern that this could result in a further avenue for backdoor discretion which, following the removal of LMR, does not promote confidence in the stability of the process. The NSG notes that consideration of a cross-check will result in either an action or no action. If action occurs, then the cross-check information is elevated above all other considerations, circumventing the rigour and transparency that may have preceded it. If no action occurs, the cross-check has no

[34] CEPA, Rate of Return Guideline Review – Facilitation of Concurrent Expert Evidence, Expert Joint report, 21 April 2018, p. 18.
[35] Enterprise Value to Regulated Asset Base.
[36] CEPA, Rate of Return Guideline Review – Facilitation of Concurrent Expert Evidence, Expert Joint report, 21 April 2018, p. 35.
[37] Investor response to the AER's issues paper on the Rate of Return Guideline, December 2017, P. 6-7.
[38] CEPA, Rate of Return Guideline Review – Facilitation of Concurrent Expert Evidence, Expert Joint report, 21 April 2018, p.19.

effect. Therefore, including a cross-check step either considerably deteriorates the quality of the process and analysis or has no effect at all.

We see no role for cash flow analysis for setting the allowed rate of return as this is affected both by elements outside of the control of the NSP such as demand, weather and energy efficiency, asset life cycle management for assets that have lives significantly longer than a regulatory period, tax cycles, depreciation schedules and revenue smoothing. We agree with experts that this would also destroy the incentive framework, and the experts' conclusion that setting aside ex-post cash flow analysis is in the interest of all stakeholders.[39]

5. The SLCAPM parameters

Key messages

- **The majority of SLCAPM parameters can be fixed over the period. This will maintain certainty and stability.**
- **Where parameters are fixed, re-openers must be limited. In any event, re-openers should not provide for the introduction of unfettered discretion.**
- **The current approach to averaging periods is supported. Nevertheless, the ability for an NSP to choose the averaging period up to 60 days is acceptable.**
- **Gearing should be maintained at 60% for the RORG period. The evidence does not support a material change in this estimate.**
- **Equity beta can be maintained at 0.7 for the RORG period. The evidence suggests that the estimate has increased, but it is not considered of sufficient precision.**
- **MRP should be set at 7% for the RORG period. The evidence suggests a material increase in the forward-looking estimate.**

The relevant elements and parameters for the SLCAPM include averaging periods, gearing, equity beta and the MRP. The NSG supports fixing parameter values during the RORG period to maximise investor certainty where there has been no material change since the parameters were last set and any changes that might occur over the period are also not expected to be material. Materiality must be assessed against the level of precision and judgement required in establishing the initial level.

5.1. Fixed and variable parameters

In choosing the value to be fixed over the period, the NSG supports the approach outlined by experts to fix parameters that should be either relatively stable through a price control period or where data is not as straightforward for estimating the parameter at a point in time, and parameters where a prescriptive methodology could be set for market variables that influence the value should be variable.[40]

We support updating estimates for the most recent data to ensure that the estimates reflect the prevailing market conditions and remain current and relevant, and limiting changes to the parameters to where there is a material change in the value currently adopted.

We consider it reasonable for the risk-free rate to be set by way of prescriptive methodology, with beta, gearing and market risk premium being fixed. We do not see circumstances that might exist over the next four years that will result in material changes that are not better addressed through the re-opening provisions if they do occur.

We support limiting the grounds for re-opening the RORG to maintain certainty and improve the efficiency of decision making processes.

[39] CEPA, Rate of Return Guideline Review – Facilitation of Concurrent Expert Evidence, Expert Joint report, 21 April 2018, p. 20.

[40] CEPA, Rate of Return Guideline Review – Facilitation of Concurrent Expert Evidence, Expert Joint report, 21 April 2018, p. 17.

5.2. Averaging periods

As set out in our previous submission of 12 December 2017, investors support the AER's current process and approach for setting averaging periods and the prescribed conditions for choosing averaging periods. We consider that the conditions are sufficiently clear, and it is not necessary to be more prescriptive. The current approach, process and discretion provided for setting averaging periods remains appropriate. NSPs are best placed to manage their capital risk and should retain the discretion and flexibility to do so.

