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6 November 2020

Mr Warwick Anderson General Manager Network Finance and Reporting Australian Energy Regulator

By email: InflationReview2020@aer.gov.au.

Dear Mr Anderson,

Re: Draft position on the regulatory treatment of inflation

The Network Shareholders Group (**NSG**) welcomes the AER's draft position to change its methodology for forecasting inflation due to the significant divergence between recent actual inflation outcomes, market expectations of future inflation rates and the mid-point of the Reserve Bank of Australia's (**RBA**) target band.

The NSG comprises global investors who have invested over \$13 billion of equity capital in Australian energy transmission and distribution network service providers (**NSPs**) serving more than nine million people across multiple states. Our ultimate investors include Australian superannuation account holders, international pensioners, and Australian retail investors. The current low interest rate and low inflation environment has highlighted the very material impact of inflation estimation error on expected and actual equity returns. The NSG has a strong interest in the AER using the best estimate of inflation as required under the regulatory framework and Rate of Return Instrument (**RORI**) to ensure its members have a reasonable opportunity to earn the AER's estimated efficient return on equity which is critical to the ongoing availability of equity capital to meet the sector's investment needs.

Key points:

- The AER's draft position improves the accuracy of the forecast.
 - However, further refinements could be made to better reflect RBA policy, statements, and market expectations to improve resilience to extreme market conditions and reduce estimation error risk.
- Moving to a 5 year estimation model is both logical and consistent with the roll-forward approach to the regulated asset base and matches the current 5 year regulatory period approach.
- A transition is not logical or relevant to a forecast of inflation and the revised approach should be adopted immediately.
 - If a transition is adopted, the forecast of inflation applied during any transition period will result in estimation error. This is not consistent with legislative requirements and expectations of capital providers and is not in the long-term interest of consumers as it will impose windfall gains and losses.
- A 'hybrid' return is most likely to better match the expected efficient financing costs and result in a real return to equity investors that is consistent with the ex-ante real cost of equity embedded in the AER's RORI. However, as identified by the AER, this issue would require a rule change process.
 - This matter, if taken forward, can be resolved separately to the AER's adoption of the best estimate of inflation which is relevant now under the current rules.



The method that adequately reflects RBA inflation targeting policy and expected monetary intervention will result in the best estimate of expected inflation

We support the AER's draft position to change its methodology for forecasting inflation as this will:

- Result in a better match between the ex-ante estimation of efficient costs and the compensation provided over the regulatory period;
- Better reflect the treatment of inflation in rolling forward the value of the regulated asset base (RAB) from one regulatory period to the next; and
- Enable changes in market conditions to be incorporated into the forecast of inflation in a timely way.

Importantly, matching the forecast period with the regulatory period provides a better match between the estimate of efficient costs over the regulatory period and the compensation to be provided through revenue for those efficient costs over the regulatory period. The costs and revenue are re-set in the next regulatory period, so any estimate of costs expected to be incurred in future periods is irrelevant.

We also agree that over the long-term, market expectations of inflation trend towards the mid-point of the RBA's target band. However, there is some uncertainty about the length of time over which inflation may revert to the mid-point. A glide path that assumes reversion to the RBA target band midpoint within the next 5 years does not reflect a reasonable expectation of inflation when extreme and unprecedented conditions exist, as they do currently. For example, the AER's proposed methodology produces an estimate of 1.95% average inflation over the period, significantly above other relevant indicators that the markets rely on, for example:

- Inflation swap markets suggest inflation over the next five years is more likely to average 1.6%.¹ Whilst we understand the AER has rejected the use of inflation swaps due to their perception of bias, we remain of the view that inflation swaps are relevant as the strongest indicator of real market expectations.
- The recent RBA statements suggest that not even the lower bound of its target band will be achieved for at least three years. The priority over the next couple of years is jobs with inflation risks remaining low.² Taken together with the RBA short term forecasts, the RBA's stated position indicates that average inflation over the next five years is unlikely to be above 1.8%.

