11 March 2022

Mr Warwick Anderson
General Manager, Network Pricing
Australian Energy Regulator
By email: RateofReturn@aer.gov.au

Dear Mr Anderson,

Re: Response to AER Rate of Return Information Paper and Omnibus Final Working Paper

The Network Shareholders Group (**NSG**) comprises a mix of global infrastructure investors with significant and ongoing capital invested in Australian electricity network assets that are subject to the Australian Energy Regulator's (**AER**) Rate of Return Instrument (**RORI**). The NSG's electricity network assets serve consumers in New South Wales (**NSW**), South Australia (**SA**) and Victoria (**VIC**).

Our objective is to play a critical role in ensuring public policy and regulatory processes for Australia's future infrastructure investments are well-informed and carefully consider conditions in financial capital markets. In turn, this supports necessary and efficient capital investment to ensure that government infrastructure and policy commitments can deliver improvements to the lives of all Australians.

The RORI underpins significant investments across the entire energy sector in Australia. An instrument that does not reflect efficient costs will deter capital flows into vital network infrastructure – evidence of which has been emerging for some time. This will potentially have significant long-term consequences for the resilience, reliability, adequacy, and sustainability of Australia's energy system, which is undergoing a fundamental transition. Ultimately, it will also lead to higher energy prices for energy consumers.

We wish to make the following key points:

- **The AER's 2018 RORI set regulated equity returns too low.** 2018 RORI equity returns are an outlier compared to the returns allowed by other regulators of comparable assets in Australia and overseas, and lower than the returns expected by investors in Australian energy network infrastructure assets. There is evidence before the AER that this is the case, including from its own consultants, The Brattle Group, and publicly available Independent Expert Reports which suggest the AER's estimate is more than 150 basis points lower than that required by investors.[1] The AER has provided no evidence or analysis that the relatively low returns are in the long term best interest of consumers.
- **The methods and estimates adopted by investors for the cost of capital are the most relevant information to the AER's task**. These estimates drive decisions by equity and debt providers about allocating capital to different investment opportunities exactly matching the AER's task of estimating the efficient cost of capital required by investors. If there is an enduring divergence between market practice and regulatory estimates, this will result in over or under investment compared to efficient levels. The risk of under investment in Australia is further exacerbated given the economy needs significant capital inflows to support energy transition and other jurisdictions facing similar challenges offer comparably more attractive risk/ return proposition. The unprecedented need to invest in the east coast transmission system in Australia is seeing Federal Government agencies like CEFC assisting

[1] The Brattle Group, A Review of International Approaches to Regulated Rates of Return, June 2020; Grant Samuel, Independent Expert Report, AusNet Services, 16 December 2021; KPMG, Independent Expert Report, Spark Infrastructure, 11 October 2021.

TNSPs in funding these multi-billion dollar greenfield developments as regulatory returns prove insufficient, while states are introducing new processes to circumvent the AER regulatory framework and ensure the necessary investment happens. These are the real-life examples of the regulatory construct that is not meeting its objectives.

- **RAB multiples and acquisition activity provides <u>no</u> information at all `on the sufficiency of regulated returns.** The claim by the AER that RAB multiples and acquisition activity provide evidence that current returns are at least sufficient and potentially higher than that needed to attract investment[2] is incorrect and unsubstantiated. No explanation or investigation is provided to support this conclusion. Publicly quoted RAB multiples capture the value of an entire network business over a period of at least twenty years (including unregulated and contracted cash flows that are not associated with the regulated business) and reflects investors' confidence in their ability to run the businesses more efficiently – exactly what the regulatory construct encourages them to do. Finally, for every acquirer of a network business there is a seller. Divesting investors are 'feeling' the impact of the 2018 RORI on their portfolio returns whereas acquirers are optimistic the AER will perform its role as an unbiased and independent regulator by making the necessary improvements to its processes to facilitate the investment.
- **The AER's equity beta estimate will bear no relation to the systematic risk faced by network business if not supplemented with international comparators.** The AER's approach to estimating equity beta mutes the impact of increases in systematic risk over time. This is further exacerbated by the reliance on a comparator set that is primarily comprised of de-listed firms which provides limited information on contemporary equity risks and return requirements. The inclusion of 'live' international comparators and de-weighting of de-listed comparators must occur if the estimate is to be meaningful.
- **Explanations and reasons are critical to demonstrate credibility of regulatory decisions.** An absence of explanations and reasons for dismissing or discounting a stakeholder view or evidence reduces the confidence in the regulatory process. We encourage the AER to genuinely engage with the material in front of it by providing explanations, reasons and analysis when making statements that views or evidence is not persuasive or given weight. This is important to demonstrate that the measured use of regulatory discretion, absence of cherry picking, and quality in decision-making continue in the absence of review processes. This is also corollary to the AER's expectation of the network businesses in their engagement with consumers, and if anything, higher evidentiary standards ought to apply to a national regulator.