We do not support any mandatory increases to the averaging period as it would make it more difficult and perhaps impractical to implement an effective hedging strategy. Although we do not consider it necessary, we do not object to the option outlined in the AER's discussion paper of providing flexibility for NSPs to choose the length of the averaging period up to 60 days[41] on the basis that any increase in averaging period is not mandatory.

We continue to support retaining flexibility for NSPs to choose the start date for their averaging period as a matter of commercial practicality and risk mitigation as it is in no-one's interest to have multiple NSPs executing large hedge transactions on the same day as it would increase execution risk and liquidity charges from bank swap providers.

5.3. Gearing

The key issue for consideration in relation to gearing is the data used to estimate gearing. We agree with experts that the AER's current approach using market-based estimates is the appropriate measure of gearing and that the estimate of gearing should be stable.[42] There is no useful or relevant information that can be obtained from considering gearing in terms of book value as this is simply a historical value and will almost never have an impact on the cost of financing debt or equity.

The current gearing benchmark is long-standing and accepted – the AER has assumed 60% gearing in every decision for energy networks for more than 10 years and this was also adopted by jurisdictional regulators in prior periods. The AER's updated analysis of gearing also continues to support 60% gearing.

We agree with the experts that the use of Australian listed energy network comparators is a reasonable representation of the BEE for determining gearing and that Australian firms are most relevant to ensure equivalence of tax regime and legal framework for bankruptcy.[43]

The gearing assumption is the cornerstone of the BEE assumptions. Any change to gearing would have to be accompanied by a re-assessment of all other assumptions in estimating the allowed ROR. A change in the gearing assumption would introduce a disproportionate level of uncertainty not warranted by the quality of the data or estimates.

5.4. Equity beta

The NSG supports the adoption of an equity beta of 0.7 for the term of the RORG. We support an approach that updates estimates of equity beta under the AER's current approach, assesses the change since the estimates in the last RORG and whether the change is material and delivers investment certainty.

De-leveraging and re-leveraging is required to ensure consideration on a consistent gearing basis. This is consistent with expert views.[44] We support the AER's current approach to de-leveraging and re-leveraging.

There has been no material change in investment valuation practices (or financial theory) since 2013 to justify a change from the existing approach to estimating beta. As agreed by all experts, there should be a high bar to change from the current approach and there is no compelling reason to make any adjustment to the approach.

[41] AER, Discussion paper, Market Risk Premium, risk free rate averaging period and the automatic application of the rate of return, March 2018, p. 37.

[42] CEPA, Rate of Return Guideline Review – Facilitation of Concurrent Expert Evidence, Expert Joint report, 21 April 2018, p. 27.

[43] CEPA, Rate of Return Guideline Review – Facilitation of Concurrent Expert Evidence, Expert Joint report, 21 April 2018, p. 28-29.

[44] CEPA, Rate of Return Guideline Review – Facilitation of Concurrent Expert Evidence, Expert Joint report, 21 April 2018, p. 39.

Nevertheless, as agreed by most experts and demonstrated by sound empirical evidence, the SLCAPM underestimates beta for low beta firms (and overestimates for high beta firms). It is therefore appropriate to apply an adjustment to the SLCAPM beta.[45]

We note that the existing comparator set has narrowed substantially since the 2013 RORG and we support the views that other comparators could be included. However, we do not consider that a narrow set of firms is of itself a sufficient rationale to include additional comparators and believe that the weight given to the comparators should be reduced as their congruence with characteristics of the BEE reduces. For example:

- Delisted Australian network firms could be considered if compared to equity betas of the three comparator firms up to the time that the firm de-listed. Once a firm is delisted, the equity beta will not change. If this does not occur, emerging risks and market cycles are unlikely to be properly accounted for.
- International energy network firms should only be used if considered in the context of varying regulatory, economic and political environments between geographies and should be calibrated to the three Australian comparators over time.
- Domestic infrastructure firms from other sectors are of very limited value because of different regulatory environments and capital requirements.
- We also agree with experts that the empirical evidence from Australian listed comparators indicates that beta has increased since 2013 on the basis that the estimates for the three live firms are materially higher over the period since the last RORG and although of less relevance, international evidence (including form other regulators) and the evidence from other domestic infrastructure firms indicates a beta above 0.7.[46]