As illustrated in the following chart, the AER's proposed method continues to produce a forecast that is greater than that expected by markets and the RBA. The data is provided in Attachment 2 to this letter.



Expectations of inflation

¹ Bloomberg five year inflation swap as of 30 September 2020 – see TransGrid response to AER inflation review, 6 November 2020.

² Philip Lowe, Governor, RBA, Today's Monetary Policy Decision, Sydney, 3 November 2020.



The impact of adopting the AER forecast in favour of RBA and market expectations is that the targeted return on equity will not be achieved, leaving equity providers to expect a return that is less than the return on equity set out in the RORI. We consider that the AER's methodology could be more accurate and resilient in a broader range of market conditions if it better reflected RBA inflation targeting policy and acknowledged that reversion to the mid-point of the target band may take longer when short term expectations of inflation are outside the target band.

The RBA's inflation targeting policy aims to achieve inflation that is within the target band, that is between 2 - 3%, over the medium term. If inflation is within this band, the RBA may act to influence inflation but equally may not be expected to do so. Similarly, if inflation is outside of the range, the RBA may be expected to act to increase or decrease inflation but not necessarily target the mid-point. Therefore, this targeting policy may be better reflected by adopting a glide path that aims to achieve the RBA target band boundaries within five years when short term forecasts of inflation remain outside the target band. For example, the methodology could include a glide path:

- to 2% if the RBA short term forecast in year 2 is less than 2%;
- to 3% if the RBA short term forecast in year 2 is greater than 3%;
- to 2.5% if the RBA short term forecast of inflation is already between 2% and 3%.

Windfall gains and losses are not in the long-term interest of consumers

The AER has identified that (based on current market conditions) improving the accuracy of forecast of inflation provides an extra \$300m in allowed revenue to Victorian distribution networks over the next five years compared to the current approach and therefore implies a higher rate of return being earned by equity providers. This logic misconstrues the issue being addressed.

The change in estimation methodology will result in customers paying more than they are currently, all else being equal, because the current method produces a forecast that is expected to be inaccurate from the outset in the current market conditions. Our view is that even with the draft position method, although significantly improved, will continue to overestimate market expectations of inflation in the current conditions resulting in the expected real return to equity to be less than the targeted real return or allowed nominal return. Accordingly, customers will continue to be paying less than the efficient cost of the services received, and providers of equity capital will receive less than the allowed (efficient) cost of equity, which is clearly inconsistent with the National Electricity Law (NEL), National Electricity Rules (NER) and National Electricity Objective (NEO).

The AER's targeted real return is the nominal return set out in the RORI less the AER's forecast of expected inflation. If the AER chooses to use a forecast of expected inflation that is above the best estimate of expected inflation, a windfall gain arises to consumers and a windfall loss arises to Network Service Providers (**NSPs**). A demonstration of the windfall gain and loss was presented in the Energy Networks Australia (**ENA**) submission to the AER's discussion paper.³

This windfall loss is borne entirely by equity providers to NSPs.

Using the example provided by the AER in its draft position paper, if the AER adopts an inflation estimate of 2.37% (per the current draft Victorian distribution determination) but considers the best estimate to be 1.95% (per the draft position paper), the expected real return to equity based on the best estimate of inflation would be approximately 60 basis points below the real return targeted by the AER. If the best estimate of inflation at the current time is actually 1.60% (in line with current inflation swap rates), then the expected real return to equity investors would be approximately 115 basis points below the AER's

³ ENA, A hybrid approach that has regard to market data, response to the AER review of regulatory treatment of inflation, 29 July 2020, p. 75-76.



targeted real return and allowed (efficient) cost. In the context of the allowed return on equity in the draft Victorian distribution decisions of 4.59%, a 60 to 115 basis point windfall loss to equity providers is material; representing a 13% to 25% under-recovery of the efficient cost of equity as determined by the current RORI.