Ignoring information and evidence on market practice in estimating the return on equity is risky

We have provided our views and supporting evidence on the issues under consideration in the 2022 RORI process in our submission of September 2021 on the AER's Omnibus working papers. This submission included evidence from investors, surveys, equity analysts, and independent expert reports (including on the approach to MRP and RFRs – see attached as Appendix 1) that demonstrated that the AER's approach to estimating the return on equity was inconsistent with that used by market practitioners (which include the investors signing this submission) and produced an estimate that was too low.

Market practitioners consider the parameters in the CAPM (MRP, RFR and equity beta) as a package to estimate the equity return required for the expected risk. They do not assess parameters in isolation and accept the resulting outcome without review and cross checks to ensure the overall investment return is reasonable.

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2 AER, Rate of Return, Overall rate of return, equity and debt omnibus, Final working paper, December 2021, p. 131.

Importantly, investors look at risk and returns over the long term and desire stability through market cycles. This means using long-term measures or adjusting short term measures to provide a better representation of long term expectations. Taking a long term view is consistent with both the nature of long life regulated network assets and cash flows expected over the life of investment that are provided under the regulatory framework and building blocks approach. It is important that these things remain connected to ensure sustainable levels of efficient investment and service over time which is in the long-term interest of consumers.

Attachment A to this letter is our response to the AER's positions on the five key issues on which the AER remains open. Our response on these issues is consistent with our actual investment practices, the views of most experts and market evidence. As investors, our practices are the most relevant and should be given the most weight because they are current, observable and drive real world capital flows into (or out of) the sector.

A summary of our actual practice on the five key issues is as follows:

1. **Term for the return on equity** – Equity investors in regulated assets value regulated businesses as the present value of cash flows over the long-term horizon. They do this because the regulatory framework sets out those cash flows over the life of the investment.

   Investors do <u>not</u> value network businesses as the present value of five years of regulatory allowances plus the end-of-period RAB. Such an approach has no support in investment or mergers and acquisition practice and disregards the methods and practices enshrined in the regulatory framework and adopted by the AER. All of the investors represented by the NSG, without exception, use a 10-year term for the return on equity when valuing their equity investments in regulated energy networks. None of these investors value their equity investments using a 5-year return on equity, or use the valuation approach that Dr Lally says should be used by network investors.

2. **Risk free rate and market risk premium** – Most investors use a long term historical average RFR matched with a long term historical MRP. Where some investors use a 10-year 'spot' RFR, associated adjustments are made to the MRP to take account of long term expectations compared to current conditions, to ensure that the cost of equity is stable and commensurate with the long term nature of the cash flows expected from the business. These adjustments give effect to an inverse relationship between the MRP and RFR. Investors overwhelmingly use a 10-year term as a proxy for the long-term because longer term bonds have a shallow market. They do not use a shorter term bond curve.

   Investors do not adopt the same long run MRP regardless of movements in the RFR (i.e., their expectations of return on equity do not change in lock step with changes in the RFR) as is the AER's current assumption. There is no evidence that this reflects market practice, nor is it supported by the expert panel. Retaining this approach sets a dangerous precedent for future.

3. **Equity beta** - Investors use a range of methods for estimating equity beta. These methods include using international comparators and adjustments where there are changes in systematic risk. They do this to ensure that the estimate is as accurate and contemporaneous as possible, and simply estimates their betas relative to the market index in which they operate. Importantly, investors adjust estimates over time to recognise forward looking risk.

   Investors would never use a beta comparator that consists of one 'live' firm or stale estimates that do not reflect current and anticipated forward risk pertaining to an asset. There is no evidence among regulators and market practitioners of an approach where a beta estimate reflecting one 'live' firm is adopted, and no expert supported such an approach.

4. **RAB multiples** – As highlighted above, RAB multiples effectively value the whole of the firm including regulated and unregulated cash flows, cash flows expected in the future from growth in RAB, cash flows from future unregulated opportunities (growth of which has accelerated in recent years due to significant penetration of renewable generation and associated network connections required), and cash flows expected from outperformance reflecting effectiveness of incentive mechanisms.

   A RAB multiple provides no useful information on whether the regulated return is sufficient as it has no impact on decisions to continue investing in the regulated business after acquisition and cannot unequivocally be split into an underlying regulated asset on the one hand, and other cash flows on the other hand.

   The only information from recent acquisition activity that is relevant to concluding if returns are sufficient is the discount rate. If it is higher, the regulated return is not sufficient, if it is lower, the regulated return is more than sufficient. The independent experts in recent Spark Infrastructure and AusNet transactions estimated the cost of equity was between 6.8% and 7.4% for SAPN and VPN, between 6.2% and 6.7% for Transgrid[3], and 7% for AusNet's regulated assets[4]. This compares to the AER's estimate of the cost of equity of 5.04% for CitiPower and Powercor[5], 5.38% for Transgrid[6], 5.25% for AusNet (transmission) and 5.12% for AusNet (distribution)[7]. - more than 150 basis points lower. In contrast to the AER's conclusion, this information demonstrates that the capital market considers the AER's allowed returns to be insufficient to attract capital into regulated businesses.