Further, nearly 60% of the AER's updated estimates at the portfolio level from the most recent 5 years (to April 2017) are above 0.7 and the AER's estimate does not fully correct for the low-beta bias in the SLCAPM. We also note that emerging systematic risks may not yet to have been captured in beta estimates (anecdotally, listed equities markets have not yet fully priced in recent political/regulatory changes such as the abolition of LMR, for the expected future impacts of the broader changes to legislation to make the ROR binding and ongoing consideration of ex-post adjustments to the RAB). Further, there may be other risks that are not captured in the equity beta, the regulatory framework or cash flows (inflation forecast risk or technology disruption) resulting in under compensation for risk. Therefore, based on the evidence the value of equity beta could only increase.

However, although we consider that there has been an increase in systematic risk and estimates of equity beta since the last RORG, we do not consider that the level of precision in the estimate of the change is sufficient to warrant a variation in the current point estimate. Further, we consider that the equity beta is reasonably stable and is not likely to change materially over the period of the RORG.

5.5. MRP

The NSG supports adopting an MRP value of 7% for the term of the RORG. We support an approach that considers both historical excess returns (**HER**) and forward-looking dividend growth model (**DGM**) estimates. We consider that given that the MRP is a forward-looking parameter, the HER approach it is not sufficient on its own. The DGM estimates are relevant information and must be given sufficient weight. We consider that movements in DGM estimates and the risk-free rate since the last RORG are material and warrant a revision to the estimate of MRP. We consider that it is reasonable to fix the estimate of the MRP for the period of the RORG. Any change in the estimate of the MRP is better addressed through a re-opener, which should only be considered for a movement in evidence and market conditions over the RORG period that is more material than those that have occurred over the last five years. This will provide certainty and ensure that any changes in the MRP result from consistent and symmetric consideration of evidence.

[45] CEPA, Rate of Return Guideline Review – Facilitation of Concurrent Expert Evidence, Expert Joint report, 21 April 2018, p. 52-53.

[46] CEPA, Rate of Return Guideline Review – Facilitation of Concurrent Expert Evidence, Expert Joint report, 21 April 2018, p. 52.

The AER's approach to estimating the MRP in the 2013 RORG was to consider HER, DGM, surveys, conditioning variables and other regulators estimates. These estimates covered a range of 5.0 to 7.5%. The AER chose a point estimate of 6.5% in a worked example provided as a guide only. It was not envisaged that this would be a fixed estimate throughout the period. Rather, it was foreshadowed that it would be re-estimated based on up-to-date information for each determination.[47]

Experts support the continued use of HER, DGM and market surveys[48] and consider that HER data should not be considered preeminent, but rather considered alongside all other relevant evidence.[49] We consider that material weight should be placed on DGM estimates in establishing the market risk premium and return on equity because these models provide a forward-looking estimate and have strong predictive power, whereas the other evidence used by the AER (HER, survey evidence and conditioning variables) are backward-looking.

We agree with experts that an approach that considers changes in relevant evidence and materiality of movements since the 2013 RORG is sensible.

The AER's arithmetic mean HER estimates have remained the same or marginally increased and the geometric mean estimates have all increased since the 2013 RORG.[50]

The AER has not provided updated MRP estimates using the AER's DGM models on a consistent basis for all growth rates to those estimated in the 2013 RORG. However, the DGM estimates in the 2013 RORG for a 5.1% assumed long term growth rate are 7.13% under the two-stage model and 7.47% under the three-stage model.[51] In the discussion paper released for the 2018 RORG review, the AER presents updated estimates to be between 7.97% to 8.08% for the two-stage model and between 7.84% and 7.96% for the three-stage model (unadjusted analyst forecasts)[52] which clearly indicates a significant rise.