Conversely, if the AER adopts an inflation estimate that is less than the best estimate of expected inflation, consumers would experience a windfall loss and equity providers would experience a windfall gain. However, in the current market environment of low interest rates and inflation, equity providers are more exposed to windfall losses (and customers to windfall gains) as the current methodology, and indeed the methodology proposed in the AER's draft position and the statements made confirm that the AER believe the current method will over-estimate the inflation rate compared to market expectations.

The AER has identified, and we agree, that any advantage of lower prices in the short term would undermine investment and affect services in the long term, particularly in the context of the significant new capital investment requirements facing the sector.

The long-term interests of consumers are best served if the AER adopts a forecast for inflation that it considers to be the most accurate reflection of expected inflation based on all available information.

A transition to the best estimate of inflation is not required

In the past, when the AER has changed its methodology for determining efficient costs, it has adopted the updated estimate immediately to re-establish the link between revenue and efficient cost. The only time the AER has applied a transition is when NSPs needed to make a significant change in contracting to achieve the estimate of efficient costs and when forecast costs are based on a historical series of costs incurred (e.g. the transition to the trailing average portfolio approach to debt). These considerations do not apply in the context of inflation estimates, and therefore a transition to the new methodology is not required and it should instead be implemented immediately.

Importantly, implementing a transition to the best estimate of inflation is the same as choosing not to adopt the best estimate and instead opting for an inferior one. This approach, in our view, would also be inconsistent with the binding RORI.

We agree with the AER that, having reached a position that there is a better way of estimating inflation, it is necessary to implement the approach and that not doing so would not promote efficient investment or use of the energy networks. To not adopt the approach would have consequences and introduce distortions in efficient investment and use, which would not be easily corrected given the long lives of network assets. As we pointed out above, any short-term advantage of lower prices from a windfall gain would undermine efficient investment in the long term and is therefore not in the long-term interests of consumers.

There remain issues to address in the regulatory framework which require further consideration

Current market conditions have revealed that the mismatch between the value of the RAB deducted for forecast indexation and the indexation added to the RAB at the commencement of the next regulatory period can be significant. This issue is identified in the draft position paper but is not addressed.

The AER's proposed changes to the forecast methodology will reduce the expected quantum and hence consequences of a continued mismatch between the allowed return and expected return. However, it will not remove it. While there remains a disconnect between the efficient debt costs incurred in nominal terms and targeting a real return on debt, the expected real return to equity providers will differ to the allowed real return on equity.



This mismatch, the cost of which is borne by equity providers (in the event of over-estimation of future inflation) and customers (in the event of under-estimation of future inflation), arises because debt costs are incurred in nominal terms and are paid first, so that equity returns are the residual between the allowed return provided in the RORI and the expected return after adjusting for the impact of the estimation error in the forecast of expected inflation on both debt and equity. This expected outcome has a direct impact on the confidence of equity providers to provide further capital to support network investment.

We are of the view that this mismatch can be addressed by adopting a 'hybrid' approach.

Nevertheless, we accept that any changes to current indexation requirements, such as the adoption of a 'hybrid' approach to returns would require a rule change process and can be progressed separately and subsequent to the AER finalising its position on its approach to forecasting inflation.

Our specific responses to the issues raised in the AER's Draft Position Paper are provided in the attachment to this letter.

If you have any questions or would like to discuss further, please contact Sally McMahon, Spark Infrastructure (phone 0421057821).

Regards,

Rick Francis Managing Director Spark Infrastructure

Nik Kemp Head of Infrastructure AustralianSuper

Steven Fitzgerald Head of Asset Management HRL Morrison & Co

Michael Hanna Head of Infrastructure – Australia IFM Investors

Michael Cummings Global Co-Head of Asset Management AMP Capital

Jean-Etienne Leroux Managing Director – Australia & New Zealand, CDPQ

Christopher Curtain Managing Director, Australia OMERS Infrastructure

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Kieran Zubrinich Head of Macquarie Australian Infrastructure Trust Macquarie Infrastructure and Real Assets