   There is not one transaction benchmark in the AER's sample that adopts a discount rate that is as low as the 2018 RORI return on equity (based on Independent Expert Reports). If the AER were able investigate RAB multiples based solely on the valuation of the regulated businesses' they would find them to have reduced over the AER's sample period due to the significant reduction in regulated returns compared to market expectations, diminishing opportunities to outperform and the increased risk of regulatory and political interference.

5. **Debt index** – Investors estimate the cost of debt and debt yields by testing the market, assessing forecast curves and examining current and historical pricing information; in each case for a unique combination of size of debt issuance and credit rating (reflecting the refinancing plans and creditworthiness of the relevant network business). Depending on market conditions, investors may consider different terms of debt based on the market price for the debt issue for different terms consistent with the risk appetite for the business. Investors cannot independently alter the credit rating.

   Investors would never use a debt index like the EICSI to estimate debt costs, because it provides no relevant, or actionable information about the cost of debt or the market for debt. The market price for debt is intrinsically linked to the size and term of the debt raising, the business' credit rating, and prevailing market conditions.

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3 KPMG, Independent Expert Report, Spark Infrastructure, 11 October 2021, p. 105.
4 Grant Samuel, Independent Expert Report, AusNet Services, 16 December 2021, p. 15.
5 AER, Final Decisions, April 2021.
6 Transgrid, Revenue proposal 2023-28, January 2022.
7 AER, Final Decisions, September 2021 and April 2021.

There is alignment between the regulatory and market task of estimating equity returns

The NSG has previously contributed information about what investors actually do in practice. This includes evidence of the discount rates actually estimated, including in independent expert reports which are prepared so that shareholders in public companies can make informed decisions about return expectations and options. In response, the AER stated that other practitioners discount rates offer limited comparability because:

> *"Different context and purpose of estimating the rate of return (and return on equity). For example, our decisions need to contribute to the achievement of the NEO and NGO and the relevant obligations under the National Electricity Rules and National Gas Rules. Other practitioners and regulators have a different objective, which may affect the return on equity estimates."* [8]

We agree that the AER's task is to make a decision that contributes to the achievement of the NEO, NGO, the NER and the NGR. However, it is not obvious why this differs to the task of market practitioners in estimating the required market returns. In the case of independent expert reports, the task is to properly inform shareholders on expectations and options in relation to returns when deciding where to allocate capital and must therefore reflect parameters that will be applied by investors in practice even if they are not theoretically correct.[9] Where these estimates relate to regulated network businesses, the assumptions are based on the revenues and returns expected under the regulatory framework established under the NEO, NGO, NGR and NER.

The AER's objective is to estimate the efficient cost of capital that will deliver efficient levels of investment. This would seem to exactly match the objective of investors and market practitioners that estimate the required cost of equity. An equity return estimate that reflects what academic experts consider investors ought to require for a regulated business rather than the equity return investors actually require will create uncertainty which will be priced in as a risk to expected returns in future periods and either result in higher return expectations (and ultimately higher prices to consumers) or result in inefficient levels of investment.

This can have significant and irreversible consequences for delivering the efficient service and price levels consumers should expect and put at risk the further savings and low emissions otherwise assumed under the Integrated System Plan and Distributed Energy Resource integration plan. Investors need stability and predictability over time and resilience to market conditions. Being theoretically correct but practically wrong will not safeguard consumer interests over the long term; consumers should have sustainable delivery of energy services and not suffer outages because, in theory, they should not.

We are concerned that the approaches that include changing the term for estimating equity to the regulatory period, using a debt index, and placing any weight at all in RAB multiples as an indicator of the sufficiency of returns severs the connection with the capital markets practice and leaves investors with substantial uncertainty regarding future regulatory decisions.

We look forward to the Draft Instrument outlining how our views and materials have been genuinely considered in the AER's conclusions and the impact of the weighing of different theories and market practice explained. We also urge the AER to consider the sustainability of the method or approach so that it remains relevant and appropriate for a range of market conditions over a period of up to 9 years (4 year RORI term plus 5 year determination) and not give rise to a need to reverse in future RORI processes.

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8 AER, Rate of return, overall rate of return, equity and debt omnibus Final working paper, December 2021, p. 137.

9 Grant Samuel, Independent Expert Report, AusNet Services, 16 December 2021, p. 1.

The following attachments present our views on the issues that remain open, outline areas where further explanation is required due to inconsistent treatment of material and views and provide a comparative analysis of the considerations of data to be used in equity beta estimation and MRP.

The 2022 RORI process provides an opportunity to improve the methods and information used to estimate returns and deliver an overall rate of return that is more reflective of the efficient cost of capital than the 2018 RORI.