The estimates from other regulators have increased from 6%[53] to above 7%[54] since the last RORG.

These results have been highlighted by Frontier Economics and reproduced in the AER's discussion paper in graphical form.[55]

Despite the overwhelming body of evidence, the AER has maintained the MRP estimate at 6.5% throughout the period. The only way the estimate could have remained constant at 6.5% is if the AER has altered the weight given to the referenced sources. However, the reasons for a change in weighting have not been clearly explained. The AER has relied on advice from Lally that DGM estimates have become less reliable in times of low interest rates and can produce upwardly biased results, that the DGM could best be viewed as a conceptual tool rather than a forecasting model and that despite the DGM consistently giving numbers above 7% for a predicted MRP since 2013, the MRP is more likely to be below the long run average than above it[56]. We have outlined earlier that low inflation can drive an increase in risk.

Nevertheless, at the concurrent evidence sessions and in the subsequent expert report, experts agreed that some weight must be given to DGM estimates[57]. There were also mixed views about survey evidence, suggesting that this should be given even less weight than DGM estimates[58].

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[47] AER, Better Regulation, Explanatory Statement Rate of Return Guideline, December 2013, p. 89.

[48] CEPA, Rate of Return Guideline Review – Facilitation of Concurrent Expert Evidence, Expert Joint report, 21 April 2018, p. 57.

[49] CEPA, Rate of Return Guideline Review – Facilitation of Concurrent Expert Evidence, Expert Joint report, 21 April 2018, p. 59.

[50] AER, Discussion paper, Market Risk Premium, risk free rate averaging period and the automatic application of the rate of return, March 2018, p. 14 and AER, Better Regulation Explanatory Statement Rate of Return Guideline (Appendices), December 2013, p. 82.

[51] AER, Better Regulation Explanatory Statement Rate of Return Guideline (Appendices), December 2013, p. 87.

[52] AER, Discussion paper, Market Risk Premium, risk free rate averaging period and the automatic application of the rate of return, March 2018, p. 18

[53] AER, Better Regulation, Explanatory Statement Rate of Return Guideline, December 2013, p. 94.

[54] AER, Discussion paper, Market Risk Premium, risk free rate averaging period and the automatic application of the rate of return, March 2018, p. 29.

[55] AER, Discussion paper, Market Risk Premium, risk free rate averaging period and the automatic application of the rate of return, March 2018, p. 24.

[56] AER, Discussion paper, Market Risk Premium, risk free rate averaging period and the automatic application of the rate of return, March 2018, p. 24

[57] AER, Discussion paper, Market Risk Premium, risk free rate averaging period and the automatic application of the rate of return, March 2018, p. 60.

[58] AER, Discussion paper, Market Risk Premium, risk free rate averaging period and the automatic application of the rate of return, March 2018, p. 63

We accept that judgement is required. However, we consider that more can be done to ensure that judgement is exercised in a manner that avoids bias in regulatory outcomes over time. This is consistent with the AER's intention at the time of the 2013 RORG:

> *"It is important to avoid bias in regulatory outcomes over time. Therefore, it is important we apply different sources of evidence symmetrically through time to avoid bias."*[59]

The NSG considers that the material increases in DGM estimates, together with the considerable reduction in the risk-free rate, supports an increase in the estimate of the MRP from 6.5% to 7%. This is also consistent with other regulators in Australia and the UK such as the ERA (7.40% in 2016), QCA (7.00% in 2017), IPART (7.55% in 2018) and OFGEM[60] and reflects the increased risk since the 2013 RORG and forward looking emerging risks. An adjustment to the MRP to reflect market evidence of forward looking risk is appropriate. None of the evidence supports a reduction in the MRP.

The NSG considers that predictability and certainty are best promoted by fixing the MRP over the period and this also reduces the need for judgement and use of discretion during the period.