Attachment 1: Response to specific issues raised by the AER

Issue	AER proposal	Reason	Response
Forecast methodology	RBA short term forecast and reversion to mid- point of RBA target band by Year 5	RBA short term orecast and reversion to mid- point of RBA targetMarket expectations in short term mirror RBA short term forecasts and are anchored to the mid-point of the RBA target band in the long termband by Year 5Sandare anchored to the mid-point of the RBA target band in the long term	 Support - subject to potential improvement. Expectations in the medium term is a return to the RBA's target band, however the RBA's inflation targeting policy does not necessarily require the mid-point of the target band to be achieved. In a low (or high) inflation environment, expectations over five years are more likely to be an increase to 2% (or a decrease to 3%) within a regulatory period rather than to the mid-point. We agree with the AER that not adopting the best estimate, once it has been identified: > Would not be in the best long-term interests of consumers because it would have consequences and create distortions for efficient investment and use, which would not easily be corrected given the long lives of network assets;
			and Would not provide the correct ex-ante compensation over the life of the asset or an efficient allocation of risk. Any short-term advantage of lower prices would undermine efficient investment in the long term, so services may not be delivered in an efficient, safe, and reliable way.
Forecast period	Match the term of the regulatory period	Match forecast RAB indexation with expected RAB indexation and, therefore, provide (ex-ante) compensation matched with the nominal return in the RORI. More responsive to changes in current market circumstances.	Support – agree with reasons.









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Issue	AER proposal	Reason	Response
Glide path	Simple linear glide path From year 3 to year 5 Symmetric Enduring	Simple, transparent, replicable Expect inflation to return to 2.5% over five years Unbiased Applicable during wide-reaching events or disturbances to market data.	Support - however we expect that reversion over the regulatory period (medium term) is to the target band, rather than the mid-point.
Impact on stakeholders	Impact identified to be the difference between the current method and a method that better reflects expectations of inflation	 Using the Victorian DNSP process example: A material impact on customers of \$8 per annum and A material impact on NSPs/investors of 36 basis point in real returns. 	 Disagree - the identified impact is a windfall gain or loss to customers or investors if the change is not adopted. However, there is no impact on investors or customers if the best estimate of inflation is adopted because: The indexation deducted from revenue is more likely to match the indexation added to RAB; The allowed real return is more likely to match the expected real return; and Customers are more likely to pay the efficient cost of providing services, rather than more or less than the efficient cost. To not adopt the best estimate, and instead adopt an inferior estimate, is not consistent with the NEO, NEL or the NER and does not deliver a targeted real return consistent with the RORI.





Issue	AER proposal	Reason	Response		
Implementation	plementation Applied at the Commencement at the start of the next commencement of regulatory period achieves the NEO		Support – the best estimate should be adopted at the earliest practical opportuni being the commencement of the next regulatory period.		
	the next regulatory period		We note that the AER has raised the prospect of a potential delay or part adoption of the best estimate – this is not supported, as it introduces consequences and distortion in investment, windfall gain or losses to consumers, and investors and would not comply with the NEL, NER NEO or be consistent with the RORI:		
			 If the best estimate was not adopted, NSPs would not have an opportunity to recover their efficient costs. Efficient investment and use would be distorted in a way that is not in the long-term interests of consumers. The expected return would be different to the allowed return under the RORI (which is intended to be binding on the AER and NSPs). 		
			Further, the regulatory framework and AER practice is to re-set revenue at each regulatory period to match the ex-ante estimate of efficient costs. An approach that enables more or less of the efficient cost to be recovered is inconsistent with the regulatory framework and AER practice even when there has been a change to the approach of the cost category such as productivity, tax and regulated returns. The forecast methodology (current or proposed) is entirely forward looking and does not rely on historical data series to implement.		
			The RORI sets the regulated return to apply over the regulatory period. A forecast of expected inflation is required as an input in the Post Tax Revenue Model (PTRM) to calculate correct compensation over the regulatory period to achieve the AER's 'targeted' real return. Therefore, it is appropriate that the forecast term is the regulatory period and that the adoption of the best estimate occurs immediately under the current RORI and is not delayed until the next RORI.		



