

7 October 2021

Mr Stephen Edwell
Chair, Economic Regulation Authority
Level 4, Albert Facey House
469 Wellington Street
PERTH WA 6000

Lodged online via publicsubmissions@erawa.com.au

Dear Mr Edwell

Re: Determination of Pilbara networks rate of return - Issues paper

Thank you for the opportunity to comment on the ERA's "Determination of Pilbara networks rate of return" Issues paper (Issues Paper) dated 2 September 2021. This submission is limited to responding to the ERA's approach to estimate the cost of equity and does not comment on whether the risks of the Pilbara networks may affect their rate of return.

The continued deterioration in the return on equity under the ERA's approach does not reflect the increased risks that network business' are facing. When ATCO acquired the gas distribution network, just over 10 years ago, the return on equity was 10.41%, this has subsequently reduced to 5.02% under the current access arrangement period. In cash terms this return is in the vicinity of 2.5%.¹ The Issues Paper highlights that the ERA's approach would result in a return on equity of 4.33% (which equates to a negative cash return on equity of approximately -0.2%) if a decision were made based on the parameters in the Issues Paper. The significant changes and disruption that have occurred in the energy sector over this timeframe are not reflected in these reduced returns. The tightening and/or removing of risks margins will have the unintended consequence of curtailing innovation, employment and growth in parts of the energy supply chain that are critical to delivering long-term value and stability to consumers as the energy sector transitions.

In contrast to the ERA's approach, in March 2021 the Alberta Utilities Commission determined that the return on equity for ATCO's Canadian networks (and commensurate with other networks in North America) would continue to be 8.5% into 2022.² ATCO has major operations in Canada, the United States, Chile, Australia and Mexico as well as presence in other countries. As a strategic investor, we are continuously assessing where best to deploy scarce shareholder capital across our global jurisdictions, where the opportunities to invest in new projects generally exceed the available financial capacity. Decisions to make specific investments depend on a variety of factors, not the least of which is the stability of the investment climate in the particular country where the opportunity arises and the return for the investment risk.

Prior to the formal commencement of the 2022 Gas Rate of Return Instrument review, ATCO would like to highlight that there have been changes since 2018 that may affect the ERA's approach to the cost of equity. This may require changes to the ERA's approach that can be integrated into the Pilbara Networks Rate of Return.

¹ The cash return excludes the non-cash impact of inflating the RAB and allows for the payment of nominal debt obligations

² Available from: [https://www2.auc.ab.ca/Proceeding26212/ProceedingDocuments/26212_X\[\]_26212-D01-2021%202022%20Generic%20Cost%20of%20Capital_000037.pdf](https://www2.auc.ab.ca/Proceeding26212/ProceedingDocuments/26212_X[]_26212-D01-2021%202022%20Generic%20Cost%20of%20Capital_000037.pdf)

1. Risk Free Rate

Since 2018, there has been significant declines in yields on Commonwealth Government Securities (CGS) that are used to estimate the risk free rate. The table below shows the drop in CGS yields from December 2018 to August 2021 as reported by the RBA. Yields have fallen so far that real interest rates are negative, as indicated by the yields on indexed bonds.³

Table 1: Indicative yields on indexed bonds

Averaging period	5 year CGS % nominal	10 year CGS % nominal	Treasury Indexed Bond 407 3.00% 20-Sep-2025 % real	Treasury Indexed Bond 408 2.50% 20-Sep-30 % real
December 2018	2.1%	2.43%	0.657%	0.746%
August 2021	0.57%	1.12%	-1.484%	-0.878%

There has been significant intervention in the CGS market by the Reserve Bank of Australia. The Reserve Bank of Australia recognise that CGS yields, in particular short-term yields out to April 2024, are being influenced by the implementation of their policies, which has included purchases of \$200 billion worth of bonds under its bond purchase program and a deliberate policy to keep yields artificially low (ie. direct intervention to set yields).⁴