If a MRP of 7.0% is adopted, there are unlikely to be further movements in DGM estimates or risk-free rates over the next four years significant enough to meet the precedent threshold for revising the MRP estimate. Similarly, if the AER continues to adopt an MRP of 6.5%, we would expect that any future reduction in MRP (i.e. below 6.5%) could only be preceded by a change in market conditions so significant that it resulted in a **net** reduction in DGM estimates (against 2013 estimates) that is greater than the increase experienced over the last five years (i.e. a gross reduction in DGM estimates that is more than double the increase experienced over the last five years).

If the threshold for change was reduced for the next RORG period, this could lead to bias in regulatory outcomes where the allowed return on equity is reduced in response to smaller movements in market conditions and evidence but held constant in response to larger movements in market conditions and evidence in the opposite direction.

Although, there is not agreement that the total market return expectations move one for one with the risk free rate which would be the assumed outcome if the MRP was fixed, we consider that an event that would shift conditions sufficiently to meet the precedent required change set over the last five years would have to be of sufficient magnitude to also trigger a re-opening of the RORG. This approach is supported by most experts.[61]

6. Gamma

Key messages

- **Gamma should be set at 0.34 to reflect the updated direct estimate from tax statistics.**
- **The direct estimate from tax statistics is transparent and replicable and provides simplicity without reducing accuracy.**
- **The current estimate of 0.34 can be adopted for the term of the RORG.**

The NSG supports adopting a value of gamma of 0.34 for the term of the RORG. We consider that adopting the updated direct estimate from tax statistics improves transparency, simplicity and replicability without reducing accuracy. The direct estimate sits within a reasonable range based on consideration of the AER's utilisation approach to estimating gamma that puts weight on the equity ownership approach, tax statistics and market value studies in estimating gamma.

The value of gamma has been subject to considerable litigation concluding with the Federal Court upholding the AER's right to interpret the value of imputation credits to be the utilisation of credits rather than the market value.

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[59] AER, Better Regulation, Explanatory Statement Rate of Return Guideline, December 2013, p. 92.

[60] Ofgem's recent consultation on RIIO2 did not directly estimate the MRP. However, a value of between 7.01% and 7.33% can be derived based on converting OFGEM's real return on equity to a nominal return, applying he Fisher formula and holding beta constant.

[61] CEPA, Rate of Return Guideline Review – Facilitation of Concurrent Expert Evidence, Expert Joint report, 21 April 2018, p. 64.

Investors remain of the view that the market value of imputation credits is appropriate and more readily estimated than other methods and although the Federal Court may have found that it is open to the AER to put no weight on these studies, we consider that the RORG process is the appropriate forum to investigate improvements in the accuracy of methods, and simplicity where accuracy can be maintained. We also note that experts did not consider the AER's approach to be correct.[62] We consider that the following views of experts should be addressed by the AER in estimating the value of imputation credits:

- Equity ownership approach is only relevant because the AER has defined it to be relevant, it would have otherwise no place in any equilibrium asset pricing model and its outputs must therefore be interpreted as an upper bound.[63]
- Equity ownership statistics are not reliable for the purpose because not all credits are redeemed, and the statistics do not take in to account leakage, for example from the 45-day rule.[64]
- One dollar in income is not valued the same as one dollar in franking credits.[65]

Investors accept that the AER has chosen to estimate gamma based on the utilisation approach. Nevertheless, it is currently difficult to follow the method or judgement relied on by the AER.

It is not clear to the NSG based on the information provided by the AER in the discussion paper or in the concurrent evidence session how the AER has estimated the distribution rate or utilisation rate. The AER indicates in its discussion paper that the evidence suggest that a reasonable estimate would be within the range 0.3 to 0.6.[66] However, this range can only be determined by adopting a rounded-up value from Lally's recommended approach to the top 20 ASX and the Lally and Handley adjusted SFG dividend drop off study. This implies equal weight on these values and no weight on the SFG dividend drop off study.