Issue

Regulatory framework







AER proposal Reason		Reason	Response		
The regulatory framework delivers a real rate of return		The nominal rate of return less the AER's estimate of expected inflation plus actual inflation delivers the intended target irrespective	Disagree - the real rate of return is only delivered if the forecast of expected inflation deducted from the nominal return reflects the inflation implicit in the estimate of the nominal cost of debt and the nominal cost of equity.		
consistent with the rules and preserves purchasing power.	of actual inflation.	Under the AER's approach to estimating the efficient cost of debt, the efficient financing practice is assumed to lock in debt in nominal terms. In the absence of removing exactly the inflation locked into debt, the real return on equity is affected. This treatment is entirely consistent with the AER's current practice for estimating the efficient cost of debt.			
			The indexation of the RAB that is removed from revenue based on forecast of expected inflation that is greater than the indexation added to the RAB in the roll-forward is lost because this amount is not trued up. Therefore, neither the value of consumer purchasing power or investor capital is preserved.		
			The current conditions have revealed that the current regime is not successful when the AER's forecast of expected inflation differs materially from market expectations of inflation. The significance of the divergence between the AER's forecast and market expectations has shown that this problem, borne out of the incorrect interaction between the PTRM and roll-forward model (RFM), can be significant.		
		The 'hybrid' approach seeks to better match the compensation with the efficient financing practice. This is achieved by applying the same indexation to the debt component of the RAB in the next regulatory period as the indexation deducted from revenue in the current regulatory period. This will ensure that the PTRM and RFM combine appropriately to provide the correct compensation.			
		An improved forecast of expected inflation will minimise the difference but not			

ed forecast of expected inflation will minimise the difference but not remove it. Equity holders will continue to bear the risk that the AER's forecast methodology produces a forecast of market expectations that is too low, and that equity holders expect to earn a return that is reduced by the forecast error on both debt and equity. This issue has no relationship to financing decisions. On the contrary, this issue forces investors to take actions that are clearly outside the expectations of efficient behaviour under the regulatory framework.









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Issue	AER proposal	Reason	Response		
Impact on risk and	A change to the targeted return would involve risk	There are practical problems associated with a change to the targeted return that could result in windfall gains and losses.	Disagree - if the change is to confirm current practice, there should be no change in risk or a windfall gain or loss.		
stakeholders			The AER currently estimates efficient debt costs based on a method that assumes these costs are incurred in nominal terms. The deduction of the same forecast of expected inflation from both debt and equity when the implicit inflation in the nominal estimates creates a distortion between debt and equity (with the mismatch being borne 100% by equity holders). A hybrid approach would ensure the integrity of the AER's current practice.		
Process	A rule change would be required to target a 'hybrid' approach	5	Agree - it would be preferrable to confirm the compensation to be provided for the efficient cost of equity and the efficient cost of debt through a rule change given the wide-ranging interpretation of current practice and requirements under the current rules and RORI.		
		A rule change would take several months The AEMC may have different material available to it and reach different conclusions	A rule change process would enable a fuller consideration of the issues raised and impacts. Further, a decision on a rule change is not required, or dependent in any way, on the forecast methodology or the adoption of the best estimate.		











Attachment 2: Alternative forecast of market expectations over the next five years

Method	Year 1	Year 2	Year 3	Year 4	Year 5	Forecast
AER current method	1.25%	1.75%	2.5%	2.5%	2.5%*	2.30%
AER improved method	1.25%	1.75%	2.0%	2.25%	2.5%	1.95%
RBA inflation targeting policy	1.25%	1.75%	2.0%	2.0%	2.0%	1.80%
RBA short term forecast and statements	1.25%	1.75%	1.75%	2.0%	2.0%	1.75%
5 year inflation swap value						1.61%

* And for years 6 to 10.