Regards

[redacted]

Gerard Dover **Acting CEO** **Spark Infrastructure**	**Christopher Curtain** **Senior Managing Director, Asia-Pacific** **OMERS Infrastructure**	**Jean-Etienne Leroux** **Managing Director – Australia & New Zealand, CDPQ**

[redacted]

Nik Kemp **Head of Infrastructure** **AustralianSuper**	**Michael Hanna** **Head of Infrastructure – Australia** **IFM Investors**	**Michael Cummings** **Global Co-Head of Core Infrastructure** **AMP Capital**

[redacted]

Kieran Zubrinich **Head of Energy & Transportation Infrastructure** **Macquarie Asset Management - Real Assets, ANZ**	**Steven Fitzgerald** **Head of Asset Management** **HRL Morrison & Co**

ATTACHMENT A: NSG RESPONSE TO THE AER'S PRELIMINARY POSITION

Issue	AER position	Concurrent evidence session expert views	Comments on evidence and analysis	NSG recommendation
Term for the return on equity	Consider there are merits of matching the equity term to the length of the regulatory period despite not receiving strong stakeholder support.	Most experts agreed that the term for equity should match the investment horizon and that a 10 year bond rate is a good proxy for the long term. All agreed that if cashflows are expected over the long term, then the AER should use a long term risk free rate (**RFR**). Agreed that a change to the term would further reduce the return on equity for no obvious change in circumstance and that this would be inconsistent with what investors would expect if observe practice rather than theory. Only one expert considered that the term should match the 5 year regulatory period because can assume that investors can recover the value of the RAB through sale at the conclusion of the regulatory period. **Independent valuation experts** Grant Samuel adopts a term rate consistent with the long life of assets. • The 30 year bond rate would be a better benchmark for longer term cash flows. • A Single long term bond rate matching the term of the cash flows is no more theoretically current than using a ten year rate. • More importantly, the ten year rate is the standard benchmark term used in practice.[10] KPMG use a 10 year Australian Government Bonds as a proxy for the risk-free rate in determining a cost of equity for regulated assets under the CAPM because, in practice, long dated government bonds are accepted as a benchmark for a risk-free security.[11]	Investors forecast cash flows over the long term, consistent with the long life of investment in regulated assets and the regulatory framework that provides cash flows over the life of the investment (10 years is overwhelmingly used as a proxy when choosing a RFR).[12] There is no evidence that investors assume that they can recover the value of the RAB at the end of the regulatory period. This is an example of where the AER has given significant weight to one theory that is contrary to practice, the regulatory framework, evidence, and theory supported by most experts. For Professor Lally's view to hold, the current regulatory framework and models that provide for cash flows over the life of investment and roll-forward the RAB must be assumed away, and the actual practice of investors ignored. Further, it gives primacy to the view that the length of the regulatory period has some arbitrary significance over other relevant factors. If this view prevails, it introduces risk and significant uncertainty given that future regulatory decisions cannot be assumed to be guided by the current regulatory framework, market practice or widely accepted theory.	No change to the term for estimation equity from the current approach of 10 years as a proxy for long-term investment horizon.

[10] Grant Samuel, Independent Expert Report, AusNet Services, 16 December 2021, p. 4.
[11] KPMG, Independent Expert Report, Spark Infrastructure, 11 October 2021, p. 101.
[12] KPMG, Independent Expert Report, Spark Infrastructure, 11 October 2021, p. 101-102.

Issue	AER position	Concurrent evidence session expert views	Comments on evidence and analysis	NSG recommendation
Relationship between the RFR and the market risk premium (MRP)	Will not pursue the potential for a relationship between the MRP and RFR because there is no theoretical basis for the Wright approach (total market returns) in Australia and it is not used by market practitioners, despite it being adopted by other regulators[13]. Open to considering the use of estimates from the dividend growth model (**DGM**) to inform the point estimate of the MRP within the range observed from the evidence looked at. Open to considering DGM estimates alongside historical excess returns (**HERs**) by applying a method to give weight to both sets of estimates. Open to considering the historical excess return, both the arithmetic and geometric mean MRP, and MRP surveys and conditioning variables.	MRP varies through time and on average is higher when RFR is lower and lower when RFR is higher. Equity returns are more stable than the MRP. If the MRP does not vary with the RFR would amount to knowingly accepting the wrong relationship because the correct one is difficult. Better to adopt a less accurate estimate of the relationship than one that is accepted as incorrect (such as the AER's no relationship). The MRP should be updated at the same time as the RFR. The question is what role the DGM, and inflation play in estimating the MRP, not whether it should. **Independent expert views** Grant Samuel considered the true risk premium rises and falls and the current parameters in the CAPM (10	Estimates of MRP are intrinsically linked to the approach to the RFR. If a spot RFR is used the MRP is adjusted. If a long term historical estimate of RFR is used, a long term historical estimate of MRP is used. When spot rates are low, either a higher long term historical estimate of RFR is used or the MRP estimate is adjusted upwards. These adjustments give effect to an inverse relationship between the MRP and RFR. We have attached a table (from our last submission) presenting the different approaches adopted in surveys, by analysts and valuation experts to the MRP and RFR as Appendix 1 which clearly shows this. The AER's basis for dismissing material on this issue is unclear. For example, the NSG and ENA considered there was a theoretical basis for a negative relationship, provided information that the practice was to accept a negative relationship and that such a relationship could be observed. This was further supported in the Independent Expert Reports which recognised market evidence and theory that an inverse relationship exists.[16] It is then difficult to	Adopt a long run historical RFR with a long run MRP so that the estimate is stable over time and less volatile to changing market conditions. If the 10 year CGS is adopted, apply an approach that enables the MRP to be adjusted to normalise current market conditions to long term expectations of market conditions. This should include giving weight to the DGM to capture the inverse movement with the RFR. Prefer to remove AER discretion in the adjustment by further considering the ENA calibrated DGM approach. This issue must be resolved if the AER maintains the use of a 10 year spot CGS rate because the MRP must be relevant for