The Reserve Bank of Australia’s policy to keep yields artificially low may mean the risk free rate as currently measured by a 5 year CGS yield is understated relative to the yields used to estimate the MRP meaning the total return on equity is understated using a 5 year CGS rather than a 10 year CGS. This raises the following questions on the ERA’s approach to estimating the risk free rate:

- **Are CGS the appropriate proxy of the risk free rate?** – Given the Reserve Bank of Australia’s policy to maintain the target of 10 basis points for the April 2024 Australian Government bond, in our view using CGS as the proxy for the risk free rate is no longer appropriate.
- **Is a 10-year term for the risk free rate more appropriate?** – If CGS remains the risk free proxy and given the Reserve Bank of Australia’s direct intervention policies, the 10 year CGS may be a better proxy for the risk free rate.
- **Is the CAPM model suited to a negative real interest rate environment?** - Brattle in their June 2020 report to the AER, where they discuss the calculation of the return on equity using a CAPM framework, find it difficult to “reconcile a negative real interest rate with finance theory”.⁵ The suitability of the ERA’s standard approach to implementation of the CAPM in a negative real interest rate environment should be considered by the ERA.

In addition to the effects of RBA intervention in the CGS market there are other matters that suggest a review of the term of the risk free rate is warranted:

- A 5 year risk free rate term is out of line with common regulatory practice in Australia and internationally where a period of 10 years is typically used.⁶ Over the last decade both QCA and IPART have moved from a 5 year to a 10 year risk free rate.
- The traditional textbook application of the Sharpe-Lintner CAPM model adopts long-dated government bonds to estimate the risk free rate reflecting the investment horizon of equity

³ RBA statistics tables f16, f16hist and f02.

⁴ RBA, Minutes of the Monetary Policy Meeting of the Reserve Bank Board, 7 September 2021

⁵ The Brattle Group, A Review of International approaches to Regulated Rates of Return, Prepared for the Australian Energy Regulator, June 2020, page 60

⁶ The Brattle Group, A Review of International approaches to Regulated Rates of Return, Prepared for the Australian Energy Regulator, June 2020, page 39

investors.⁷

- The reliance on Lally's 2004 paper⁸ stating a 5 year risk free rate is required to maintain the NPV = 0 principle is out of step with accepted finance theory.⁹

2. Market risk premium

Since 2018, there has been further consideration of the use of the dividend growth model and the possible relationship between the market risk premium (MRP) and the risk free rate by Australian regulators. To derive a robust estimate of a forward looking MRP, it is important to consider the various ways it may be estimated:

- **Relationship between MRP and the risk free rate** - As part of its draft working paper the AER engaged CEPA for expert advice on the relationship between the risk free rate and the MRP. CEPA concluded:

"...there is no conclusive theoretical basis for an assumption of independence or dependence."¹⁰

The current ERA assumption is the risk free rate and MRP are independent. CEPA highlights three options to consider when setting the MRP and its relationship to the risk free rate and consideration should be given to them all when setting the MRP.

"In judging evidence on MRP using historic data, the AER can choose whether to use:

- *An assumption that the MRP is fixed (current approach)*
- *An assumption that the TRMR is stable ("Wright approach")*
- *An approach that has regard to both measures. This could be for example a weighted average of the two measures, that assumes that the MRP is related to the RfR, but the relationship is not one to one.*

Our review of international regulators demonstrates that regulatory processes can accommodate any of these approaches. The data to implement these for Australia is available.

The evidence indicates that the second two alternatives cannot be ruled out, and may provide a better estimate of the forward looking MRP consistent with the AER's duty. We suggest that consideration of these options, and the evidence that would be necessary to decide between them is undertaken as part of the 2022 RORI process."¹¹

- **Dividend growth model** - The determination of the MRP should give more weight to forward looking estimates of the MRP such as the dividend growth model to derive the point estimate of the MRP. For example, the US Federal Energy Regulatory Commission (FERC) relies exclusively on a forward-looking MRP that is calculated using a DGM model and the New Zealand Commerce Commission uses a MRP that is reflective of both historical and forecasted estimates of the return on equity.