We consider that the Lally approach that relies on the top 20 ASX firms is irrelevant to the task. Most experts agreed that the benchmark firm for estimating the distribution rate is a corporate entity that pays tax at the corporate tax rate, operates entirely within Australia and has a capital expenditure level that is comparable with that of network businesses.[67] Lally considers that imposing additional criteria in accordance with the definition of a BEE may lead to a sample size that is too small to provide a good estimate.[68] Nevertheless, Lally has adopted a sample size of 20 including the largest ASX firms with the only shared characteristic of a BEE being that they pay tax. During the concurrent evidence sessions, Stephen Gray pointed out the reasons for these firms not being good comparators, namely, most of these firms have material foreign income that they can use to distribute credits (whereas a BEE has none) and that the top 20 firms can materially impact the results due to corporate tax policies of foreign parents and one-off tax events.[69] Ilan Sadeh highlighted that these firms are also largely financial firms that do not require large retention of operating cashflow for capital expenditure.[70] If a subset of firms is to be used to estimate the distribution rate, then this subset should have characteristics more congruent to the BEE than the full set.

Therefore, if the equity ownership estimates remain as an upper bound, Lally's top 20 ASX method is given no weight and SFG dividend drop off studies are given any weight, a reasonable range is 0.26 to 0.49. The mid-point of this range is 0.375.

We consider that direct estimates should be given more weight than the equity ownership estimates. The only direct estimates come from tax statistics and dividend drop off studies. If the AER continues to give no weight to dividend drop off studies, the only direct estimate remaining is from tax statistics. Considerable improvements in transparency, simplicity and replicability can be achieved by adopting a direct estimate of the utilisation gamma for

[62] CEPA, Rate of Return Guideline Review – Facilitation of Concurrent Expert Evidence, Expert Joint report, 21 April 2018, p. 5.
[63] CEPA, Rate of Return Guideline Review – Facilitation of Concurrent Expert Evidence, Expert Joint report, 21 April 2018, p. 75.
[64] CEPA, Rate of Return Guideline Review – Facilitation of Concurrent Expert Evidence, Expert Joint report, 21 April 2018, p. 75.
[65] CEPA, Rate of Return Guideline Review – Facilitation of Concurrent Expert Evidence, Expert Joint report, 21 April 2018, p. 69.
[66] AER, Discussion paper, Value of imputation credits, March 2018, p. 16.
[67] CEPA, Rate of Return Guideline Review – Facilitation of Concurrent Expert Evidence, Expert Joint report, 21 April 2018, p. 72.
[68] CEPA, Rate of Return Guideline Review – Facilitation of Concurrent Expert Evidence, Expert Joint report, 21 April 2018, p. 76.
[69] CEPA, Rate of Return Guideline Review – Facilitation of Concurrent Expert Evidence, Expert Joint report, 21 April 2018, p. 76-77.
[70] CEPA, Rate of Return Guideline Review – Facilitation of Concurrent Expert Evidence, Expert Joint report, 21 April 2018, p. 77-78.

a BEE across the economy from the use of company tax paid or credits redeemed without reducing accuracy. This ATO data is free from the data reliability issues associated with the ATO data required to estimate distribution and utilisation rates separately. It is therefore also much more reliable evidence than the equity ownership approach.[71]

In the interest of transparency, simplicity and replicability as well as the desire to limit the need for judgement and the use of discretion during the period the NSG supports a fixed value for gamma of 0.34 directly estimated from tax statistics. We do not expect the value to change materially or with any precision. If there is a material change, it is likely to result from a change in law which is best addressed through re-opening the RORG.

7. Re-opening the RORG

If the RORG is to be re-opened during the effective period, the trigger should be limited, and the process should be expedited and constrained to address the identified issue only. This approach increases certainty, limits the introduction of additional judgement and discretion and ensures an efficient process.

Re-opened issues should have an industry-wide impact, with conditions spelled out in advance and limited to serious and low probability events. We support the AER's role in determining whether the RORG should be re-opened and we look to the AER to outline in the RORG the process it would expect to adopt to make the decision to re-open the guideline, give specific examples of conditions that might warrant re-opening and the process and scope for revising the RORG part way through its term.

[71] CEPA, Rate of Return Guideline Review – Facilitation of Concurrent Expert Evidence, Expert Joint report, 21 April 2018, p. 74.