13 AER, Rate of return, Overall rate of return, equity and debt omnibus, Final working paper, December 2021, p. 17.
16 Grant Samuel, Independent Expert Report, AusNet Services, 16 December 2021, p. 14-15 and KPMG, Independent Expert Report, Spark Infrastructure, 11 October 2021, p. 101-102.

Issue	AER position	Concurrent evidence session expert views	Comments on evidence and analysis	NSG recommendation
		year CGS of 1.8% at November 2021 and a MRP of 6%) give results that are arguably unrealistically low, understate the true cost of capital or accord with how investors set their expected returns: • Given, the evidence that risk premiums are higher when RFRs are lower (i.e., implying a more stable overall cost of equity) there is a need to adjust the discount rate to be more realistic (cost of equity of 7%).[14] The KPMG outlines that market evidence indicates that bond yields and the MRP are inversely correlated so it is important that the RFR reflects the position adopted in deriving the MRP. • Adopt an adjusted RFR (upward) to reflect a long-term view and represent an appropriate return in the current low interest rate investment environment (2.8%) with a long term historical MRP (6%).[15]	reconcile this evidence with the AER's conclusion to dismiss a negative relationship and instead make an adjustment to the MRP to give weight to DGM estimates. There is no evidence (or expert support) that required returns move in lock step with the RFR. A consistent treatment of the AER's fixed MRP approach would result in this approach being dismissed also. There is no theoretical underpinning for a fixed MRP, and market practitioners do not use that approach. Instead, the AER has maintained an approach that all experts agree does not result in the best estimate because it is difficult to specify the relationship. An equal weighting of the fixed MRP approach and Wright approach is no more wrong than putting 100% weight on the current fixed MRP approach. We look forward to the AER providing further explanation of the theoretical underpinning and market adoption of fixed MRP approach and why it results in a better estimate than the Wright approach or the equal weighting of both approaches.	changing market conditions for up to nine years.

[14] Grant Samuel, Independent Expert Report, AusNet Services, 16 December 2021, p. 14-15.
[15] KPMG, Independent Expert Report, Spark Infrastructure, 11 October 2021, p. 101-102.

Issue	AER position	Concurrent evidence session expert views	Comments on evidence and analysis	NSG recommendation
Equity Beta	Maintain current approach to estimating beta and current comparator set. May lay foundation for future reviews to consider approaches which may be informed by international energy firms and domestic infrastructure firms.	General support for using the longest data series. General agreement that less firms with greater relevance results in a loss of accuracy and more firms (including international and Australian infrastructure) improves accuracy but may lead to a loss of relevance. The loss of accuracy with no live firms is likely to be more detrimental than the reduced relevance of using additional comparators. International firms should be included unless shown to be a poor comparator. **Independent valuation experts** • Grant Samuel included other energy, infrastructure, and countries in data set – including Vector (NZ) in the group of most comparable (Spark, AusNet, APA Group).[17] KPMG included international comparators.[18]	Investors and other regulators and practitioners use additional comparator firms (including international firms) to improve the accuracy of the estimate.	Include international and other Australian infrastructure comparator firms and do so for the 2022 RORI to minimise any 'step change' in future estimates and ensure the estimate remains relevant over the potential 9 year life of the estimate. There is potential to shape the weighting of data for relevance but not to exclude it without consideration. We remain of the view that the AER's current approach to estimating beta provides no clear pathway for changes in systemic risk to alter the beta estimate due to the method for establishing the range and point estimate. This exacerbated by the primary reliance on stale data. If changes in systemic risk are to be captured in the AER's estimate of equity beta: • the point estimate chosen from the range, must reflect changes in systemic risk, including for example, energy transition and increased regulatory risk. and • the estimates must be expanded to include relevant international comparators.

[17] Grant Samuel, Independent Expert Report, AusNet Services, 16 December 2021, p. 10.
[18] KPMG, Independent Expert Report, Spark Infrastructure, 11 October 2021, p. 103.