In the *International regulatory approaches to rate of return* working paper, the AER received expert advice from the Brattle Group that the dividend growth model could be used to

⁷ Berk, J & DeMarzo, P, Corporate Finance, 3rd edition, 2014, Pearson, pg 404-406

Brailsford, T., Heaney, R. & Bilson, C, Investments - Concepts and Applications, 2nd edition, 2004, pg 179

Peirson, G., Brown, R., Easton, S. & Howard, P., Business Finance, 8th edition, 2003, pg 460

⁸ Lally, M., 2004, 'Regulation and the Choice of the Risk Free Rate', Accounting Research Journal, vol. 17 (1), pp. 8- 23.

⁹ ENA, Term of the rate of return - Response to draft AER working paper, 21 July 2021, page 36, Available at <https://www.aer.gov.au/system/files/ENA%20-%20Submission%20-%20Term%20of%20the%20rate%20of%20return%20-%2020July%202021.pdf>

¹⁰ CEPA, Relationship between RFR and MRP, A report for the Australian Energy regulator, 16 June 2021, page 7

¹¹ Ibid page 7

estimate a more forward looking MRP. Brattle's report also identified other regulators that used the dividend growth models to estimate the MRP.¹²

CEPA also state the rates of equity return set by international regulators they examined do not rely on an estimate of the MRP that is wholly or even substantially based on the historic average of the realised MRP.¹³

Consideration of all these methods is integral to arriving at a robust estimate of MRP.

3. Beta

The COVID-19 pandemic's impact on financial markets and the recent transactions in the marketplace will require the ERA to consider if the ERA's approach to beta requires some refinements or amendment. In addition, over time the degree of risk faced by a 'pure play' gas distribution business may increase relative to a pure play electricity networks due to the increasing penetration of renewables and contestability of gas connection points and appliances. ATCO considers that in the future this may manifest in a different beta for gas distribution networks relative to other networks.

ATCO notes that the ERA's estimate of beta under its approach may be conservative because:

- if the time period where the market was impacted significantly by COVID were not included in the sample, then the beta estimate would increase¹⁴;
- if DUET Group were omitted, or given less weight (because it is the only firm that is no longer listed, and therefore contributes no new information on the prevailing conditions in the market for equity funds) then the beta estimate would increase materially;
- if the ERA were to expand the set of comparator firms beyond the current four domestic comparators, the estimate of beta would increase; and
- If the ERA were to give any weight to the low-beta bias problem,¹⁵ which the ERA had regard to in the 2013 Guidelines, the beta estimate would increase.

In conclusion, while ATCO accepts the CAPM framework used by the ERA to estimate the return on capital invested, ATCO believes changes in energy market participants, risk free rates, operating risk and available evidence with regard to estimating CAPM parameters since 2018 make it incumbent on the ERA to revisit the methods used to estimate the parameters necessary to implement the CAPM framework. In particular, the ERA should consider the reasonableness of the results produced from its implementation of the CAPM framework in the light of evidence from the market and from other regulators.

I look forward to engaging further with the ERA following publication of its rate of return information paper later this year. Should you have any questions on this submission please contact me on

[REDACTED]

Yours sincerely

[REDACTED]

John Ivulich
Chief Financial Officer

¹² AER, Equity Omnibus Draft working paper, July 2021, page 4-25

¹³ CEPA, Relationship between RFR and MRP, A report for the Australian Energy regulator, 16 June 2021, page 5

¹⁴ ENA, Estimating the cost of equity, Response to AER's draft equity omnibus working paper, 3 September 2021, page 81.

¹⁵ The 'low-beta bias' problem relates to the well documented phenomenon that econometric estimates of the Sharpe-Lintner Capital Asset Pricing Model tend to be understated for stocks with beta estimates less than the market average of 1.