Issue	AER position	Concurrent evidence session expert views	Comments on evidence and analysis	NSG recommendation
Cross checks	Use cross checks to inform overall return on equity. Financeability, RAB multiples and scenario testing seen to be more relevant than investment levels or other regulator or practitioner estimates of returns. Returns provided by other regulators are to have no role at all. Investment levels have limited value because it is complicated to untangle non-rate of return factors and difficult to compare levels over time. Market practitioner and other regulator estimated have limited value because of different methodologies, different context and purpose, and differences in systematic risk and RFR. RAB multiples have limited value because they include all factors (including non-rate of return factors, unregulated business, circumstances not appropriate across all transactions, control premiums, future value), difficult to isolate factors, and infrequently available	Cross checks help identify and address measurement errors. The question is what to do with them, not whether to use them. All cross checks have limitations, but that should not entirely invalidate their use (that they should be used indicatively but not determinatively). **Independent expert views** Grant Samuel analysis of RAB multiples indicated that they have trended higher but could represent: • Higher population • Scale and geographical diversification • Potential for scarcity value. However, this is likely offset by decrease in regulated revenues and a restricted pool of acquirers. • Lower cost of capital driving a contested search for yield (in excess of interest rate returns).[19] KPMG analysis of RAB multiples outlines the following limitations: • Limited number of transactions • Can be affected by outliers • Are affected by control premiums	Other regulators and market practitioners use cross checks to test/assess whether estimates of returns are reasonable – not too low or too high. The NSG supported the use of market analyst and valuation expert estimates as the most critical cross check, and investment levels and other regulator returns also as valuable cross checks. Transaction multiples have no value in testing the overall rate of return because they contain significant information that is unrelated to the regulated network business. Use of cross checks will become increasingly important as the listed comparator set diminishes due to market activity. RAB multiples have all the limitations that the AER identified for other regulator and market practitioner rate of return estimates and investment levels.	Include comparisons with other regulators, including international regulators, and market practitioner estimates. Calculate financeability metrics. Do not cherry pick cross checks. Either include all cross checks and outline limitations or apply a consistent approach to excluding them based on limitations. If an estimate fails (or is an outlier with) the cross check, revisit the assumptions and comparisons of the estimates of individual parameters. Adjust the parameters to ensure consistency/satisfaction with the cross check. Present findings of investigations and explanations that can be subject to review if using a cross check to conclude returns are sufficient or insufficient, particularly if another cross check leads to a contrary conclusion.

[19] Grant Samuel, Independent Expert Report, AusNet Services, 16 December 2021, p. 61.

Issue	AER position	Concurrent evidence session expert views	Comments on evidence and analysis	NSG recommendation
	RAB multiples may be used as a trigger for investigation and, if able to successfully disaggregate the information, may be able to place more weight on using this information on whether the overall compensation to investors is sufficient. Based on a review of 2021 RAB multiples determined that current and expected rates of return are at least sufficient (as part of the overall compensation to investors) and potentially higher than that needed to attract investment.	• Can reflect synergies that might not be available to all suitors • Are increased by future participation in ISP projects and include unregulated revenue (approx. 15% for Transgrid).[20]	There is no reliable way to decompose RAB multiples. Such a composition would require subjective judgements about returns, cash flows and unregulated value, and adds no additional value to directly comparing discount rates. In addition, a winning RAB multiple includes a premium for the 'winners curse' and should be excluded as an outlier to 'losing' bid multiples.	

[20] KPMG, Independent Expert Report, Spark Infrastructure, 11 October 2021, p. 77 and 86.

Issue	AER position	Concurrent evidence session expert views	Comments on evidence and analysis	NSG recommendation
EICSI index	Analyse and consult on residual outperformance or departures on term that should be adjusted for and what form the adjustment may take. The weighted average term to maturity can be useful in determining the benchmark term and consider change to the benchmark term.	The EICSI can be useful to inform the benchmark term or credit rating but not for setting allowance or weighting the yield. The EICSI could be used to trigger an investigation of outperformance. An adjustment might be warranted if the outperformance is material, and the sample size is sufficient. Any adjustment should be to the benchmark only and match the method.	There is no evidence of material sustained outperformance or underperformance that might necessitate a departure from the current benchmark. The role of the AER is to determine the parameters of an efficient debt financing strategy, and then determine the associated efficient cost of debt. If investors choose to depart from this practice by taking more or less 'financing risk', then this should reasonably drive debt cost outcomes (reflecting that risk transference). It is not appropriate for the AER to then use those outturn debt costs as an input into the regulatory debt allowance (via the EICSI).	No change to the current method for estimating the cost of debt.
Weighted trailing average	Considering weighting the trailing average with past or forecast capex.	Confusion over the problem that was trying to be resolved and whether it would be resolved.	There is no evidence or theoretical underpinning to support a weighted trailing average, no agreement on the problem to be resolved or how the proposed solution would resolve the problem.	No change to current simple trailing average.

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ATTACHMENT B: EXAMPLES OF HOW THE EVIDENCE AND VIEWS PRESENTED COULD LEAD TO A DIFFERENT OUTCOME THAN THE AER'S POSITION

1. Equity beta

Issue – A diminishing data set leads to a less accurate estimate. Should the data set be increased to include additional comparators such as international energy firms, infrastructure firms or other regulator decisions?

AER Position - Retain existing comparator set and not using international energy firms, infrastructure firms or other regulators decision to inform the estimate range for beta.

AER interpretation of the evidence - Evidence is not sufficient to support the use of international comparators for estimating beta. May consider in future if comparator set becomes insufficient.

- Conceptual and practical issues associated with using international data remain a significant challenge.
- Not convinced that the benefit of including international data in terms of increased number of observations outweighs the risk of introducing data that can significantly bias the estimate.
- International comparators (regulators and firms) may incorporate different systematic risk.
- There has been no decrease in comparator firms since 2018 (same number of live firms for 2022 as in 2018 – three).

Evidence

Should the comparator set be increased to include international firms and other regulator practice?		Impact of giving weight to view	AER weight	Interpretation of AER response to evidence
Practice				
Other regulators	Yes	Higher estimate	None	The use of different methodologies by other regulators makes their use of international data irrelevant.
Investors	Yes	Higher estimate	None	Because investors estimate the return on equity for a different purpose, their use of international data is irrelevant.
Consultant Advisors				
The Brattle Group	Yes	Higher estimate	None	Unclear why recommendations not accepted.
Economic Insights and Sapere	Yes, with adjustments	Would need to determine required adjustment	The need for adjustment outweighs support for more comparators.	Conceptual and practical issues associated with using international data remain a significant challenge that the AER is unable to resolve.

Should the comparator set be increased to include international firms and other regulator practice?		Impact of giving weight to view	AER weight	Interpretation of AER response to evidence
Academic advisors				
Partington and Satchell	Yes, if can resolve implementation problems	Would need to resolve implementation problems	The Need to resolve implementation problems outweigh support for more comparators.	Accepted the view that the benefit of including international data in terms of increased number of observations does not outweigh the risk of introducing data that can significantly bias the estimate.
Stakeholder groups				
ENA	Yes	Higher estimate	None	ENA did not provide an adequate resolution of implementation issues.
Customer Reference Group	Yes, to improve accuracy but have concerns over relevance	Would need to ensure comparators are relevant.	Need to ensure relevance outweighs support for improving accuracy.	Three firms were used in 2018 so three firms are sufficient in 2022.

Alternative interpretation of the evidence

- Other regulator decisions and international comparator firms should be included where they provide more relevant informational value than the existing comparator set to improve the accuracy of the estimate. The AER should undertake a review of the comparators to determine relative relevance.

Additional views provided in the concurrent evidence sessions

- There is a trade-off between a loss of accuracy with a small data set and a loss of relevance with firms that are less comparable.
- Accuracy can be improved by including additional firms.
- Relevance can be maintained by ensuring additional firms are relatively comparable.

2. Relationship between market risk premium (MRP) and risk-free rate (RFR)

Issue – Should the MRP change when the RFR changes?

AER Position – No. However, will consider the current approach that minimises the impact of any relationship, and two options that enable the AER to make a discretionary adjustment; 1) a directional adjustment to the point estimate based on estimates of DGM, or 2) giving weight to DGM estimates to inform the MRP estimate.

AER interpretation of the evidence – Evidence suggests that weight should be given to other evidence than HER.

- HER is unlikely to pick up short run variations in MRP.
- A stable MRP estimate is more desirable than an unstable MRP with the potential for material and uncertain volatility.
- DGM estimates are more likely to reflect prevailing market conditions, however, there are practical limitations due to sensitivity to assumptions.

Evidence

How should the change in the MRP be captured when the RFR changes?		Impact of giving weight to view	AER weight	Interpretation of AER response to evidence
Practice				
Other regulators	Adopt a forward looking MRP by including information from dividend growth models and surveys.	Higher estimate	None	Point estimates are of limited value because their objectives and regimes are different and may target a higher or lower number to deliver the right level of investment (that may not be the efficient level?).
Investors	Match a long run average RFR with a long run average MRP. Alternatively, apply an MRP to the 10 year spot rate that is adjusted for expectations of risk in current conditions compared to long term expectations.	Higher estimate	None	Because investors estimate the return on equity for a different purpose, their approach to estimating market risk is irrelevant.
Independent Expert Report				
Spark Infrastructure (2021)	Adopt a long term historical average RFR with a long term historical average MRP <u>or</u> adopt a spot rate and an MRP adjusted for perceived additional risk compared to current environment and inverse relationship between variables.	Higher estimate	None	Return on equity estimated for a different purpose or objective than estimating the efficient cost of capital so not relevant.

How should the change in the MRP be captured when the RFR changes?		Impact of giving weight to view	AER weight	Interpretation of AER response to evidence
AusNet (2021)	An adjustment to the overall return on equity to recognise unrealistically low CGS 10 year rates and DGM estimates	Higher estimate	None	Return on equity estimated for a different purpose or objective than estimating the efficient cost of capital so not relevant.
Consultant Advisors				
The Brattle Group	Adopt a forward looking MRP by including information from dividend growth models and surveys.	Higher estimate	Some	Open to applying a discretionary adjustment based on DGM estimates.
CEPA	DGM can provide directional information on MRP estimates. Consider three different estimates – a fixed MRP, a fixed total market return (TMR) approach, and a hybrid approach.	Higher estimate	Some	Open to applying a discretionary adjustment based on DGM estimates but not total market returns over time.
Academic advisors				
Partington and Satchell	Allowing an adjustment to the MRP is desirable but should estimate MRP based on HERs alone because of implementation problems with the DGM (although useful as a conceptual tool) and do not support the total market return approach.	Would need to resolve implementation problems with the DGM.	Some	Open to considering views on a discretionary adjustment based on DGM estimates.
Lally	MRP is likely to fluctuate over time, but it is impossible to reliably estimate short-term variations.	Status quo	Some	Open to retaining current approach which provides minimal recognition of changes in risk in different market conditions.
Stakeholder groups				
ENA	DGM estimates are forward looking, and the practical issues can be addressed by calibrating the DGM to past decisions and specifications.	Higher estimate	Some	Seeking views on the ENA's suggestion to adopt a formulaic adjustment to calibrate with DGM estimates.
Customer Reference Group	Continue to rely on long run HER to avoid being lured into chasing market expectation of the economic cycle using questionable methodologies.	Status quo	Some	Open to retaining current approach which provides minimal recognition of changes in risk or returns in different market conditions.

Alternative interpretation of the evidence

- The estimate of the MRP is more likely to reflect prevailing market expectations if it reflects information from DGM estimates. The options are to make a discretionary adjustment or a calibrated adjustment.

Additional views provided in the concurrent evidence sessions

- MRP varies through time, but no one can tell you how – estimating the relationship is difficult.
- MRP on average is higher when RFR is lower.
- Equity returns are more stable than MRP – stronger relationship without macro variables than MRP.

APPENDIX 1: INDEPENDENT REPORTS, VALUATION EXPERTS, ANALYSTS AND MARKET SURVEYS

	Date	MRP	Rf
Independent Reports			
Independent Report (Deloitte)	13/08/2021	7.0% Based on current share market values and assumptions regarding future dividends and growth + estimate also has regard to the spreads observed on domestic and foreign corporate bonds and equity market volatility)	1.65% Spot RFR with the 10-year Australia Government bond rate as proxy)
Independent Report (KPMG)	07/03/2017	6.0% Long-term view	4.0% Blend of the spot rate and a forecast long-term Australia Govt bond yield
Independent Report (Leadenhall)	31/12/2020	7.0%-7.5% Forward looking approach with contemporaneous MRP	0.97% Does not normalise RFR, but uses market observed RFR with contemporaneous assessment of MRP
Independent Report (Korda Mentha)	28/04/2015	6.0%-6.5% Use historical risk premia as a proxy since expected premia is not directly observable phenomena	5% Normalised RFR assumption based on long-term expectation level
Independent Report (Grant Thornton)	30/09/2019	6% Historical risk premium over a period of 20 to 80 years	3.5% 10-year Govt Bond yield used as proxy, assumption based on daily nominal average yield over a historical period of 10 years
Independent Report (EY)	19/10/2020	6.0% Based on empirical studies over a period up to 100 years in Australia	3.25% Long-term RFR estimate by including a non-asset specific risk premium to the 10-year Australia Govt Bond yield

	Date	MRP	Rf
Independent Report (KPMG)	30/06/2018	6% Based on market survey and academic articles. Also considers specific risk premium apart from MRP such as low geographical diversification and regulatory risk amongst other things	2.9% Yield on longest Govt bond maturity (15 years) disclosed by Bloomberg
Independent Report (Grant Samuel)	April 2019	8.7% Includes 2.7% risk premium due to depressed bond yield	2.2% 10-year CGS
Independent Report (Grant Samuel)	August 2020	6% Long-term view	3% 200 basis points 'normalisation' adjustment
Independent Report (FTI Consulting)	June 2020	7.5% Tax adjusted based on midpoint of market practice range of 7% to 8% (NZ companies)	RFR adjusted each year
Independent Report (Calibre Partners)	July 2020	6% Long-term view	2.98% Long-term average to maintain consistency between the RFR and MRP
Independent Report (Lonegran Edwards and Associates)	June 2020	6.5% Long-term view	3% 'Normalised' based on blend of historical average and spot rate
Valuation experts			
Valuation expert A	2021	6.0%	2.3% Spot 20-year Australian government bond
Valuation expert B	2021	6%	3.0% 10-year CGS plus 'normalisation' adjustment
Valuation expert C	2021	6.5% Long-term estimate	2.9% Representing long-term RFR

Analyst Reports			
Analyst Report (Citi)	11/02/2020	5.0% (Long-term estimate)	5.0% (In line with long-term estimate)
Analyst Report (BofA)	13/05/2021	7% (Through-the-cycle estimate)	1.5% Through-the-cycle estimate
Analyst Report (Credit Suisse)	11/02/2021	6.0% (Long-term estimate)	3.0% (In line with long-term estimate)
Analyst Report (Macquarie)	10/08/2021	6.25% (Long-term estimate)	2.6% (In line with long-term estimate)
Market Surveys			
Market Survey (Chartered Accountants)	November 2020	Most analysts adopted a MRP > 6% **Cost of equity in Australia at June 2020 – majority between 8% and 10%,**	Most practitioners adopt a value between 2% and 4%
Market Survey (Pablo Fernandez)	June 2021	6.3% (Australian median of market practitioners) 6.4% (average) **Cost of equity – average 9%, median 8.8%**	2.6% (average)